

Annual Report 2021-22

About IIC Institute
Vision / Mission of IIC established at the Institute

The Ministry of Human Resource Development (MHRD), Govt. of India, has recently established 'MHRD's Innovation Cell (MIC)' to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas and transform them into prototypes while they are informative years.

Functions Through the IIC,

- Students/Faculty associated with the IIC will have exclusive opportunity to participate in various Innovation and Entrepreneurship-related activities organized by MIC in a time bound fashion.
- Students will be recognized for their Innovations and rewarded. Their success stories will be shared.
- The entrepreneurs will get the opportunity to meet/Interact with their peers and other entrepreneurship development organizations
- The student innovators will get to meet a pool of mentors through the periodicworkshops/ seminars/ interactions with entrepreneurs, investors, professionalsconducted by IIC.
- Innovative projects carried out by students and faculty of the University will be highlighted through the Innovation Portal.
- Hackathons, idea competition, mini-challenges etc. with the involvement of industries will be conducted.
- Students will be encouraged to experiment with new technologies. Visit companies and places and see the new culture of Entrepreneurship.

Journey of IIC established at the Institute

The Ministry of Education encouraged all higher education institutions to form Institution's Innovation Councils (IIC) in order to inspire students and excite young minds with a new spirit of innovation and vigour so that their thoughts and ideas find a suitable outlet. In this regard, Brainware University established the IIC in 2019 with the participation of the academic staff, department heads, and administrative personnel.

This organisation was founded with the intention of promoting an innovative culture inside the institution and fostering the holistic and all-inclusive growth of both society and students in particular.

For the benefit of the students, the IIC at Brainware University actively organises frequent workshops, seminars, and webinars so that they are well-versed in the current business environment. Because of the relevance of an independent entrepreneurial career and the copyright difficulties linked with new ideas and creativity, seminars on entrepreneurship and Intellectual Property Rights (IPR) have been very successful with many attendees. Additionally, frequent industry trips are planned so that applicants can connect their classroom learning with real-world experience and gain confidence.

The students are also taught about startup policies, how to think differently so that one can come up with novel ideas, what the right mindset should be when starting a business, and similar things through motivational speeches from well-known businesspeople so that they can transform themselves from job seekers to job providers. Additionally, the IIC of Brainware University organises Hackathons to help students focus their creative energy so that their ideas and innovations can find an appropriate platform. These events give students the chance to collaborate with teachers on a project while also allowing them to build a prototype of their ideas. An example of an IIC event is a one-day workshop on "The importance of communication in problem-solving," as well as the Brainware University Internal Hackathon 2K20, a seminar on "Entrepreneurship and Family Business," and a session on IPR & IP Management for Innovation & Start-ups. One of the IIC's most recent self-driven projects was an article writing competition for students on "Contemporary Issues of Intellectual Property Rights," with sub-themes on various branches of science and technology, cyber science, copyright law, innovation and commercialization, patents, geographic issues, and plant science and technology.

The IIC team continued to persevere and kept on their hard work. With events being organized at regular intervals, the committee toiled to undertake more initiatives and inspire more students profoundly. Despite the pandemic crisis, the spirit of the body members has notbeen dampened. Though the lockdown posed a great challenge, the IIC of Brainware could not stopped in its endeavors. This indefatigable determination bore glorious fruits when the efforts of IIC were recognized and honored with 4.5 stars. IN the year 2020-2021 it received 4.0 stars It is an achievement that has further ignited the enthusiasm of all the team members to work with renewed energy and vitality. The IIC of Brainware University intends to carry on their efforts to meet the objectives and hopes to be successful in all their future endeavors.













CERTIFICATE

Institution Innovation Council (IIC) established at

BRAINWARE UNIVERSITY, KOLKATA

had undertaken various activities prescribed by Innovation Cell, Ministry of Education, Govt. of India to promote Innovation and Start-up in campus during the IIC calendar year 2019-20.

Prof.Anil D.Sahasrabudhe Chairman, AICTE Sh. Amit Khare
Secretary, Department of Higher Education, MOE

Issued On: 2020-09-22

Abhay Jere
Dr. Abhay Jere
CIO, MOE, Innovation Cell

Certificate No: 118









Certificate of Recognition

This is to certify that

BRAINWARE UNIVERSITY

is recognised in the band "PROMISING" under the category
"University & Deemed to be University (Private/Self Financed) (Technical)"
in Atal Ranking of Institutions on Innovation Achievement(ARIIA) 2021,
a flagship program of the Ministry of Education, Government of India.

29th December 2021.

Dr. Anil D Sahasrabudhe Chairman, AICTE

SADELMA

Shri K Sanjay Murthy Secretary (HE), MoE Abhay Tere

Dr. Abhay Jere

Chief Innovation Officer

MoE's Innovation Cell

Diversified representation in the IIC established at the institute from industry, Interdisciplinary& Departments/ Units etc.

Brainv	Brainware University Institutions Innovation Council							
Extern	External Member & Experts			Faculty Members & Experts			Students Member	
IPR Expe rt	Indust r y Expert s	Entrepenurs h ipEnablers	Coordinat o rs	Ment o rs	Institutio n al Ambassa d or	Memb ers	Students Entreprene ur s	

Brief mention of key functionaries at the IIC Institute

Name	IIC Designation	University Association	Teaching/N on- Teaching
Dr. Sanjay Saha	President	Professor, Dept. of Management	Teaching
Ms. Shahnaz Mondal	Vice President	Assistant Professor, Dept. of Law	Teaching
Ms. Anandita Das	Convener	Assistant Registrar	Non-Teaching
Ms.Mahua Pal	NIRF Coordinator	Registrar	Non-Teaching
Mr.Jyotirishwar Kumar	ARIIA Coordinator	Assistant Registrar	Non-Teaching
Dr. Sandip Roy	Startup Activity Coordinator	Associate Professor, Dept. of Computational Sc.	Teaching
Dr. Anirban Mandal	Internship Activity Coordinator	Associate Professor, Dept. of Management	Teaching
Dr. Kaushik Banerjee	IPR Activity Coordinator	Associate Professor, Dept. of Law	Teaching
Mr. Partha Pratim Dasgupta	Innovation Activity Coordinator	Assistant Professor, Dept. of Computational Sc.	Teaching
Mr. Manoj Mukherjee	Social Media Coordinat or	Assistant Professor, Dept. of Multimedia	Teaching

Dr.Somnath Ghosh	Member	Associate Professor, Dept. of Allied HealthSc.	Teaching
	Member	Assistant	Teaching
Majumdar		Professor,Dept.	

r r r Member	Assistant Professor, Dept. of Management Finance Dept. Adm. Dept. Assistant Professor, Department of Media Science and Journalism Associate Professor Department of	Teaching Non-Teaching Non-Teaching Teaching
r	Finance Dept. Adm. Dept. Assistant Professor, Department of Media Science and Journalism Associate Professor	Non-Teaching Teaching
r	Assistant Professor, Department of Media Science and Journalism Associate Professor	Teaching
	Department of Media Science and Journalism Associate Professor	-
Member		Teaching
	Biotechnology	
1ember	Assistant Professor, Dept. of Allied Health Sciences	Teaching
1ember	Assistant Professor, Dept. of Allied Health Sciences	Teaching
1ember	Assistant professor, Department of Pharmacy	Teaching
lember	Assistant professor, Department of Pharmacy	Teaching
lember	Assistant professor, Department of Agriculture	Teaching
1ember	Associate Professor and HOD,Department of Agriculture	Teaching
1ember 8	Assistant Professor, Department of Computer	Teaching
	1ember 1ember 1ember 1ember	Member Department of Biotechnology Member Assistant Professor, Dept. of Allied Health Sciences Member Assistant Professor, Dept. of Allied Health Sciences Member Assistant professor, Department of Pharmacy Member Assistant professor, Department of Pharmacy Member Assistant professor, Department of Agriculture Member Associate Professor and HOD, Department of Agriculture Member Assistant Professor, Department of Agriculture Member Assistant Professor, Department of Agriculture

			Science and Engineering	
Mr. Subhro Prakash Dutta	Member		Assistant Professor, Department of Computer Science and Engineering	Teaching
Dr. Samrat Paul	Member Ambassador	&	Assistant Professor, Department of Biotechnology	Teaching
Mr. Subhadip Nandi	Member Ambassador	&	Assistant Professor, Department of Computational Science	Teaching
Ms.Eshani Sadhukhan	Member& Ambassador		Assistant Professor, Department of Management	Teaching
Mr.Pankaj Kumar Sanda	Member& Ambassador		Assistant Professor, Dept of Electronics and Communication Engineering	Teaching
Mr. Kankana Ghosh	Member& Ambassador		Assistant Professor Department of Media Science and Journalism	Teaching
Ms.Paramita Ganguly	Member& Ambassador		Assistant professor, Department of Pharmaceutical Technology	Teaching
Mr.Rajesh Kumar Mukherjee	Member		Assistant Professor, Department of Pharmaceutical Technology	Teaching
Mr.Anik Ghosh	Member		Assistant	Teaching

	Professor, Dept.
	Professor, Dept. of Management
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Portfolio/graphical/Tabular representation of Resource strength (human capital and Physical capital) of the IIC institution

Total No. of IIC Members	21 (Including external expert)
Total No. of IAs	11
Total No. of faculty Mentors From Portal	15
Pre-Incubation Units, If any	Yes
Incubation Units, If any	Yes under MSME Ministry of MSME, Govt. of India
IP Facilitation Unit, If any	NA

Highlight Facilities, Infrastructure of Pre-Incubation & Incubation kind and Student bodies/clubs engaged in promotion of Innovation and Entrepreneurship in the campus.

Inci	ubation Units					
S. N o.	Incubatio n Unit Name	Incubati o n Incharg e Name	Incubati o n Incharge Email	Incubation Incharge Phone	Funding Agency/Sch e mes Available	Acti o n
1	Business Incubation (BI) to provide 'Support for Entreprene u rial and Managerial Developme n t of MSMEs'	Jyotirish war Kumar	8013571 6 11	asstregistrar@brainwareuniver s ity.ac.in	Own Resource,Ot her Central/Stat e Governmen t	

Pre	Pre incubation Details						
S. N o	T y p e	Pre- Incubatio n Unit Name	Pre- Incub a tion Incha r ge Name	Pre-Incubation Incharge Email	Pre- Incub at ion Inchar g e Phone	Website Url	Act i on
1	E D C	Entrepre n eurship Develop m ent Cell (EDC)	Jyotiri s hwar Kuma r	asstregistrar@brainwa r euniversity.ac.in	03371 4 5500	https://www.brainwareuni v ersity.ac.in/edc.php	

Highlight Achievements (Narrative/Graphical/tabular representation) 2021-22

Activity

IIC Activities Announced: 40 IIC Activities Submitted: 22 IIC Activities Approved: 22 MIC

Activities Announced: 8 MIC Activities Submitted: 5 MIC Activities Approved: 5 Self-Activities

Announced: 20

Self-Activities Submitted: 18

Self-Activities Approved: 14

TECH CLUB

The Tech club of Brainware University organizes a series of events that include technical, social, and community outreach programs. Students are encouraged to join these clubs as the experience gained during their stint in these technical clubs will add the edge to their resumes going forward and help build expertise in the technical domains.

EVENTS ORGANIZED







Some Major Activities/Events

Name of the Event: IDEATHON-2022 Date of the Event: 28th February, 2022 Collaboration

with: IIC

No. of Student Participant: 28

National Science Day Celebration | Raman Effect

To mark the discovery of the Raman Effect by renowned Indian Physicist Sir C V Raman, the Departments of Physics and Chemistry of Brainware University in

collaboration with the Institute's Innovation cell organized an online seminar on 28th February, 2022 titled "Integrated Approach in

Science and Technology for Sustainable Future". The result of IDEATHON-2022 was announced at this event.

The programme commenced at 10 am with opening remarks and an introduction delivered by Dr. Bishuddhananda Das, HOD of the Physics Department. It was followed by a speech given by Prof. Sankar Gangopadhyay, Vice Chancellor of the university. He acquainted the audience with the circumstances surrounding the discovery of the Raman effect and its wide-ranging applications in technological fields along with the importance of celebrating National Science Day. Prof. Kushal Goswami, Ex. HOD, Department of Physics, Jadavpur University, graced the occasion as Chief guest and shared his knowledge about the different practical applications of science and technology. He highlighted the usage of the comparison microscope in the history of forensic science by referring to the famous incident of the St. Valentine's Day Massacre that occurred in Chicago in 1929. This instrument played a pivotal role in revealing the true identity of the assailants responsible for the murder of seven gangsters of Chicago's North Side Gang. Dr. Goswami concluded his talk by highlighting the importance of technology in our daily lives.

We are proud to announce the participant name of best ideas and also congratulate the participants. If your name is not listed as one of the selected ideas do not get discouraged as there will be many more opportunities in the future. Such competitions are a stepping stone and each experience helps them to learn. Hence, a positive attitude is what makes them extraordinary.

Name of the Event: Internal Hackathon 2022

Date of the Event: 16th March, 2022

No. of Student Participant: 135

Guest: Sayantan Chakraborty, Director - INDO-UK CONFEDERATION OF SCIENCE, TECHNOLOGY & RESEARCH, LONDON, UK, INDO-US CENTER OF

DROFFESSIONAL EXCELLENCE LISA Cuber Security Magnifester

PROFESSIONAL EXCELLENCE, USA, Cyber Security Knowledge Sharing & Research Council, Entrepreneurship Development & Research Council of India

Achievement: After a round of deliberations 15 teams were selected to participate in the Smart India Hackathon 2022.

Smart solutions for the smart generation

To promote innovative thinking and problem solving skills in students Brainware University organized an Internal Hackathon for SIH competition on March 17,2022 from 12 PM by the joint collaboration of Brainware University Tech Club and Institution's Innovation Council under the guidance of MoE's Innovation Cell, Government of India. Often the youth's brilliance goes unnoticed even when they have innovative ideas to solve some of the most

compley problems. This	event was to provid	le a proper platform	for students to showcase	
their ideas and receive	event was to provid	le a proper plationi	Tor students to snowcase	
		1		

proper feedback from the experts. Students from different departments participated in teams and presented their solutions to the list of problem statements provided for SIH (Smart India Hackathon). The topics were centered on crowd-sourcing solutions and finding innovative yet sustainable approaches to common place problems. At the end of the presentations the students received feedback from the mentor board of internal and external experts. Their efforts were widely appreciated by the board members including honorable Vice Chancellor Prof.(Dr) Sankar Gangopadhyay. After a round of deliberations seven best teams were selected to participate in the Smart India Hackathon

Name of the Event: TEXIBITION 2K22 include following events:

I. The Bluster

II. The Architect

III. The Legends

IV. The Illusion

V. Technology Exhibition

Date of the Event: 6th – 7th June, 2022

Collaboration with: IIC

No. of Student Participant: 500

Texibition 2K22: Brainware University annual technology fest. Enjoyments. Calling all tech enthusiasts! Join us to celebrate the wonders of technology for Texibition 2K22, the annual tech fest of Brainware University.

The fest starts from June 6, 2022 and will go on till June 7, 2022. From gaming, to coding, to prototype building, there is something for everyone. Register today and join us for a journey into the tech wonderland.

SMART INDIA HACKATHON 2021-2022

Total participation count	Total Approved Count	Total Disapproved Count

	27	10	5	
Number and Different types of I&E and IPR activities Conducted				72
No.	of students & faculty ideas go	15 SIH2022		
No. o	of students & faculty Innovat	PPD		

Highlight few best IIC Faculty/Student members and their achievements/ Rewarded for theinnovations at different forum

A prototype submitted as Proof of Concept by one of our students, Ms. Shreya B. Tech, CSE and her team, has been nominated for regional level mentoring under the IIC National Innovation Contest 2020 announced and held by MHRD's Innovation Cell in February, 2020.

Highlight selected best Innovations & images with mention of inventor/innovation name

Sr. No.	Title	Theme
1	Smart Watch For Women Safety	IoT based technologies (e.g. Security& Surveillance systems etc.)

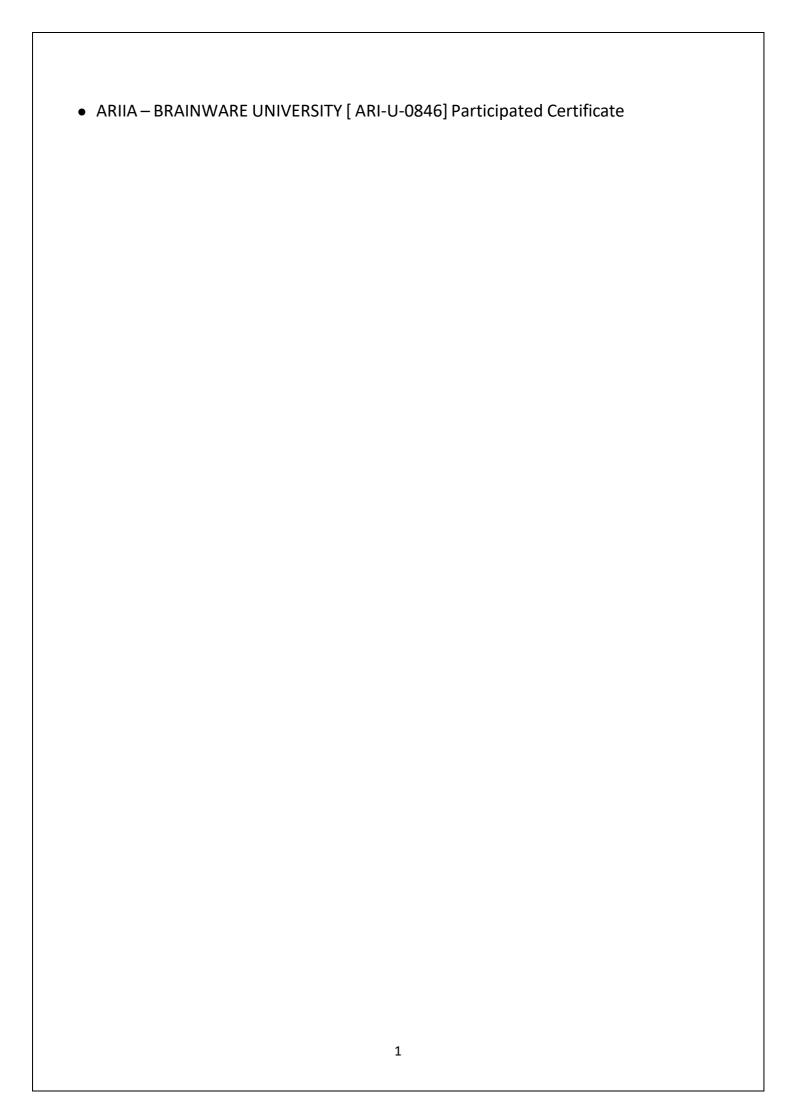
2	Manufacture of low cost floor cleaner from used tea	Waste Management/Waste to Wealth Creation			
	leaveswaste				
3	Plastic to Power	Waste Management/Waste to WealthCreation			
4	gas absorption and purificationchimney	Waste Management/Waste to WealthCreation			
5	DTEG(DECISIVE TERRAIN ENERGY GENERATION)	Renewable and affordable Energy.			
6	Gas absorption and purificationchimney	Waste Management/Waste to WealthCreation			
7	ALGINATE BOTTLES	Waste Management/Waste to WealthCreation			
8	HEAVEN & FRUIT	Agriculture & Rural Development.			

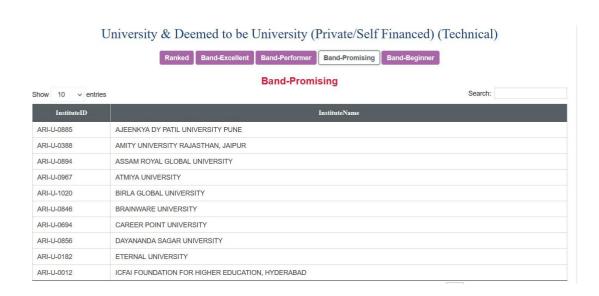
Highlight selected start-ups established by students/faculties with mention of founder/co-foundername NA

List if any break through Innovations / Technology Developed at the institute (2-3 technology with 2-3 lines about technology and innovation)

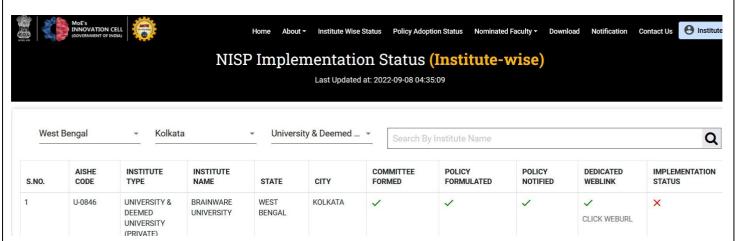
DTEG (DECISIVE TERRAIN ENERGY GENERATOR) is capable of generating enough power for charging a mobile phone or camera indecisive / crucial terrains / landscapes like cold icy regions with the help of the ashes that remain after bonfireatnight. And The next day, the devices will be charged

Participation of IIC-institute in various programs of Central and Stage Govt. Highlighting speciallyfor the schemes or programs





• NISP Adoption status - Policy Formulation & Policy Implementation



- Smart India Hackathon Participated
- Students Participation in MIC Innovation Contest

Detail of Social Media & Connections of IIC institute

https://www.facebook.com/brainwareuniversity

https://twitter.com/BrainwareTweet

https://www.linkedin.com/school/brainwareuniversity/

https://www.instagram.com/brainware_university_kolkata/

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	•	Srn o	Title/Name of Patent	IP Registratio n Number	Date of Filed/Publishe d	Actio n
1			FPGA-BASED ACCESS CONTROL SYSTEM AND METHOD FORDCT COMPRESSED IMAGES	202110621 7	20-08-2021	
2	I	OT bas	ed Intelligent Traffic Management System		202131062286A	31-12- 2021
3	C	OPPE	R TITANIUM DIOXIDE MASK		E-1/38319/202	29-07- 2021
4	A fo	simp or tha	le, rapid and low-cost biochemical method assaemia carrier detection	2	2021104630 2021	27-07-
5 202		⁄lalwa	e Detection Model for android using Machine	e Learning	202111037434	18-08-
6	S	_	NE LEARNING BASED SMART GRID POWER I INTEGRATED WITH WIRELESS COMMUNICA	TION	202111027550A 2021	19-06-
7	A	RTIFIC	CIAL INTELLIGENCE BASED AUTOMATED DATA SSISTANCE SYSTEM	A SECURITY	202141039098A	29-08- 2021
8	Α	BNOR	NE LEARNING DRIVEN DETECTION OF MAL BEHAVIOURS IN MOBILE CLOUD TRUCTURE.		118570 5	01-08- 2021
9	Ν	/IONIT	THOD AND A SYSTEM FOR REAL-TIME IS ORING FOR CONSTRUCTION INDUSTRY SED SYSTEM AND METHOD FOR FALL	FUEL	2020102439	28-10- 2022
10			TION IN ELDERLY OR PD PEOPLE BY THE MEAN	NS	202110270	20-10-
11	Α.	SYS.	TEM AND METHOD FOR SMART WALKII	NG	ASSISTANT	FOR

ELDERLY CARE 2021102699 2021

1 2	System and Method for cloud Management for provisioning multiple services through virtual green cloud	2021102711	17- 11- 2021
1 3	Cloud based system and method for early detection of pandemic diseases through smart phone sensor	2021102693	03- 09- 2021
1 4	A method of evaluating mental health disorders to provide a medicine for the same	2021101498	28- 04- 2021
1 5	AOT based pendamic related smart health management system for industrial worker	2021101013	14- 04- 2021
1 6	A Robotic System for Disinfecting an area	2021102592	16- 06- 2021
1 7	"A SYSTEM AND A PROCESS FOR DIAGNOSIS OF MENTAL HEALTH CONDITION APPLYING INTELLIGENT DATA ANALYSIS	2020103851	27- 01- 2021
1 8	Development of Indian Oral Cancer Risk Score and Index	2021101805	08- 04- 2021
1 9	Deep Learning And Wireless Based Energy Efficient Autonomous System For Pollution Control In E-Cities	20214105186 6	26- 11- 2021
2 0	DEEP LEARNING BASED DETECTION OF CHRONIC HEART DISEASE USING FEATURE EXTRACTION OF ECG	20214104804 9	21- 10- 2021
2	A SYSTEM FOR MONITORING SOCIAL DISTANCE AND GENERATING QALERTS USING IOT	20211104625 4	11- 10- 2021
2 2	CONCEPTUAL FRAMEWORK OF ARTIFICIAL INTELLIGENCE IN HUMAN RESOURCE MANAGEMENT	2021102839	30- 06- 2021

Testimonials from IIC members and external about IIC institute and IIC of MoE's Innovation CellTestimonial 1

"In accordance with the guidelines of the Innovation Cell, Ministry of HRD, Government of India, Brainware University established the Institution Innovation Council (IIC). The goal of IIC is to mentor and spread awareness on fostering innovation at the Institute level. Institution Innovation Council (IIC) is carrying out various activities prescribed by Innovation Cell to promote Innovation and Start-up on campus throughout the academic session. Head of the Department of Allied Health Sciences at Brainware University, Prof. Dr. Somnath Ghosh.

Testimonial 2

The Ministry of Education, Government is proud of its Institutions Innovation Council programme. In the areas of ideation, prototype, IPR, entrepreneurship, and startup, students and faculty members are affected by this initiative of India. The entire MoE Innovation Cell is congratulated by Brainware University for their efforts. —Jyotirishwar Kumar, Assistant

Registrar, Brainware University Testimonial 3

By exposing them to pre-incubation processes, exercises, bootstrapping it, and producing the new concept into a prototype, the group of IICs has as its goal to inspire, support, and develop young minds. Through many workshops, seminars, and other innovative activities put on by our Institutions, these groups have been given various inventive works to complete. We always appreciate their original ideas, which have been recognised and encouraged more children to be creative. Sandip Roy, associate professor and head of the computational science department

Testimonial 4

IIC is an excellent tool for instructors and students. It offers them chances to expand and refine their ideas. The regular webinars and seminars that feature top entrepreneurs teaching students the keys to a successful startup career are another thing that people love about this cell. The institution's IIC cell is filled with inspiration and innovation. We are regularly encouraged by the IIC Ministry of Education to evaluate student feedback, take it into account, and take part in fresh programmes in order to better help students. Anandita Das Assistant Registrar, Convener II, Brainware University

Testimonial 5

Observing pupils actively engage in all of the programmes makes me very happy. It is quite beneficial because the advice is so detailed and useful because the majority of our students want to start their own businesses. Without being confused by the jargon, it enables them to quickly understand key concepts of innovation and startups. The fact that each of the three IIC sections—MIC activity, calendar activity, and self-driven activity—has been so carefully and thoughtfully constructed to extend students' perspectives on employment options is fantastic. Students who have taken part in IIC's programmes have gained confidence and been inspired to think of innovation and self-employment as equally fulfilling career path. Mahua Pal, Registrar, Brainware University.

Testimonial 6

The institution's Innovation Council (IICs) encourages the young, inquisitive students to turn their concepts into prototypes and startups. It employs a methodical process to turn student inventions and startups into reality. IIC offers its pupils a structured method of learning "how to create fresh ideas for "how to implement it" and "how to protect it". Most crucially, the year-round activities are required by the modern business world.-Dr. Sanjay Saha, Professor, Dept of Management, President IIC.

Testimonial 7

The main goal of the MHRD's Innovation Cell (MIC) is to basically inspire, nurture, and encourage students by assisting them in working with new ideas and turning them into

prototypes.	The	institution's	innovation	council	team	at	Brainware
			;	<u>2</u>			

University has been successful in running various activities throughout the year. IIC recently observed "World Entrepreneur Day" with the goal of encouraging first-year students who had just been admitted to innovate and practise entrepreneurship. To help the young entrepreneurs seize possibilities in the constantly shifting business landscape, IIC and the School of Management and Commerce recently hosted a session on Accelerators/Incubation-opportunities Students and Faculty-Early Stage Entrepreneurs. Ms. Shahnaz Mondal, Asst. Prof. Department of Law, Vice President IIC

Contact:

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