

# GLOBAL INITIATIVE OF ACADEMIC NETWORKS (GIAN): AN INDIAN INITIATIVE OF ACADEMIC COLLABORATION

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## ABSTRACT

*Global Initiative of Academic Networks (GIAN) was launched in 2015 by the Ministry of Human Resource Development, Government of India. Under this initiative, an international academician can visit an Indian Institute for a pre-determined period to teach a course. This initiative aims to promote educational and research activities in India by forging solid linkages with global academic institutions and laboratories. The paper aims to describe the structure and implementation of the GIAN Program at various levels and evaluate how different types of Indian institutes engage in GIAN and the degree of foreign country involvement. The paper sheds light on how this program fosters India's higher education sector through the internationalization of education. The authors have not come across a similar study done specifically on GIAN; the study hence fills the gap in this area.*

**Keywords:** *Internationalization; Transnational education; Academic mobility; Faculty exchange; Academic collaboration; Academic networks; Partnerships; GIAN*

## Introduction

The higher education system globally has undergone significant transformations over the past several decades. One of the most important developments in the higher education sector has been the internationalization of education. Internationalization of education means establishing global collaborations and strengthening cooperation all around the globe to enhance the teaching, learning, and research opportunities with respective goals (Gálová 2016). Such initiatives will aid trade between the two nations and establish positive relationships and eventually world peace (Atalar 2020).

The New National Education Policy of India 2020 (NEP 2020) also demands reforms in higher education through internationalization. The policy also promotes high-quality research, teaching collaborations, and faculty and student exchanges with prominent foreign institutions.

Several initiatives are being taken in the direction of promoting internationalization in education and research in India. The Global Initiative of Academic Networks (GIAN) and the Scheme for Promoting Academic Research and Collaboration (SPARC) are two important examples of such undertakings. In order to facilitate fundamentally and socially relevant research in India and to strengthen the collaboration between Indian Researchers with top research groups in

the world, GIAN was launched in 2015 by the Ministry of Human Resource Development (MHRD), Government of India. Under this program, an international academician can visit an Indian Institute to offer a short-term course (Global Initiative of Academic Networks n.d.). As a result of the tremendous response to the GIAN program, the MHRD launched another initiative named SPARC. The SPARC scheme provides funds for long-term project visits by international faculty and also funds for the travel and stay of Indian Students at the University of the International Collaborator. The vital aim of both these programs is to nourish educational and research activities in India by laying down strong relationships with international research institutions and laboratories ("SPARC" n.d.).

The present paper describes the structure and implementation of the GIAN Programme at different levels, evaluates the extent to which various Indian Institutes participate in GIAN, the degree of association of foreign countries, determines the important knowledge areas

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covered in the GIAN program, etc. The report sheds light on how this program fosters India's higher education sector through the Internationalisation of education.

### Structure and implementation of GIAN programs

The GIAN program is headed by the Secretary of Higher Education, MHRD. A national-level institute will coordinate the operations of the GIAN in India. At present, the national coordinating institute for GIAN is the Indian Institute of Technology (IIT), Kharagpur. There are group coordinators for institutions. These institutes will create and manage national and group portals for GIAN programs, maintain archives, conduct workshops on GIAN activities, and build good interaction and coordination among different hosting institutes. A set of highly eminent academicians are designated as Brand ambassadors to provide assistance to communicate with international faculties to coordinate GIAN programs. The approved courses will be published on the GIAN website. ("GIAN, Guidelines" n.d.)

### Review of literature

A review of prior studies reveals that there were several attempts to evaluate the benefits of academic collaboration, faculty visits on the campuses, and student-faculty exchange programs of various nations. Academic collaboration and international faculty exchanges provide opportunities for new contacts, leading to long-lasting professional relationships even after the faculty visit programs as discussed by Enskär et al. (2011). Hiring eminent scientists in an organization will construct fruitful effects on junior researchers, which will draw more benefits to the hosting organizations or academic institutions in the long run (Slavova, Fosfuri, and de Castro 2016). Various studies deduced that the availability of resources, facilities, organization, collective participation, and time are the essential factors for the successful execution of faculty exchange programs in a cooperative learning environment (Patrício et al. 2018; Byrne 1998; Otieno and Otieno 2016; Caniglia et al. 2017)

Internationally mobile academicians are more productive (Aykac 2021) with respect to publications after their international assignments, and their publication output is usually less before mobility. To a certain extent, it is conditional during the period of mobility. Faculty exchange programs have made a positive impact on their personal

and professional attitudes and performances Alkarzon(2016)

International Teaching collaborations and experiences contribute enormously to the reputation of their institution and help a lot in the innovation in teaching and research practices (Bracht et al. 2006). Beerkens and Vossensteyn (2011), in their study on the effects of the ERASMUS program, point out that these programs have positively impacted the organizational structure of participating institutes, their teaching and research process, and designing of international curriculum, joint degrees, and collaborative research networks. Furthermore, the institutes under study reported that ERASMUS activated the steps for establishing or developing institutional-internationalization strategies, framing policies, and improving the institutions' international visibility and attractiveness.

The studies reveal that the internationalization of education programs has led to significant changes in the institutions, staff, and students, their organization's structure, approaches to teaching and learning practices, curriculum designs, academic collaborations, and international policies. Lack of necessary resources, such as adequate financial assistance, resources, equipment, accumulated scientific knowledge, organizational structure, and information technology, are the critical challenges faced by all international collaborative programs.

However, no studies have been done on the Indian Initiatives GIAN. Hence, the present study contributes to reducing the knowledge gap in the area.

### Objectives of the study

The research was carried out with the following objectives

1. To explore the extent of involvement by Indian institutions in GIAN activities
2. To ascertain the range of foreign collaboration in GIAN programs.
3. To determine institutes' contribution at the national, state, and category levels to this program.
4. To determine the depiction of various subject areas in GIAN
5. To identify the Top Ten Indian Institutes



## Methodology

The data for the study were extracted from the GIAN website (<https://gian.iitkgp.ac.in/>) in July 2021. The GIAN website shows 2101 courses. However, the program has been paused due to limited travel opportunities imposed by the covid pandemic, and 184 courses have now been removed. As of July 2021, 1917, courses were being approved across the country by various institutions. These course details were identified, compiled, and analyzed using Excel.

## Indian Institutions' participation with GIAN

The study's findings show that Institutions of National Importance, including all IITs, 23 NITs, five IISERs, and the Indian Institute of Engineering Science and Technology, actively participate in the GIAN initiative. In contrast, the number of IIMs participating in GIAN is minimal. In the case of other institutes, only a few State Universities (UTY), Central Universities (CUTY), and Deemed to be Universities (DUTY) have begun to offer courses through GIAN. Nine central universities, 57 state universities, 11 other kinds of Institutes, and one deemed institution have taken part in GIAN. At the college level, just 14 colleges are participating in this effort.

Table 1 shows that IITs head by 865 (45.12%) courses, followed by State Universities with 413 (21.54%) and then NITs with 377 (19.67%), followed by colleges with 98 courses and central Universities with 80 courses both having a representation with around 5% of the courses. Compared to the vast number of colleges in the country, the availability of courses is relatively meager.

**Table 1**  
**Number of Courses offered by Institutions**

Type of	No. of Institutes	No. Of courses	%
IIT	23	865	45.12
UTY	57	413	21.54
NIT	26	377	19.67
Colleges	14	98	5.11
CUTY	9	80	4.17
INST	11	47	2.45
IISER	5	22	1.15
IIM	4	8	0.42
IEST	1	4	0.21
DUTY	1	3	0.16
Total	151	1917	100

## Top 10 Indian Institutions and their involvement in GIAN Programs



The number of institutions with approved courses in GIAN was found to be 151. It can be seen that the institutes of national importance, such as IITs, NIT's grabbed the top ten positions in terms of the number of courses offered. IIT Madras is in the first position with 164 (8.56%) courses, followed by IIT Kharagpur with 104(5.43%) courses. NIT Warangal is in the third position. The top 10 institutions, ranked by the number of courses provided, are listed in Table 2.

**Table 2**  
**Top 10 Institutions Vs Courses in the GIAN**

S. No	Organisation / Institution	State	Type of Institute	No of courses	%
1	Indian Institute Of Technology, Madras	Tamilnadu	IIT	164	8.56
2	Indian Institute Of Technology, Kharagpur	West Bengal	IIT	104	5.43
3	National Institute Of Technology, Warangal	Telangana	IIT	84	4.38
4	Indian Institute Of Technology, Indore	Madhya Pradesh	IIT	74	3.86
5	Indian Institute Of Technology, Roorkee	Uttarakhand	IIT	64	3.34
6	Indian Institute Of Technology, Kanpur	Uttar Pradesh	IIT	57	2.97
7	Indian Institute Of Technology, New Delhi	New Delhi	IIT	44	2.3
8	Indian Institute Of Technology, Bombay	Maharashtra	IIT	43	2.24
9	Indian Institute Of Technology, Guwahati	Assam	IIT	43	2.24
10	Malaviya National Institute Of Technology, Jaipur	Rajasthan	NIT	40	2.09

## Geographical Distribution of GIAN Program in India

It is observed that the southernmost state of India, Tamilnadu, has offered the highest number of courses (240, 12.52%) through the contribution of 9 institutes, followed by Telangana with 173 (9.02%) courses by the combined

efforts of 6 institutes. The top seven states contribute to 52.27 % of the courses. When it comes to the number of participating institutions by state, Madhya Pradesh and Maharashtra have the utmost. Twelve institutes each are participating in this international venture. All the Indian States and two Union Territories are participating in the GIAN initiative.

Furthermore, still few states have made no significant contributions to the GIAN effort. This necessitates the establishment of state-level academic networks to increase awareness of the GIAN program among institutes.

### **Knowledge Areas covered in GIAN and associate countries**

One of the imperative aims of the GIAN initiative is to offer courses on topics in niche areas through the collaborative learning process.

The findings show that Mechanical Sciences and infrastructure lead in terms of the total number of approved courses (331, 17.26 %). The top countries with respect to resource persons associated with the courses were the United States of America (USA), the United Kingdom (UK), Australia, Canada, and Germany. Followed by Electronics, Electrical, Information & Communication Technology (262, 13.67%), Chemical, Bio-Chemical (251, 13.09 %), and Mathematical & Computer Sciences (210, 10.95 %). The rest of the course areas were below 10 % of the total number of approved courses. The top countries for collaboration show that the United States of America, the United Kingdom, Australia, Canada, and Germany are at the forefront of GIAN's collaborative efforts across all disciplines. The USA dominates by offering the most courses in almost every discipline.

### **Foreign Collaboration in GIAN**

To determine the overseas collaboration in GIAN, the affiliating details of the resource person associated with the courses and their respective countries were identified and collected from the GIAN website. The findings show that there were resource persons from 60 countries; the maximum number of partaking resource persons belonged to the United States (810). The United Kingdom (175) and Australia (111) came in second and third place. The analysis shows that the European nations are actively

supporting the GIAN initiative.

Around 600 courses are having resource persons from different European nations. The other European countries involved with GIAN activities are Germany (110), Italy (63) and France (61), Spain, Russia Netherlands. Among the European countries, there were resource persons from the Scandinavian nations like Sweden, Denmark, and Norway.

In comparison to the European nations, there is only meager involvement by the Asian and African Countries.. The participation of Middle East nations was very limited, and Israel is the most contributing Middle East nation with 23 courses. Among the African nations, Only South Africa leads the way with 17 courses. As per the data from the web of science, China is an active collaborator with India with respect to scientific papers during the last ten years (2011 to 2020) after the USA and UK. But, with respect to participation in GIAN, the numbers seem to be significantly less.

### **Suggestions and Conclusion**

It is important to note that the GIAN is a unique Indian initiative to bring renowned academicians worldwide for face-to-face interaction. Students and faculty on the Indian campus, which includes both domestic and international students, equally benefitted from the outcomes of this program. This will attract more international students to Indian institutes, which paves the way for universities to enrich diverse learning environments.

### **Major findings and suggestions are listed below.**

1. More participation from institutes across the country is essential; especially colleges and universities.
2. Even though Institutions of National Importance actively participate in the GIAN initiative, the number of IIMs participating in GIAN is minimal.
3. A multidisciplinary approach is needed while formulating the curriculum and program syllabus.
4. Courses in Humanities, Arts, Management, Social Sciences, and Law are relatively low compared to Science and Technology disciplines. Institutions that offer courses in these areas can invite more overseas resource persons.

5. European nations are broadly supportive of this project. While other countries, such as China, countries from Middle East Asia, and African countries have not actively participated in this project, as was intended, the program can acquire additional momentum by facilitating other BRIC countries - Brazil, Russia, China, and South Africa
6. Only a few video lectures were found to be archived on the GIAN website. Steps must be taken to ensure the proper archiving of course materials, video lectures, and presentations into the National Digital Library of India as envisioned

Efforts should be taken to archive and redistribute the high-quality course materials to the academic clients and invite active discussions and suggestions for planning new courses in GIAN. State-level empowerment of activities is also essential for the practical realization of this program. Giving due academic weightage to the courses and incorporating it as part of the syllabus or coursework will bring positive results in the higher education sector.

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