

# From Degrees to Jobs: Transforming Sri Lanka's Higher Education Program Governance System

Wang Dingquan, Dr. E.S. Neranjani

Faculty of Education, University of Colombo

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.906000263>

Received: 31 May 2025; Accepted: 10 June 2025; Published: 10 July 2025

## ABSTRACT

This study is a library survey to provide a comparative analysis of higher education program adjustment mechanisms in Sri Lanka with the United States of America (USA) and China. While China employs a policy-driven model to rapidly align programs with national strategies such as Artificial Intelligence (AI) and semiconductors, and the USA relies on market-based mechanisms for agile responses to labor demands, Sri Lanka's over-centralized system, controlled by the University Grants Commission (UGC), suffers from severe delays in the approval policies, misaligned programs, and stagnant graduate employability. Key recommendations include adopting China's performance-based program evaluation and the USA's approach to industry partnerships, while decentralizing Sri Lanka's approval processes. This comparison underscores that strategic governance reform is essential for Sri Lanka to transform higher education into an engine of economic growth. The study offers actionable insights for policymakers balancing national priorities with institutional autonomy in developing economies.

**Keywords:** Higher education, program reform/approval/discontinuation

## INTRODUCTION

Higher education institutions (HEIs) in many countries play a pivotal and leading role in national development by equipping students with the skills needed to meet labor market demands, drive economic growth and enhance the vitality of social development. The ability of universities to adapt their academic programs, adding new disciplines in response to emerging trends and phasing out obsolete ones, is crucial for maintaining relevance in a rapidly evolving global economy. However, the mechanisms and processes for approving and discontinuing academic programs vary significantly across countries, shaped by governance models, regulatory framework, and socio-economic priorities.

### Impactful Events of Higher Education Program Reform

#### Higher Education Program Reform in the USA

Since 2015, the USA has embarked on a new round of extensive adjustments and reforms to higher education programs. Universities have been rapidly introducing programs in artificial intelligence (AI), data science, renewable energy, and healthcare technology to meet industry demand (Georgetown University, 2023). Between 2015 and 2023, the number of AI-related degree programs in the USA increased by 400%, with higher education institutions such as Stanford and MIT leading the shift (National Center for Education Statistics, 2023). At the same time, low-enrollment programs such as humanities have been phased out or restructured into interdisciplinary tracks (AAUP, 2022).

Under the "Decentralized and Market-Driven" model, the USA has implemented many adjustments in higher education programs.

#### 1. Program Innovation Initiative (2021-present)

This was launched in 2021 as "Re-emerging Academic Program Portfolios" by the American Council of

Education (ACE) in collaboration with the Department of Education to accelerate transformation of academic programs to meet workforce demands in various emerging fields (ACE 2021).

## 2. Flagship Policy Developments

Under the 2022 CHIPS and Science Act, massive STEM program expansion has been extended. According to NSF (2023), 127 new semiconductor-related programs are created at 68 universities, such as "Semiconductor Degrees" was launched at Purdue University in 2023.

The Department of Education issued the 2023 Guidance with the title of "Strategies for Program Alignment with Labor Market Needs" in January, which encourages discontinuation of progress with less than 50% graduate placement rates.

## 3. Landmark Institutional Changes

"Academic Enterprise Model" introduced by Arizona State University in 2022 allowed new programs to be approved within six months. As a result, 42 new programs were launched in the USA in 2023. Climate Entrepreneurship was one such program.

Further, "UC Program Portfolio Optimization Framework" introduced by University of California in 2021 resulted in phasing out 89 low-enrollment programs by 2023.

## 4. Recent Data on Program Changes

According to the National Center for Education Statistics (NCES, 2023), since 2020, there has been a 300% increase in the number of academic programs related to Artificial Intelligence (AI) and Machine Learning (ML), while over 1220 humanities programs were discontinued between 2020 and 2023 (Association of American Colleges and Universities [AAC&U], 2023).

## 5. Key Catalysts

Report titled "Recovery 2025: Aligning Education with the Post-Pandemic Economy" issued by the 2020 Georgetown University emphasized the need to restructure educational priorities to meet emerging labor demands. The 2021 National Science Board highlighted the importance of strengthening technical education to support national innovation and economic resilience in its vision document "The Skilled Technical Workforce".

## Higher Education Program Reform in China

Since 2018, China has launched a fresh round of comprehensive adjustments and reforms to higher education programs. The Chinese government has earnestly promoted "New Engineering" and "New Liberal Arts" programs to support its technological and innovation goals (MOE, 2021). Since 2020, China has added over 1,800 new undergraduate programs in AI, quantum computing, and advanced manufacturing while discontinuing more than 500 outdated programs with low employment rates (MOE, 2023). The "Double First-Class" initiative further prioritizes STEM disciplines in top universities to enhance global competitiveness (China Education Daily, 2022).

Under the "Centralized and Policy-Driven" model, China has implemented many adjustments in higher education programs.

### 1. Guidelines for the Construction of First-Class Undergraduate Programs (2020)

Ministry of Education (MOE) in China introduced "Guidelines for the construction of First-Class Undergraduate Programs" in 2020 with the aim of establishing 10,000 national-level and 10,000 provincial-level first-class undergraduate programs by 2025. AI, big data, integrated circuits, quantum computing and other strategic emerging industries were identified as priority fields. Low employment rates (e.g. less than 60% for 3 consecutive years), outdated curricula and weak industry relevance were considered as program elimination

criteria.

## **2. 14<sup>th</sup> Five-Year Plan for Education Modernization (2021)**

Launched by the State Council, a series of key higher education reforms have been implemented to align academic programs with emerging national priorities. These include the promotion of the "New Engineering, New Medicine, New Agriculture, and New Liberal Arts" initiative to foster interdisciplinary development; a mandate requiring all "Double First-Class" universities to establish AI-related majors by 2023; and the encouragement of vocational-professional through university-industry collaborations with leading enterprises such as Huawei and Alibaba to design application-orientation programs.

## **3. Notice on Dynamic Adjustment of Undergraduate Programs (2022)**

The Ministry of Education established a mechanism of warning system titled "Red/Yellow Card" to discontinue outdated programs, such as programs with low-enrollment (less than 60% for 3 years), and programs with low-employment rates (below 50% capacity for 2 years). At the same time, a fast-track approval system within 6 months and bypassing provincial review to set up programs of strategic fields such as AI, semiconductors and renewable energy is established.

## **4. Data Highlights (MOE, 2023)**

According to the Ministry of Education (2023), from 2020 to 2023, over 1850 new programs in STEM fields have been approved; while 520 programs, mainly inhumanities and outdated engineering fields were discontinued. The employment rate of the new strategic programs is 92% which is much higher than traditional programs with 68%.

## **5. Latest Trends (2024)**

Total 30 top universities, including Peking University and Shanghai JiaoTong University, are mandated by the Ministry of Education in January 2024, to establish "Future Technology Academies" aimed at advancing education in cutting-edge fields. In addition, through "1+X Certificate System", the integration of micro-credentials is being piloted, which combines academic degrees with industry-recognized certifications. To control academic quality, programs with graduation rates below 85% are subject to reconstructing and reform strictly.

## **Higher Education Program Reform in Other Countries**

In other countries, some adjustments on higher education programs also proceeded.

Germany is expanding dual-study programs (combining academia and industry training) in engineering and IT (DAAD, 2023). Singapore introduced micro-credentials and stackable degrees in fintech and cybersecurity (Skills Future Singapore, 2023).

## **Global Trends of Higher Education Program Reform**

According to the impactful events that occurred globally, the emerging trends in higher education program adjustment and reform can be summarized as follows:

### **1. Strategic Program Prioritization**

Many countries, at the national level, have placed programs in strategic fields or high-tech fields in the position of being given top priority for development. Both China and the USA, have provided high priority to programs of strategic fields such as AI, semiconductors, etc.

### **2. Unprecedented STEM Expansion**

Programs related to the STEM fields have become the predominant areas of development. STEM programs now

dominate 58% of the TOP200 university offerings (THE, 2023).

### **3. Decline in Traditional Programs**

Many traditional programs in social science and humanities show an overall downward trend. Humanities programs in the USA decreased by 17% between 2020 and 2023, while China discontinued 9.5% of humanities programs by 2023 (MOE, 2023).

### **4. Performance-Based Program Discontinuation**

Programs with low performance in terms of enrollment and employment will be discontinued within a short period of time. University of California in US phased out 89 programs with enrollment less than 30% (AAC&U, 2023). While China cut 520 programs (2020-2023) for low employment (MOE, 2023).

### **5. Accelerated Process for Program Approval**

In order to respond to the needs of social development in a timely manner, a mechanism for fast-track approval for establishing new programs has become an overwhelming trend. This trend is fully reflected in the recent rapid establishment of emerging programs within a short period of time in both China and the United States. China adopts fast-track approval for new program establishment within 6 months. Average approval time in 2023 is 14 months, which is reduced by 42% than that in 2018. (MOE. 2023)

### **6. Flexible Learning Model**

More diverse, flexible, and dynamic learning models have been created and provided for learners to satisfy the demands of the job market and social development. China implemented the "1+X Certificate System" (degree + skills certification). The Microcredentials market in the USA grew by 300%.

## **Higher Education and Labor Market in Sri Lanka**

In Sri Lanka, the mismatch between higher education offerings and labor market demands has become increasingly evident, yet systemic inefficiencies prevent timely adjustments. According to relevant research and statistics, the key issues in Sri Lanka's higher education system are as follows:

### **1. Outdated Programs with Low Employability**

Many traditional degree programs such as humanities and general sciences continue to operate without much adjustment despite declining labor market relevance.

A 2020 study by the Sri Lanka Labor Force Survey found that graduates in fields such as Arts and Social Sciences faced an unemployment rate of 23.5%, significantly higher than the national graduate unemployment average of 12.8% (Department of Census and Statistics, 2020).

Despite these trends, the University Grants Commission (UGC) has been slow to phase out or restructure underperforming programs due to rigid bureaucratic processes (Wickramasinghe & Liyanage, 2021).

### **2. Delayed Introduction of High-Demand Programs**

Emerging sectors such as information technology (IT), artificial intelligence (AI), and renewable energy face severe skill shortages.

A World Bank (2022) report highlighted that Sri Lanka produces fewer than 1,000 IT graduates annually, while industry demand exceeds 5,000 per year.

Although private universities and vocational institutes have introduced short-term tech courses, public universities—which enroll the majority of students—lag behind due to lengthy UGC approval processes (Gunasekara, 2023).

### 3. Centralized Decision-Making Hinders Responsiveness

Unlike China (which aligns programs with national policy) or the U.S. (where universities independently adapt to market needs), Sri Lanka's system remains heavily centralized.

A study by the Centre for Policy Alternatives (CPA) in 2021 found that introducing a new degree program in a Sri Lankan public university takes 3–5 years due to UGC review delays, whereas private institutions (with more autonomy) can launch programs in 12–18 months (CPA, 2021).

This misalignment between education and employment has led to:

1. High graduate unemployment (particularly in oversupplied fields, such as social science and humanities).
2. Skill shortages in growing industries, such as high-tech, healthcare, engineering.
3. Increased reliance on foreign-trained professionals, exacerbating brain drain.

In this context, what priority measures should Sri Lanka implement are:

1. Minimize the negative impacts of its higher education program governance system.
2. Enable efficient program adjustment of establishment and discontinuation that effectively response to socioeconomic development needs.

## COMPARATIVE ANALYSIS OF PROGRAM APPROVAL AND DISCONTINUATION PROCESSES IN THE USA, CHINA AND SRI LANKA

### Program Approval and Discontinuation Processes in the USA, China and Sri Lanka

#### 1. The USA

Under the "Decentralized and Market-Driven" model, the approval and discontinuation of higher education programs in American are as follows:

Approval Process: 1) Universities independently propose programs, subject to internal review; 2) State-level agencies may require notification but rarely impose restrictions; 3) Accreditation bodies such as ABET, AACSB influence program viability.

Discontinuation Process: Institutions decide based on enrollment, funding, and labor market trends.

#### 2. China

China adopts "Centralized and Policy-Driven" model for approving and discontinuing higher education programs.

Approval Process: 1) Universities propose programs based on national guidelines; 2) Provincial education departments review submissions; 3) The Ministry of Education grants final approval (or requires adjustments).

Discontinuation Process: 1) Institutions can phase out programs but must report to authorities. 2) The government issues "red alerts" for low-demand programs.

#### 3. Sri Lanka

In Sri Lanka, a "Governmental-Controlled and Bureaucratic" model is applied to the process of approving and discontinuing higher education programs.

Approval Process: 1) Universities submit proposals to the UGC; 2) Lengthy review periods due to centralized



decision-making.

Discontinuation Process: Requires UGC approval, often delayed by administrative hurdles.

## Comparative Analysis

In terms of the characteristics of higher education program approval and discontinuation, the "Decentralized and Market-Driven" model in the USA gave freedom to the universities to independently propose programs subject to internal review but rarely imposed restrictions. China adopts "Centralized and Policy-Driven" model that enables top-down adjustment, allowing for rapid adaptation to national development demands, efficiently allocating resources to key programs, and ensuring coordinated, system-wide changes that enhance the overall strength of higher education.

Whereas, when compared with the USA and China, Sri Lanka followed a "Government Controlled Bureaucratic" model, which led to substantial delays in the process of higher education program adjustment, particularly in the approval of emerging programs.

To better understand the strengths, weakness, and uniqueness of the models for higher education program approval and discontinuation in America, China and Sri Lanka, a comparison has been conducted in Table 1.

Table 1: Comparison of Models for Higher Education Program Approval and Discontinuation in America, China and Sri Lanka

	Dimension	America	China	Sri Lanka
	Model	Decentralized and Market-Driven	Centralized and Policy-Driven	Government-Controlled and Bureaucratic
1	Model Type	Bottom-up	Top-down	Top-hybrid
2	Strengths	Market-driven with strong innovation; High institutional autonomy	Rapid response to national strategies; Avoids redundant programs	Ensuring alignment with national development needs
3	Weaknesses	Inconsistent program quality; Uneven resource distribution	Excessive administrative intervention may curb innovation	Severe bureaucracy; Slow adaptation
4	Uniqueness	Accreditation bodies substantially influence program continuity	"Catalog system" + "early warning mechanism"	Highly centralized UGC control; Public university dominance

To gain a direct perception and achieve a comprehensive and empirically based understanding of the delay phenomenon in the approval and discontinuation processes of higher education programs in Sri Lanka, a comparison of the timelines for approving and discontinuing higher education programs among America, China and Sri Lanka has been conducted. Specifically, the 2023 case serves as a representative sample to illustrate the real situation. The detailed compassion is shown in Tabe 2 below.

Table 2: Comparison of Timelines for Approval & Discontinuation of Higher Education Program in America, China and Sri Lanka

	Dimension	America	China	Sri Lanka
0	Decision Authority for launching a new program	Universities + Accreditation	MOE + Provincial Government	UGC + Ministry of Education

1	Timeline for approving a new program	6-18 months	12-24 months	24-60 months
2	Discontinuation Trigger	30% enrollment drop	<60% employment	No clear criteria
3	Timeline for discontinuing an existing program	6-18 months	6-12 months	6-8 years
4	2023 Case			
4.1	Discontinued	1200+ programs	387 programs	12 programs in public universities
	Program Filed	Mainly traditional humanities	Low employment programs	Traditional agriculture, unpopular language
4.2	Adding	2800+ programs,	1850 programs	9 programs
	Program Filed	Mainly STEM field	Mainly STEM field	Information technology, tourism management

According to table 2, it is obvious to see that the program approval and discontinuation process of Sri Lanka's higher education has following characteristics.

1. The bodies who have been mandated to initiate the process of program adjustment in Sri Lanka is all centralized in the state level, which is different from the bottom-up process in the USA and top-down process in China as well. This may lead to the negative effect that the decision-making level is divorced from the actual situation.
2. For the time of approval, Sri Lanka takes the longest time, which takes around three-four (3-4) times over America and at least twice (2) over China.
3. For discontinuation of program, the universities in both America and China can make their own decisions to phase out obsolete programs, and there is clear standard to proceed that. But in Sri Lanka, there is no precise mechanism.
4. It is evident that the administrative processes governing the approval and discontinuation of Sri Lanka's higher education programs are excessively protracted and intricate. This situation directly impacts the universities' ability to produce graduates who can promptly meet the demands of society.

## FINDINGS AND CONCLUSIONS

This comparison highlights Sri Lanka's critical challenge on higher education: bureaucratic delays in higher education program adjustments hinder its ability to meet labor market demands. While China rapidly aligns programs with national strategies and the U.S. adapts through market forces, Sri Lanka's over-centralized system (controlled by the UGC) slows approvals and discourages innovation. Without urgent changes, Sri Lanka risks falling further behind in global education and economic competitiveness.

## RECOMMENDATION

Based on the characteristics and weaknesses of the program approval and discontinuation of Sri Lanka's higher education as compared in Table 1 and 2, the following recommendations are provided for the references of policymakers.

### 1. Streaming Program Approval Mechanisms

1. Decentralize Academic Governance: Pilot autonomous program approval authority for top-tier

universities such as University of Colombo, University of Moratuwa, in high-demand fields like IT and renewable energy.

2. Establish Fast-Track Channels: Implement a maximum approval timeline for programs aligned with national priorities.
3. Industry-Academia Councils: Create statutory bodies with a certain percentage of private sector representation to evaluate program proposals.

## 2. Data-Driven Discontinuation Framework

1. Performance Metrics: Mandating automatic reviews for programs with low graduate employment (less than 50%), underutilized enrollment capacity (below 30%), or poor learning outcomes (bottom quartile) (DCS Sri Lanka, 2020; UGC, 2021; OECD, 2021).
2. A "Sunset Clause Mechanism" requires all programs to undergo a 5-year mandatory review, with automatic phase-out unless reaffirmed through evidence of labor market relevance (Texas HE Coordinating Board model, 2021).

## 3. Enhancing System Responsiveness

1. Competency-Based Curriculum: Transition 30% of credit requirements to modular, industry-certified micro-credentials (following EU's Bologna Process benchmarks).
2. Cross-Institutional Programs: Develop "National Priority Clusters" allowing shared courses across universities (e.g., Data Science consortium between Peradeniya, Moratuwa and SLIIT).
3. Dynamic Enrollment Planning: Replace fixed quotas with sliding-scale allocations adjusted annually based on employer demand forecasts and real-time labor market analytics.

## 4. Key Success Factors

1. Political commitment to depoliticize academic governance.
2. Public-private financing mechanism for program innovation.
3. Digital transformation of accreditation processes.

## 5. Key Takeaways for Sri Lanka

1. Speed up Reforms: Reduce UGC bottlenecks for high-demand fields such as IT, green energy, etc.
2. Balance Control & Flexibility: Allow top universities such as University of Colombo and University of Moratuwa more autonomy while maintaining national standards.
3. Learn from Others: Adopt China's warning system for low-performing programs and the America's industry partnerships responding to social demands in a timely manner.

## Statement on the Use of AI Tools

During the process of writing this paper, AI tools such as ChatGPT, Deepseek, and Doubao were used as auxiliary tools, mainly for information retrieval and assisting in optimizing language expression. It should be emphasized that all content provided by AI tools was used solely as a reference. The core viewpoints, research methods, analysis processes, and final conclusions in this paper were independently completed by the authors.

## REFERENCES

1. ABET (Accreditation Board for Engineering and Technology) (2019). 2020-2021 Criteria for



- Accrediting Engineering Programs. <https://www.abet.org/wp-content/uploads/2020/02/2020-21-ETAC-Criteria.pdf>
2. Altbach, P. G. (2016). *Global Perspectives on Higher Education*. Johns Hopkins University Press.
3. American Academy of Arts & Sciences (2023). The State of the Humanities 2023: From Education to the Workforce. <https://www.amacad.org/humanities-indicators>
4. American Council on Education (2021). Reimagining academic program portfolios. <https://www.acenet.edu>
5. Centre for Policy Alternatives (CPA) (2021). Delays in Higher Education Reforms: A Case Study of Program Approvals in Sri Lanka.
6. Credential Engine (2023). Counting U.S. Postsecondary and Secondary Credentials. <https://credentialengine.org>
7. DAAD (2023). Germany's Dual Education System: A Global Benchmark.
8. Department of Census and Statistics, Sri Lanka (2020). Labor Force Survey Annual Report 2020.
9. Georgetown University (2023). The Evolution of STEM Education in the U.S.
10. Gunasekara, R. (2023). "Bridging the Skills Gap: Challenges in Sri Lanka's IT Education Sector." *Colombo Business Journal*, 14(1), 88-104.
11. HolonIQ (2023). Global Microcredentials Market Size 2023. <https://www.holoniq.com>
12. Li, X., & Wang, Y. (2023). "Policy-Driven Program Optimization in Chinese Higher Education". *Higher Education Policy*, 36(2), 245-263. <https://doi.org/10.1057/s41307-023-00312-5>
13. Marginson, S. (2018). *Higher Education and Government in the Global Era*. Routledge.
14. Ministry of Education (MOE) (2024). Work Plan for Future Technology Talent Development.
15. Ministry of Education (MOE), China. (2023). Annual Report on Higher Education Adjustments.
16. Ministry of Education (MOE). (2020). Guidelines on the Construction of First-Class Undergraduate Programs.
17. Ministry of Education, China (2012). Regulations on the Management of Undergraduate Programs in Regular Higher Education Institutions.
18. Ministry of Education, China (2017). Double First-Class University Plan.
19. Ministry of Education, China (2023). Annual Report on Higher Education Quality. <http://en.moe.gov.cn>
20. Ministry of Education, China (MOE) (2022). Notice on Dynamic Adjustment of Undergraduate Programs. <http://www.moe.gov.cn>
21. MOE & MIIT (2021). Guidelines for 1+X Certificate Pilot Program. <http://en.moe.gov.cn>
22. National Center for Education Statistics (2023). Trends in Academic Program Offerings.
23. National Center for Education Statistics (2024). IPEDS Program Completion Survey 2020-2023. <https://nces.ed.gov/ipeds/>
24. National Science Foundation (2023). CHIPS Act implementation report (NSF 23-601). <https://www.nsf.gov/chips>
25. National Science Foundation. (2023). Science and Engineering Indicators 2023: Higher Education in Science and Engineering. <https://nces.nsf.gov/indicators>
26. NSB (2021). Vision 2030 Report. <https://www.nsf.gov/reports/nsb/board/national-science-board-vision-2030>
27. OECD (2021). Benchmarking Higher Education System Performance.
28. State Council of China (2021). 14<sup>th</sup> Five-Year Plan for Education Development.
29. State Council, China (2019). Implementation Plan for National Vocational Education Reform. <http://english.www.gov.cn>
30. Texas Higher Education Coordinating Board (2021). Program Productivity Metrics.
31. Times Higher Education (THE) (2023). [Report title: e.g., "Global University STEM Program Trends 2023"]. <https://www.timeshighereducation.com>
32. U.S. DOE (2023). Program Alignment Strategies. ED-OPS-2023-0121.
33. University Grants Commission (UGC), Sri Lanka (2021). Annual Report on Higher Education.
34. University Grants Commission (UGC), Sri Lanka (2022). Delays in Academic Program Approvals.
35. Wickramasinghe, W., & Liyanage, S. (2021). "Higher Education and Graduate Employability in Sri Lanka: A Mismatch Analysis." *Journal of Education and Employment*, 15(2), 45-62.

36. World Bank (2022). Sri Lanka Digital Economy Diagnostic Report.
37. World Bank (2022). Sri Lanka Education Sector Modernization Project.

## **AUTHOR PROFILES**

The 1<sup>st</sup> author: Wang Dingquan, Engineer, currently pursuing a Master of Education (English Medium) in the Faculty of Education, University of Colombo.

The 2<sup>nd</sup> author: Dr. E.S. Neranjani, Head of Department of Humanities Education, Faculty of Education, University of Colombo.