



Verification Submitted Institute Data for Atal Ranking of Institutions on Innovation Achievements (ARIIA) - 2020-21

Institute Name: Terna Public Charitable Trusts Terna Engineering College Nerul [ARI-C-34092]

List all the departments / centers / units are part of innovation and startup ecosystem of the institite

Srno	Department / Center / Unit Name	Type of Department / Center / Unit	Mention the Stream / Discipline / Sector of focus	Department / Center / Unit Level	Program Type	Student / Benificiary Strength (2019-20)	Academic Staff Strength (2019-20)	Non-academic Staff Strength (2019-20)
1	Computer Engineering	Academic Department with lab facility	Computer Engineering	UG / PG / PhD	Technical	240	34	13
2	Information Technology	Academic Department with lab facility	Information Technology	UG / PG / PhD	Technical	80	14	5
3	Electronics and Telecommunication Engineering	Academic Department with lab facility	Electronics & Telecom	UG / PG / PhD	Technical	135	21	8
4	Electronics Engineering	Academic Department with lab facility	Electronics	UG / PG / PhD	Technical	70	10	5
5	Mechanical Engineering	Academic Department with lab facility	Mechanical	UG / PG / PhD	Technical	135	18	7
6	Mechatronics Engineering	Academic Department with lab facility	Mechatronics	UG / PG / PhD	Technical	70	12	5
7	Civil Engineering	Academic Department with lab facility	Civil	UG / PG / PhD	Technical	65	10	6
8	Engineering Product Innovation Center	Pre-incubation unit	Learning Engineering skills and Product Development	At all level	Technical	450	6	3
9	Terna Incubation Center	Incubation Unit	Entrepreneurship Development	At all level	Technical	400	5	1
10	TEC Research Center	Research Unit / Park	Research in IoT healthcare and other areas	At all level	Technical	100	5	1

Participation of HEI in Innovation & Entrepreneurship Initiatives of Ministry of Education (Till Today)

Programs/Initiatives	Status	Registration ID
Adopted National Innovation and Start-up Policy at the HEI	Yes	Not Required
Establishment of Institution's Innovation Council (IIC) at HEI	YES	IIC Registration ID : IC201912398

Participation of HEI in Innovation & Entrepreneurship Initiatives of Ministry of Education (Till Today)

Trained Innovation Ambassadors at HEI	NO	Not Required
Participation in Smart India Hackathon (SIH)	Yes	Not Required
Facilitated listing start-ups/ technologies in Young India combating COVID with Knowledge, Technology and Innovation (YUKTI 2.0) portal of MIC	No	Not Required
Participation in National Education Alliance of Technology (NEAT)	No	Not Required

Section 1 > i : Details of Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up Conducted by the HEI

Srno	Name of Program (Full Name)	Program Theme	Program Type	Program Category	Organizin g Departm ent / Centre / Student Body Name	Program Start Date	Program End Date	Program Duration(i n Days)	Program Location	Internal Participa nts (Student)	Internal Participa nts (Faculty)	External Participa nts (Student)	External Participa nts (Faculty)	Total Number of Participa nts	Had institute spent expenses either from own resource/received fund to organise the program/activity/event?	Did any of the participants received any awards/recognition for startup / innovation ideas / research?
1	Introducti on to Terna E- CELL	Entrepre neurship/ Startup	Orientatio n Session	Institute Lead Activity	TEC E- Cell	27-07-20 19 00:00:00	27-07-20 19 00:00:00	1	Within Campus	153	4	0	0	157	No	No
2	Expert talk on "Cyber Security"	Entrepre neurship/ Startup, Innovatio n	Mentorin g Session	Institute Lead Activity	Terna E- Cell	24-09-20 19 00:00:00	24-09-20 19 00:00:00	1	Within Campus	122	4	0	0	126	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)	No
3	Illuminate Worksho P	Entrepre neurship/ Startup	Worksho p	Institute Lead Activity	TEC E- Cell	19-10-20 19 00:00:00	19-10-20 19 00:00:00	1	Within Campus	120	4	0	0	124	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)	No
4	Startup- Sutra	Entrepre neurship/ Startup, Innovatio n	B-Plan Competiti ons	Institute Lead Activity	Terna E- Cell	21-12-20 19 00:00:00	21-12-20 19 00:00:00	1	Within Campus	15	4	96	0	115	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)	No
5	Saimplex Training	Entrepre neurship/ Startup, Innovatio n	Start-up Yatra	Institute Lead Activity	TEC E- Cell	29-01-20 20 00:00:00	29-01-20 20 00:00:00	1	Within Campus	90	0	0	0	90	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)	No
6	SAP seminar	Innovatio n	Seminar	Student Lead Activity	CSI Terna	19-09-20 19 00:00:00	19-09-20 19 00:00:00	1	Within Campus	121	0	0	0	121	No	No
7	Machine Learning	Innovatio n	Training	Institute Lead Activity	CSI Terna	07-12-20 19 00:00:00	14-12-20 19 00:00:00	8	Within Campus	16	0	0	0	16	No	No

## Section 1 > i : Details of Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up Conducted by the HEI

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8	MongoD B seminar	Innovatio n	Seminar	Student Lead Activity	CSI Terna	30-01-20 20 00:00:00	30-01-20 20 00:00:00	1	Within Campus	152	0	0	0	152	No	No
9	Django workshop	Innovatio n	Worksho p	Student Lead Activity	CSI Terna	01-02-20 20 00:00:00	02-02-20 20 00:00:00	2	Within Campus	48	0	0	0	48	No	No
10	IDBI BFSI	Innovatio n	Worksho p	Institute Lead Activity	CSI Terna	27-02-20 20 00:00:00	29-02-20 20 00:00:00	3	Within Campus	150	0	0	0	150	Total Expense Amount Incurred by Institute to Organise the Program (In Rupees)	No
11	Visit to Automati on Expo	Entrepre neurship/ Startup, Innovatio n	Exposure visit	Institute Lead Activity	Mechatro nics	28-09-20 19 00:00:00	28-09-20 19 00:00:00	1	Outside Campus	53	5	0	0	58	No	No
12	B&R FDP	Entrepre neurship/ Startup, Innovatio n	Skill developm ent	Institute Lead Activity	Mechatro nics Departm ent	09-12-20 19 00:00:00	20-12-20 19 00:00:00	12	Within Campus	0	9	0	7	16	No	No
13	Prolific Worksho p	Entrepre neurship/ Startup, Innovatio n	Skill developm ent	Institute Lead Activity	Mechatro nics Departm ent	13-04-20 19 00:00:00	15-04-20 19 00:00:00	3	Within Campus	27	2	0	0	29	No	No
14	CNC Training PMKVY	Entrepre neurship/ Startup, Innovatio n	Skill developm ent	Institute Lead Activity	Mechatro nics Departm ent	02-11-20 19 00:00:00	05-01-20 20 00:00:00	65	Within Campus	2	0	88	0	90	No	No
15	B & R Guest Lecture	Entrepre neurship/ Startup, Innovatio n	Motivatio nal speak	Institute Lead Activity	Mechatro nics Engineeri ng	17-09-20 19 00:00:00	17-09-20 19 00:00:00	1	Within Campus	83	0	0	0	83	No	No
16	SMC Guest Lecture	Entrepre neurship/ Startup, Innovatio n	Motivatio nal speak	Institute Lead Activity	Mechantr onics Engineeri ng	04-03-20 20 00:00:00	04-03-20 20 00:00:00	1	Within Campus	95	0	0	0	95	No	No

Section 1 > ii : Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State, National and (or) International Level (Organized by External Organizations) sent by the HEI

Srno	Name of Program (Full Name)	Program Theme	Program Type	Organizin g Agency / Institute Name	Organizin g Agency Type	Program Start Date	Program End Date	Program Duration(i n Days)	Participa nts (Students )	Participa nts (Faculty)	Total Number of Participa nts	Awards/R ecognitio ns/Achiev ements	Award / Position / Recogniti on Secured	Title of Innovatio n / Start-up Secured the Award / Recogniti	Had institute spent expenses either from own resource/ received fund towards sending delegation to participate / represent the activity /event?	Did any of the participants received any awards/recognition for startup / innovation ideas / research
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Section 1 > ii : Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State, National and (or) International Level (Organized by External Organizations) sent by the HEI

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1	Smart India Hackatho n	Entrepre neurship/ Startup	Hackatho n	MHRD Innovatio n Cell	Govt. Agency (Central)	01-09-20 19 00:00:00	15-03-20 20 00:00:00	19	50	0	50	Yes	Joint Winner	EPICAR E	TotalTotal Expense Amount Incurred by Institute? (In Rupees)	Award / Position / Recognition Secured  Title of Innovation / Start-up Secured the Award / Recognition  Award/Recognition/Achieve ment Received for
2	ESVC 2020	Innovatio n	Innovatio n Contest	Imperial Society of Innovativ e Engineer s (ISIE)	Non- Govt. Agencies	03-10-20 19 00:00:00	15-03-20 20 00:00:00	16	30	4	34	No			TotalTotal Expense Amount Incurred by Institute? (In Rupees)	No
3	DST AICTE Texas Instrume nts India Innovatio n Contest Design Challeng e	IPR	Innovatio n Contest	DST Texas Instrume nts India IIM Bangalor e	Corporat e / Industry Associati on	10-08-20 19 00:00:00	31-03-20 20 00:00:00	23	32	1	33	No	+	+	TotalTotal Expense Amount Incurred by Institute? (In Rupees)	No
4	SAE India SUPRA 2020	Innovatio n	Innovatio n Contest	Society of Automoti ve Engineer s(SAE) India	Non- Govt. Agencies	16-09-20 19 00:00:00	15-03-20 20 00:00:00	18	30	3	33	No			TotalTotal Expense Amount Incurred by Institute? (In Rupees)	No
5	KPIT Sparkle 2020	IPR	Innovatio n Contest	KPIT	Corporat e / Industry Associati on	05-06-20 19 00:00:00	18-03-20 20 00:00:00	28	12	1	13	No	1	-	No	No
6	latest Technolo gy related to Innovatio n, Entrepre neurship and Intellectu al Property (IP)	IPR	Worksho p	K. B. Patil college	Corporat e / Industry Associati on	26-02-20 20 00:00:00	27-02-20 20 00:00:00	2	0	1	1	No			No	No

Section 1 > ii : Details of Students, Faculties/Staff Participation/Representation in Co-curricular events/programs related to Innovation, IPR and Entrepreneurship/Start-up at the State, National and (or) International Level (Organized by External Organizations) sent by the HEI

	State, N	ational a	ma (01) n	- Itorriano	nai Eoro	i (Organi	<u> </u>	Atornar (	or garniza	10110) 00	it by the					
7	Machine Learning in Python	Innovatio n	Worksho p	Surge One bit Technolo gy LLP	Corporat e / Industry Associati on	20-07-20 19 00:00:00	20-07-20 19 00:00:00	1	1	0	1	No			No	No
8	NATION AL ELECTRI C KART CHAMPI ONSHIP 2020 Season 3.0	Innovatio n	Innovatio n Contest	CREDIBL E FUTURE INDIA PVT LTD	Non- Govt. Agencies	04-03-20 20 00:00:00	04-03-20 20 00:00:00	1	10	1	11	Yes	Innovatio n Award	ELECTRI C KART	No	Award / Position / Recognition / Secured  Title of Innovation / Start-up Secured the Award / Recognition  Award/Recognition/Achievement Received for
9	India Electroni cs Week 2020	IPR	Conferen ce	Electroni cs for You	Corporat e / Industry Associati on	13-02-20 20 00:00:00	15-02-20 20 00:00:00	3	0	1	1	No			TotalTotal 23109 Expense Amount Incurred by Institute? (In Rupees)	No
10	Internatio nal Competiti on of Technical working model on Innovative, low cost and sustainab le technologies for rural development	Innovatio n	Innovatio n Contest	Shri Shivaji Educatio n Society Amaravat i College of Engineeri ng	Educatio nal Institute	11-10-20 19 00:00:00	11-10-20 19 00:00:00	1	6	1	7	Yes	03rd Position	Smart Irrigation system for Rural Areas	TotalTotal Expense Amount Incurred by Institute? (In Rupees)	Award / Position / Recognition / Secured  Title of Innovation / Start-up Secured the Award / Recognition  Award/Recognition  Award/Recognition/Achievement Received for
11	4th IEEE Conferen ce on Communi cation and Electroni cs Systems	Innovatio n	Conferen ce	PPG Group of Institution	Internatio nal Agencies	17-07-20 19 00:00:00	19-07-20 19 00:00:00	3	0	1	1	No			TotalTotal Expense Amount Incurred by Institute? (In Rupees)	No

Section 2 > i : List the Academic Programs on Innovation, IPR and Entrepreneurship Development Offered During the Academic Period (2019-20)

No Data Flled!

Section 2 > ii : List the Employment Generation Skill Development Programs Organized by the HEI on Innovation, IPR and Entrepreneurship Development During the Academic Period (2019-20)

No Data Filed!

Section 2 > iii: List the Full Time Faculties had with a Degree (UG/PG/PhD) in Innovation/IPR/Entrepreneurship and (or) Received Specialized Training program of I&E, IPR (MDP, EDP, FDP, Short-term Certificate Course, of minimum 30 hours Duration) conducted by various State, Central Govt. agencies, and Knowledge Agencies in the Academic Period (2019-20)

No Data Flled!

Section 3 > i : List Idea/Innovation Centric Student Clubs Are Functional at the HEI with Access to Co-working Space/Work-stations for Students with Facilities & Equipment Available to promote and Support Innovation, Entrepreneurship and IPR Activities in Campus

No Data Flled!

Section 3 > ii > a : List the Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Centre/Startup Cell) (>= 600 Sq. Ft. Floor Area)

Floor A	Area)												
Srno	Name of Pre- Incubation Centre	Type of Facility	Year of Establishme nt	Type of Facilities Available at the Centre	Pre-Incubation with Access to Other I&E Facilities at the HEI	Name of the Funding Schemes Available with Pre- Incubation Unit, if any (Optional)	Facility Details	Total Nos of Dedi Executive/Managi team Strength Eng the Facility	ement aged at	Had the Pre-Incubation Unit Provided any Funding Support for Idea/Prototype/Innovati on Development and implementation during the Financial Year 2019-20	Had ins Generated either from Offered I Incuba Centre/Fa	Income Services by Pre- ation	Had institute spent expenses either from own resource/received fund towards Establishment/Operation of Pre-Incubation Centre/Facilities?
1	Engineering Product Innovation Center	Innovation Centre	2017	Co-working Space,3D Printing & Prototype Equipment, Work Stations	Incubation Unit,Innovation Labs,Innovation Park/Research Park,IPR Cell/Technology Transfer Centre	Labs,Innova tion Park/Resear	Facility Incharge Name  Facility Incharge Email  Facility Incharge Email  Facility Incharge Phone  Vijaypal vadav @terna eng.a c.in  Pacility Incharge Phone	10		Yes	No		Yes
		Sour	ce of Grant / Fur	nd			Agency Name			Agency Type		Total ( Incubation ex	Grants / Funds Received by Pre- on & Incubation Centre / Facilities ists in Campus (In Rupees)
	Institute's Own Fu	nd / Resource			1	Terna Engineering	College		Educati	onal Institute		100000	
2	Texas Instruments Innovation Center	Design Centre	2017	3D Printing & Prototype Equipment, Work Stations	Innovation Park/Research Park,IPR Cell/Technology Transfer Centre,Student Clubs	Innovation Park/Resear ch Park,IPR Cell/Technol ogy Transfer Centre,Stud ent Clubs	Facility Incharge Name  Facility Incharge Email  Facility Incharge Email  Facility Incharge Email  Facility Incharge Phone  Vijaypal yadav @terna eng.a c.in	03		No	No		No

#### Section 3 > ii > a: List the Pre-Incubation Facility (Tinkering Lab/Makers' Space/Design Centre/New Gen IEDC/IEDC/EDC/Innovation Centre/Startup Cell) (>= 600 Sq. Ft. Floor Area)

Entrepreneurship Cell	EDC	2015	Work Stations	Incubation Unit,Innovation Park/Research Park,IPR Cell/Technology Transfer Centre,Student Clubs	Incubation Unit,Innovati on Park/Resear ch Park,IPR Cell/Technol ogy Transfer Centre,Stud ent Clubs	Facility Incharge Name  Facility Incharge Email  Facility Incharge Phone	Rande ep Kahlon randee pkahlo n@tern aengg. ac.in 882845 3368	04		Yes	No		Yes
	Soul	rce of Grant / Fu	nd			Agenc	/ Name			Agency Type		Incubation	Grants / Funds Received by Pre- on & Incubation Centre / Facilities ists in Campus (In Rupees)
Institute's Own Fu	titute's Own Fund / Resource				Terna Engineering College				Educational Institute			200000	

## Section 3 > ii > b : List the Centre of Excellence (CoE) Facilities with Advance Tools and Equipment at the HEI (>= 1000 Sq. Ft. Floor Area)

No Data Flled!

#### Section 3 > ii > c : List the Incubation Facilities at the HEI (>= 1500 Sq. Ft. Floor Area)

No Data Flled!

## Section 3 > ii > d: List the Innovation Park/Research Park Facilities at the HEI (>= 5000 Sq. Ft. Floor Area)

No Data Flled!

## Section 3 > ii > e: List the IPR Cell/Technology Transfer Centre Facilities at the HEI

No Data Flled!

#### Section 3 > iii > a: Provide detail list of Faculties as Mentor to help Ideas/Innovations/Startups

No Data Flled!

## Section 3 > iii > b : Provide detail list of External Experts/Agencies engaged as Mentor to help Ideas/Innovations/Startups

Srno	Name of the External Expert/Agency as				Mentor Expert Area	·		Type of Mentorship		
1	CL Educate		Idea/Innov	vation Development,IPR Protec	tion & Commercialization			Structured Mentorsh	nip	
	Structured Mentorship Program Name Start Date  Research Incubation Program 27-08-2019		e	End Date	No of Mentors Involved	Mente (1	orship Cohort Size No. of Mentee)	Type of Mentee		
			27-08-2019 31-03-2020 218 5						Innovation/Prototype	
2	Phi Education Pvt Ltd		Idea/Innov	vation Development		Structured Mentorship				

#### Section 3 > iii > b : Provide detail list of External Experts/Agencies engaged as Mentor to help Ideas/Innovations/Startups

Structured Mentorship Program Name	Start Date	End Date	Total No of Days of Mentorship Program	No of Mentors Involved	Mentorship Cohort Size (No. of Mentee)	Type of Mente
EPIC Mentor Board	01-04-2019	31-03-2020	366	04	450	Innovation/Prototyp

# Section 4 : List all the Innovations Generated Developed, Completed and Implemented in Ground with Support of Pre-incubation & Incubation facilities at the HEI and Recognitions Received

No Data Filed!

## Section 5 : List all the Ventures/Startups/SME Units Established with Support of Pre-incubation & Incubation facilities at the HEI

No Data Filed!

#### Section 7 > i : List all the Collaborations with External Agencies and Co-Creation of I&E Activities by the HEI

Srno	Collaborated Agency Name	Collaborated Agency Type	Purpose of Collaboration	Type of Support Offered	No. of Student Projects/ Ideas / Innovation / Startups from the HEI get benefitted through this partnership	Date of MOU / Agreement Signed on
1	Phi Education Solutions Private Limited	Corporate / Industry Association	Providing (or) Receiving Mentor and Handholding Support to Support I&E Activities	Pre-incubation,Mentoring	155	30-01-2019

#### Section 8 > ii: List the IPs Filed/Published/Granted (Copyright & Designs Only) by the HEI as an Applicant / Co-applicant / Co-owner

No Data Flled!

## Section 8 > iii : List the IP (Patents only) Filed by the HEI as Applicant / Co-applicant / Co-owner

Srno	Title/Name of Patent	IP Registration Number	Date of Filed/Published (Year, Month)	Application Level	Copy of receipt / application screenshot [PDF or Image]
1	Gain Bandwidth Enhancement of a Fabry Perot Cavity Resonator Antenna by Using Modified PRS and AMC	201921033035	National	2019 - 08	Uploaded
2	A METHOD TO IDENTIFY AND SECURE THE SOFTWARE DEFINED NETWORK AGAINST DOS ATTACK	202021002330	National	2020 - 01	Uploaded
3	EVRT-MONITORING SYSTEM: REAL-TIME MONITORING SYSTEM IN ELECTRIC VEHICLE USING IOT-BASED TECHNOLOGY	201941053823	National	2019 - 12	Uploaded

## Section 8 > v : List the IPs hold by the Innovation teams/Startups Incubated at the Pre-incubation/incubation Unit of the HEI

No Data Flled!

## Section 8 > vi : List the IP Commercialized/Transferred Published & Granted to HEI as Co-applicant/Co-owner

No Data Filed!

## **Declaration**

To, The ARIIA Committee MHRD's Innovation Cell New Delhi

# Joint Declaration by the Head of the Institute and Nodal Officer

#### Dear Sir,

Herewith, myself Dr. Laxman Ragha (Head of Institute) and Mr. Vijaypal Yadav (Nodal Officer) jointly declaring on behalf of our institute is that all the information submitted are true and correct to best of our knowledge.

Thank you

The Head of Institute

31.03.2021

Dr. Laxman Ragha Head of the Institution, Navi Mumbai , Maharashtra Nodal officer

Mr. Vijaypal Yadav Nodal Officer, Navi Mumbai , Maharashtra

Responsibility for accuracy and authenticity of data lies with the concerned institution.