NATIONAL BOARD OF ACCREDITATION

Data Capturing Points of the Program Applied for NBA Accreditation– Tier I/II UG (Engineering) Institute Programs

Program Name : Electrical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11590	**Date of Submission**: 13-02-2026

PART A- Profile of the Institute

A1.Name of the Institute: Punjab Engineering College (Deemed to be University)	
Year of Establishment : 1921	Location of the Institute: Chandigarh
A2. Institute Address:PEC UNIVERSITY OF TECHNOLOGY	
City:Chandigarh	State:Chandigarh
Pin Code:160012	Website:www.pec.ac.in
Email:REGISTRAR@PEC.AC.IN	Phone No(with STD Code):0172-2753055
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Chandigarh
State : Chandigarh	Pin Code: 160012
A4. Type of the Institution: Deemed University	
A5. Ownership Status: Government Aided	

A6. Details of all Programs being Offered by the Institution:

- No. of UG programs: **12**
- No. of PG programs: **13**

Table No. A6.1: List of all programs offered by the Institute.

Sr.No.	Discipline	Level of program	Name of the program	Year of Start	Year of Closed	Name of The Department
1	Engineering & Technology	UG	Aerospace Engineering	1962	--	Aerospace Engineering
2	Engineering & Technology	PG	Aerospace Engineering	2022	--	Aerospace Engineering
3	Engineering & Technology	UG	Civil Engineering	1921	--	Civil Engineering
4	Engineering & Technology	PG	Computer Science & Information Security	2010	--	Cyber Security
5	Engineering & Technology	PG	Computer Science and Engineering	2001	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering	1988	--	Computer Science and Engineering
7	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence)	2023	--	Computer Science and Engineering
8	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2022	--	Computer Science and Engineering

9	Engineering & Technology	PG	Electrical Energy Systems	2022	2025	Electrical Engineering
10	Engineering & Technology	PG	Electrical Engineering	1957	--	Electrical Engineering
11	Engineering & Technology	UG	Electrical Engineering	1947	--	Electrical Engineering
12	Engineering & Technology	UG	Electronics & Communication Engineering	1963	--	Electronics and Communication Engineering
13	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2023	--	Electronics and Communication Engineering
14	Engineering & Technology	PG	Environmental Engineering	1989	--	Civil Engineering
15	Engineering & Technology	PG	Industrial Engineering and Management	1995	--	Production and Industrial Engineering
16	Engineering & Technology	PG	Material Science and Engineering	1963	--	Metallurgical and Materials Engineering
17	Engineering & Technology	UG	Mathematics & Computing	2024	--	Mathematics
18	Engineering & Technology	PG	Mechanical Engineering	1957	--	Mechanical Engineering
19	Engineering & Technology	UG	Mechanical Engineering	1921	--	Mechanical Engineering
20	Engineering & Technology	UG	Metallurgical & Materials Engineering	1963	--	Metallurgical and Materials Engineering
21	Engineering & Technology	UG	Production & Industrial Engineering	1967	--	Production and Industrial Engineering
22	Engineering & Technology	PG	Structural Engineering	1964	--	Civil Engineering
23	Engineering & Technology	PG	Transportation Engineering	1957	--	Civil Engineering
24	Engineering & Technology	PG	VLSI Design	2012	--	Electronics and Communication Engineering
25	Engineering & Technology	PG	Water Resource Engineering	1964	2023	Civil Engineering

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation.

Name of the Department	**Having Allied Departments**	**Name of the Program**	**Program Level**
Civil Engineering	No	Civil Engineering	UG
Mechanical Engineering	No	Mechanical Engineering	UG
Electrical Engineering	No	Electrical Engineering	UG
Production and Industrial Engineering	No	Production & Industrial Engineering	UG
Computer Science and Engineering	No	Computer Science and Engineering	UG

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.

Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

No Record

PART-B: Program information

B1. Provide the Required Information for the Program Applied For:

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

SR.NO.	PROGRAM NAME	PROGRAM APPLIED LEVEL	YEAR OF START / YEAR OF CLOSED	SANCTIONED INTAKE	INCREASE/DECREASE INTAKE (if any)	YEAR OF INCREASE/DECREASE	CURRENT INTAKE	YEAR OF AICTE APPROVAL	AICTE/COMPETENT AUTHORITY ARROVAL DETAILS	ACCREDITATION STATUS	FROM	TO	NO. OF TIMES PROGRAM ACCREDITED	PROGRAM DURATION
1	Electrical Engineering	UG	1947 / --	120	No	NA	120	2023	1-2519066781	Granted accreditation for 3 years for the period (specify period)	2022	2025	3	4

List of the Allied Departments/Cluster and Programs:

B2. Detail of Head of the Department for the program under consideration:

A. Name of the HoD :	Rintu Khanna
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

Table No.B3.1: Admission details for the program excluding those admitted through multiple entry and exit points.

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	120	120	120	120	120	120	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	113	119	120	117	129	129	112
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	0	0	0	0	0	0
N3=Separate division if any	0	0	0	0	0	0	0
N4=Total no. of students admitted in the 1st year via all supernumerary quotas	5	3	2	2	1	1	2
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	118	122	122	119	130	130	114

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGm1= Last Year Graduate Minus 1. LYGm2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

Year of entry	N (From Table 4.1)	N1 (From Table 4.1)	N4 (From Table 4.1)	Enrollment Ratio [(N1/N)*100]
2025-26 (CAY)	120	113	5	98.33
2024-25 (CAYm1)	120	119	3	101.67
2023-24 (CAYm2)	120	120	2	101.67

Average [(ER1 + ER2 + ER3) / 3] = 100.56≡ 100

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

Item	(2021-22) LYG	(2020-21) LYGm1	(2019-20) LYGm2
A*= (No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any).	130.00	130.00	120.00
B=No. of students who graduated from the program in the stipulated course duration	122.00	120.00	111.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 92.89

B6. Academic Performance of the First-Year Students of the Program

Table No.B6.1: Academic Performance of the First-Year Students of the Program.

Academic Performance	CAYm1(2024-25)	CAYm2(2023-24)	CAYm3 (2022-23)
Mean of CGPA or mean percentage of all successful students(X)	6.97	7.02	6.78
Y=Total no. of successful students	122.00	122.00	119.00
Z=Total no. of students appeared in the examination	122.00	122.00	119.00
API [X*(Y/Z)]	6.97	7.02	6.78

Average API[(AP1+AP2+AP3)/3] : 6.92

B7: Academic Performance of the Second Year Students of the Program

Table No.B7.1: Academic Performance of the Second Year Students of the Program.

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	6.94	7.00	7.17
Y=Total no. of successful students	120.00	115.00	125.00
Z=Total no. of students appeared in the examination	122.00	119.00	130.00
API [X * (Y/Z)]	6.83	6.76	6.89

Average API [(AP1 + AP2 + AP3)/3] : 6.83

B8. Academic Performance of the Third Year Students of the Program

Table No.B8.1: Academic Performance of the Third Year Students of the Program

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10)	7.19	7.37	7.32

Y=Total no. of successful students	115.00	125.00	123.00
Z=Total no. of students appeared in the examination	115.00	125.00	125.00

Average API [(AP1 + AP2 + AP3)/3] : 7.25

B9. Placement, Higher Studies, and Entrepreneurship

Table No.B9.1: Placement, higher studies, and entrepreneurship details.

Item	LYG (2021-22)	LYGm1(2020-21)	LYGm2(2019-20)
FS*=Total no. of final year students	125.00	123.00	120.00
X=No. of students placed	108.00	98.00	113.00
Y=No. of students admitted to higher studies	5.00	2.00	3.00
Z= No. of students taking up entrepreneurship	1.00	2.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	91.20	82.93	96.67

Average Placement Index = (P_1 + P_2 + P_3)/3: 90.27 Placement Index Points:

PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

C1. Faculty details of Department and Allied Departments

Table No.C1: Faculty details in the Department for the past 3 years including CAY

Sr.No	Name of the Faculty	PAN No.	Highest degree	University	Area of Specialization	Date of Joining in this Institution	Experience in years in current institute	Designation at Time Joining in this Institution	Present Designation	The date on which Designated as Professor/ Associate Professor if any	Nature of Association (Regular/ Contract/ Ad hoc)	Currently Associated (Y/N)	In case of NO, Date of Leaving	IS HOD?
1	Tilak Thakur	XXXXXXX87H	Ph.D	Indian School of Mines	Electronics and Instrumentations	20/02/2004	21.11	Assistant Professor	Professor	21/02/2011	Regular	Yes		No
2	Rintu Khanna	XXXXXXX55F	Ph.D	Punjab University	Power System	09/12/1987	38.2	Lecturer	Professor	30-06-2013	Regular	Yes		Yes
3	Balwinder Singh	XXXXXXX95C	Ph.D	Punjab University	Power System	04/05/1992	33.9	Lecturer	Professor	08-10-2011	Regular	Yes		No
4	Tarlochan Kaur	XXXXXXX12L	Ph.D	Punjab University	Power System	09/09/1986	39.5	Lecturer	Professor	21-10-2012	Regular	No	13/09/2024	No
5	Jagdish Kumar	XXXXXXX37A	Ph.D	IIT Roorkee	Power Electronics	25/11/2003	22.2	Lecturer	Professor	18-11-2012	Regular	Yes		No
6	Sandeep Kaur	XXXXXXX71E	Ph.D	IIT Roorkee	Power System	06/12/2006	19.2	Assistant Professor	Professor	23-04-2018	Regular	Yes		No
7	Sulata Bhandari	XXXXXXX35P	Ph.D	PEC	Control System	25/11/1988	37.2	Lecturer	Professor	23-11-2018	Regular	Yes		No
8	Puneet Chawla	XXXXXXX45J	Ph.D	PEC	Power System	24/04/1992	33.9	Lecturer	Professor	01-07-2019	Regular	Yes		No

9	Jaimala Gambhir	XXXXXXX63R	Ph.D	PEC	Power System	11/12/2003	22.2	Lecturer	Associate Professor	28-05-2016	Regular	Yes		No
10	Loveleen Kaur	XXXXXXX68H	Ph.D	PEC	Power System	24/04/1992	33.9	Lecturer	Associate Professor	24-06-2017	Regular	Yes		No
11	Dr. Manohar Singh	XXXXXXX97L	Ph.D	IIT Delhi	Power System	09/03/2023	2.11	Associate Professor	Associate Professor		Regular	Yes		No
12	Dr. Shimi SL	XXXXXXX03G	Ph.D	PEC	Power Electronics & Drives	06/04/2023	2.10	Associate Professor	Associate Professor	06-04-2023	Regular	Yes		No
13	Tejinder Singh Saggu	XXXXXXX33H	Ph.D	IKGPTUJ	Power System	15/03/2013	12.11	Assistant Professor	Associate Professor	24-06-2025	Regular	Yes		No
14	Dhiraj Bharat	XXXXXXX95K	Ph.D	IIT KANPUR	Power Electronics	15/03/2013	12.11	Assistant Professor	Assistant Professor		Regular	Yes		No
15	Amita Kumari	XXXXXXX08E	M.Tech	NIT Patna	Power System	18/12/2017	8.1	Assistant Professor	Assistant Professor		Regular	Yes		No
16	Dr. Ajay Kumar	XXXXXXX11P	Ph.D	MNIT Jaipur	Power Electronics	02/02/2023	3	Assistant Professor	Assistant Professor		Regular	Yes		No
17	Lalit Kumar	XXXXXXX61L	Ph.D	MNNIT Allahabad	Control System	28/07/2023	0.6	Assistant Professor	Assistant Professor		Contractual Fulltime	No	09/02/2024	No
18	Vineet Kumar	XXXXXXX50H	Ph.D	NIT Hamirpur	Power System	31/07/2023	0.10	Assistant Professor	Assistant Professor		Contractual Fulltime	No	03/06/2024	No
19	Hanuman Prasad	XXXXXXX47B	Ph.D	IIT Dhanbad	Power Electronics	01/08/2023	2.6	Assistant Professor	Assistant Professor		Contractual Fulltime	No	19/12/2025	No
20	Pallav	XXXXXXX64L	Ph.D	NIT Hamirpur	Control System	12/08/2024	1.5	Assistant Professor	Assistant Professor		Contractual Fulltime	No	16/04/2025	No
21	Rajeev Kumar	XXXXXXX33K	Ph.D	IIT Roorkee	Power System	14/08/2024	0.10	Assistant Professor	Assistant Professor		Contractual Fulltime	No	18/06/2025	No
22	Rohit Kumar	XXXXXXX76F	Ph.D	IIT Banaras	Power System	19/08/2024	1.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
23	Anu Singla	XXXXXXX05R	Ph.D	IKGPTUJ	Power System	02/08/2023	2.6	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
24	Avinash Maurya	XXXXXXX92Q	Ph.D	NIT Patna	Power Electronics	18/08/2023	2.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
25	Hemant Kumar	XXXXXXX89L	Ph.D	IIT Jodhpur	Electric Vehicles	18/08/2025	0.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
26	Vivek Kumar	XXXXXXX88K	Ph.D	NIT Hamirpur	Power Electronics	18/08/2025	0.5	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No
27	Deven Vatsal	XXXXXXX90G	M.Tech	NIT Hamirpur	Power System	20/01/2026	0	Assistant Professor	Assistant Professor		Contractual Fulltime	Yes		No

28	Preeti Gupta	XXXXXXX12L	Ph.D		Power System	12/08/2024	0.5	Assistant Professor	Assistant Professor		Contractual Fulltime	No	07/02/2025	No

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

C2. Student-Faculty Ratio (SFR)

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):
UG1=1st UG program
UGn=nth UG program
B= No. of Students in UG 2nd year (ST)
C= No. of Students in UG 3rd year (ST)
D= No. of Students in UG 4th year (ST)
No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):
PG1=1st PG program.
PGm=mth PG program
A= No. of Students in PG 1st year
B= No. of Students in PG 2nd year
Student Faculty Ratio **(SFR)** = S/F
S= No. of students of all programs in the Department including all students of allied departments/clusters.
No. of students (ST)=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)
Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.
F=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department2

Table No.C2.1: Student-faculty ratio.

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	120	120	120
UG1.C	120	120	120
UG1.D	120	120	120
UG1: Electrical Engineering	**360**	**360**	**360**
PG1.A	0	12	12
PG1.B	12	12	18
PG1: Electrical Energy Systems	**12**	**24**	**30**
PG2.A	0	12	12
PG2.B	12	12	25
PG2: Electrical Engineering	**12**	**24**	**37**
DS=Total no. of students in all UG and PG programs in the Department	408	408	427
AS=Total no. of students of all UG and PG programs in allied departments	0	0	0
S=Total no. of students in the Department (DS) and allied departments (AS)	**S1=** 408	**S2=** 408	**S3=** 427
DF=Total no. of faculty members in the Department	20	20	20
AF= Total no. of faculty members in the allied Departments	0	0	0
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 20	**F2=** 20	**F3=** 20

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	2
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 22.67**	**SFR2= 22.67**	**SFR3= 23.72**
Average SFR for 3 years	**SFR= 23.02**		

C3. Faculty Qualification

- Faculty qualification index (FQI) = 2.5 * [(10X +4Y)/RF] where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

Year	X	Y	RF	FQ = 2.5 x [(10X + 4Y) / RF)]
2025-26(CAY)	18	2	20.00	23.50
2024-25(CAYm1)	16	4	20.00	22.00
2023-24(CAYm2)	16	4	21.00	20.95

C4. Faculty Cadre Proportion

- Faculty Cadre Proportion is 1(RF1): 2(RF2): 6(RF3)
- RF1= No. of Professors required = 1/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per C2 of this documents:.
- RF2= No. of Associate Professors required = 2/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- RF3= No. of Assistant Professors required = 6/9 * No. of Faculty required to comply with 20:1 Student-Faculty ratio based on no. of students (S) as per section C2 of this documents:.
- Faculty cadre and qualification and experience should be as per AICTE/UGC norms.

Table No.C4.1: Faculty cadre proportion details.

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	2.00	7.00	4.00	5.00	13.00	3.00
2024-25	2.00	7.00	4.00	4.00	13.00	4.00
2023-24	2.00	8.00	4.00	4.00	14.00	4.00
Average	RF1=2.00	AF1=7.33	RF2=4.00	AF2=4.33	RF2=13.33	AF2=3.67

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Er. Rajeev Sapra	EX DGM	Delhi Transco	Power System Analysis, Electric Vehicles, Energy Storage System	4.00
2	Mr. Veer Karan Goyal	R&D, Head	Electrowaves Electronics PVt. Ltd.	Power Electronics	2.00
3	H.S. Oberoi	Deputy Chief Engineer	PSPCL, Punjab	Smart Grid Technologies, Electrical Power System-II	2.00
4	Chetan Som	Founder CEO	Exaleap Semiconductor Pvt. Ltd.	Introduction to Mechatronics, Power Electronics	2.00
5	Saurabh Kumar	Assistant Manager	EY Ltd.	Smart Grid Technologies, Electrical Power System-II, Power System Engineering	2.00
6	Khushvjeet Mann	Director	Ethospower	Smart Grid Technologies, Electrical Power System-II, Power System Engineering	2.00
7	Dr. B.K. Panigrahi	Professor, EED	IIT, Delhi	Power System Engineering, Smart Grid Technologies	1.00
8	Dr. Tirath Pal Singh Bains	Power System Specialist	GE Vernova Markham, Canada	Renewable Energy Technology	2.00
9	Dr. Shabnam Bassi	Deputy CEO	GRIHA Council TERI	Renewable Energy Technologies	2.00
10	Mr. Ajay Arora	Vice President	Energy Auditing & Sustainability, at Greenfinch Consultants and Engineers Pvt. Ltd	Energy Management and Energy Audit	2.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Vineetha Ravindran	Technical Project Lead	Next Generation Inverter Scania, Sweden	Electric Vehicles	2.00
2	H.S. Oberoi	Deputy Chief Engineer	PSPCL, Punjab	Electrical Power System-I, Smart Grid Technologies, PSOC and Renewable Energy	2.00
3	Ashish Kundu	Ex-Executive Director	NTPC	Electrical Power System-I, Smart Grid Technologies, PSOC and Renewable Energy	2.00
4	Dr. Ravi Sehgal	Advisor	Enerzinx, Banglore	Electrical Power System-I	2.00
5	Er. Vikas Kumar	Director	AVM, Ambala	Electrical Power System-I	2.00
6	Er. Rajiv Sapra	EX DGM	Delhi Tansco	Electrical Power System-I	2.00
7	Dr. Manohar Singh	Ex, Engineer Officier	CPRI, Bangalore	Electrical Power System-I	2.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Dr. Bob Gill	-	BCIT, Vancouver	Curriculum-conference in India and Canada	2.00
2	Dr. Sanjeev Kumar	Associate Professor	CSIR, CSIO, Chandigarh	Medical Instrumentation	2.00
3	Ankush Sethi	Consultant Radiologist	Mehar Super Specialist Hospital, Zirakpur	Medical Instrumentation	2.00
4	Vivek Mahajan	Deputy Director	BBMB, Chandigarh	Electrical Power System-II	2.00
5	H. S. Oberoi	Deputy Chief Engineer	SE, PSPCL, Patiala	Electrical Power System-II	2.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	15	10	7
2	No. of peer reviewed conference papers published	16	11	13
3	No. of books/book chapters published	7	1	2

C7. Sponsored Research Project

Table No. C7.1: List of sponsored research projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Manohar singh	Dr. Ajay kumar Dr. Tejinder Singh	Department of Electrical Engineering, Punjab Engineering College, Chandigarh	POWERGRID (Centre of Excellence)	POWER GRID	2 years	1719.00
						Amount received (Rs.):1719.00

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. T S Saggu	Dr. Shimi S.L	Department of Electrical Engineering, Punjab Engineering College, Chandigarh	Measurements based Impact Study on Solar PV and Electric Vehicle Integration to the Grid	DST, Chandigarh	1 year	1.00
Dr. Manohar Singh	Dr. Rintu khanna	Department of Electrical Engineering, Punjab Engineering College, Chandigarh	Impact of Electric Vehicle Charging on Chandigarh Power Network	DST, Chandigarh	1 year	1.00
Dr. Ajay Kumar	Dr. Aftab Alam	Department of Electrical Engineering, Punjab Engineering College, Chandigarh	Design of Cloud based IoT Enabled Real Time Controller for Grid Connected Photovoltaic Systems against Cyber Threats	Science and Engineering Research Board, DST, GoI	3 Years	28.50
						Amount received (Rs.):30.50

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 1749.50

Note*:

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

C8. Consultancy Work

Table No. C8.1: List of consultancy projects received from external agencies.

(CAYm1)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Jagdish Kumar	Dr. Tejinder Singh Saggu	EED	Third Party Inspection for the work of cumulative capacity of 900 kWp Grid connected SPV Power Plant (2-5 kWp capacity) at various Govt. Residential houses in Sec 27 to 46, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	4.05
Dr. Jagdish Kumar	Dr. Tejinder Singh Saggu	EED	Third Party Inspection for the work of cumulative capacity of 816 kWp Grid connected SPV Power Plant (2-5 kWp capacity) at various Govt. Residential houses in Sec 28 to 46, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	4.06
Dr. Tejinder Singh Saggu	Dr. J.D.Sharma/Dr. Ajay Kumar	EED	Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL Consultancy regarding Technical Specifications of 3-phase Dry Type 11/0.433 kV Transformers of Capacity 100, 200, 315, 500 & 1000 kVA drafted by PSPCL	PSPCL, Patiala	01 Year	2.36
Dr. Tejinder Singh Saggu	Dr. J.D.Sharma	EED	Consultancy regarding Technical Evaluation of Single phase Distribution Transformers (10 kVA and 25 kVA) and suggestions for improvements.	PSPCL, Patiala	01 Year	1.18
Dr. Tejinder Singh Saggu	-	EED	Consultancy regarding Technical Evaluation of Oil Type Distribution Transformers of higher ratings above 500 kVA	PSPCL, Patiala	01 Year	1.18
Dr. Manohar Singh	-	Electrical Engineering Deptt	Third-party Inspection of the work cumulative capacity of 50 kWp Grid grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.20
Dr. Manohar Singh	-	Electrical Engineering Deptt	Third-party Inspection of the work cumulative capacity of 120 kWp(Grid-connected SPV Power plant in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.50
Dr. Manohar Singh	-	Electrical Engineering Deptt	Third-party Inspection of the work cumulative capacity of 100 kWp Grid-connected SPV Power plant in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.51
Dr. Manohar Singh	-	Electrical Engineering Deptt	Third-party Inspection of the work cumulative capacity of 70 kWp Grid-connected SPV Power plant in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.29
Dr. Manohar Singh	-	Electrical Engineering Deptt	Providing services for 'Audit of Electrical Protection System', 2x150 MW Thermal Power Plant, Haldia, West Bengal (WB).	Hiranmaye Energy Limited (HMEL),	01 Year	17.34
Dr.Ajay Kumar	Dr. T. S. Saggu	Electrical Engineering Deptt	Testing of 11 kV HT XLPE 400mm^2 insulated PVC sheeted almored cable (Electrical work)	Vigilence Cell, UT Chandigarh	01 Year	0.47

Dr. Jagdish Kumar	-	Electrical Engineering Deptt	TPI for the work of aggregate capacity of 800 kW SPV power plant at lake parking Sec-42, Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.27
Dr. Jagdish Kumar	-	Electrical Engineering Deptt	TPI for the work of 100 kW(20X5kW) grid connected SPV power plant at 20 no. of houses in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.51
Dr. Jagdish Kumar	-	Electrical Engineering Deptt	TPI for the work of 198 kW(90kW + 61kW) grid connected SPV power plant at 22 no. of different govt. sites in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.77
Dr.Ajay Kumar	Dr. Rintu Khanna	Electrical Engineering Deptt	Soil Electrical Resistivity Test	Chawala Associate Panchkula	01 Year	1.18
Dr.T.S.Saggu	Dr. Ajay Kumar	EED	TPI for the work of aggregate capacity of 205kWp (80+75+50)grid connected SPV power plant at 3no.s of different govt. sites in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	1.01
Dr.Ajay Kumar	Dr.T.S.Saggu/Dr. Dhiraj Bharat	EED	TPI for the work of 816kWp grid connected SPV at various locations of Govt. houses	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	4.06
Dr.Ajay Kumar	Dr.T.S.Saggu	EED	TPI for the work of 900kWp grid connected SPV at various locations of Govt. houses	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	4.05
Dr. Jagdish Kumar	Dr. Dhiraj Bharat	Electrical Engineering Deptt	Consultancy report for aerial passenger ropeway at Parwanoo	Timber Trail Resorts, Parwanoo	01 Year	3.54
Dr. Jagdish Kumar	Dr.Ajay Kumar	EED	TPI for the work of aggregate capacity of 100kWp (20X5kWp)grid connected rooftop SPV power plant 25kWp capacity at 20 No.sof govt. houses in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.57
Dr. Jagdish Kumar	Dr. Sulata Bhandari	EED	TPI for the work of aggregate capacity of 100kWp (16X3kWp+3X4kWp+8X5kWp)grid connected rooftop SPV power plantat 27 No.sof differentgovt. houses in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.60

Dr. Jagdish Kumar	Dr. Puneet Arora	EED	TPI for the work of aggregate capacity of 100kWp (30X3kWp+2X5kWp+8X5kWp)gridconnected rooftop SPV power plantat 32 No.sof differentgovt. houses in Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.63
Dr. Jagdish Kumar	Dr. Sandeep Kaur	EED	TPI for the work of aggregate capacity of 150kWp grid connected rooftop SPV power plantatMahatama Ghandhi state institute of public administration Sec-26 Chandigarh	Chandigarh Renewable Energy & Science and Technology Promotion Society(CREST),Chandigarh Administration	01 Year	0.74
						Amount received (Rs.):50.07

(CAYm2)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Tejinder Singh Saggu	-	EED	TPI for the work of Aggregate capacity of 100 kWp (15x3+11x5) grid connected SPV power plant at 26 different Govt. Houses, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	NA	0.60
Dr. Tejinder Singh Saggu	-	EED	Third Party Inspection for the work of aggregate capacity of 50 kWp (35+15) Grid connected SPV Power Plant at Chemistry Department and Auditorium Chemistry Department in Panjab University, Sec-14, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	NA	0.25
Dr. Tejinder Singh Saggu	-	EED	Third Party Inspection for the work of cumulative capacity of 1584 kWp (9x150+56+28) Grid connected SPV Power Plant (2-5 kWp capacity) at various Govt. Residential houses in Sec 28 to 46, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	NA	7.88
Dr. Tejinder Singh Saggu	-	EED	Third Party Inspection for the work of aggregate capacity of 205 kWp (80+75+50) Grid connected SPV Power Plant at 03 Nos. of different Govt. Sites in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	NA	1.01
Dr. Manohar Singh	-	EED	Protection Review and Audit	Essar Power Gujarat Power Ltd.	01 Year	15.34
Dr. Manohar Singh	-	EED	Review of Technical Specifications of 11 kV VCB Panels and 66 KV CTS	Punjab State Power Corporation Ltd.	01 Year	1.50
Dr. Manohar Singh	-	EED	Third-party inspection for the aggregates capacity of 2.5 MWP kWpgrid-connected SPV Power plant at Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	3.99
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 360 kWp(2*150 kWp+1*60 kWp) Grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.71
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 360 kWp(2*150 kWp+1*60 kWp) Grid grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.71
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 450 kWp(3*150) Grid-connected SPV Power plant in sectors -21 to 26 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.71
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 225 kWp(1*150 kWp+1*70 kWp) Grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.18
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 673 kWp(4*150 kWp+1*73 kWp) Grid Grid-connected SPV Power plant in sector -21 to 27in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	2.83
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 300 kWp(2*150 kWp) Grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.58
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 225 kWp(3*75 kWp+1*60 kWp) Grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.07
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 300 kWp(2*150 kWp) Grid grid-connected SPV Power plant in sector -21 to 26 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.43
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 140 kWp Grid grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.54
Dr. Manohar Singh	-	EED	Third-party inspection for the aggregates capacity of 3 MWP kWpgrid-connected SPV Power plant at Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	10.78
Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 763 kWp Grid grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	3.21

Dr. Manohar Singh	-	EED	Third-party Inspection of the work cumulative capacity of 955 kWp(Grid-connected SPV Power plant in sector -1 to 20 in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	4.02
Dr. Manohar Singh	-	EED	Third-party Inspection of Electrical Installation of the work: Renovation of the sub-office Manimajra, Chandigarh	Municipal Corporation –Chandigarh-UT Administration of Chandigarh.	01 Year	1.43
						Amount received (Rs.):63.77

(CAYm3)

PI Name	Co-PI names if any	Name of the Dept., where project is sanctioned	Project Title*	Name of the Funding agency	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25
Dr. Tejinder Singh Saggu	-	EED	Examination of Electrical Work Samples (D-94)	Vigilance Department, Chandigarh	NA	4.19
Dr. Tejinder Singh Saggu	-	EED	Examination of Electrical Work Samples (D-141)	Vigilance Department, Chandigarh	NA	1.24
Dr. Tejinder Singh Saggu	-	EED	Examination of Electrical Work Samples (D-205)	Vigilance Department, Chandigarh	NA	1.71
Dr. Tejinder Singh Saggu	-	EED	Examination of Electrical Work Samples (D-172)	Vigilance Department, Chandigarh	NA	1.56
Dr. Tejinder Singh Saggu	-	EED	Examination of Electrical Work Samples (D-185)	Vigilance Department, Chandigarh	NA	0.71
Dr. Jagdish Kumar	Dr. Tejinder Singh Saggu	EED	TPI for the work of Aggregate capacity of 500 kWp grid connected floating SPV power plant with high power evacuation on HT side along with fountains at Dhanas Lake, Chandigarh	Vigilance Department, Chandigarh	NA	2.65
Dr. Manohar Singh	-	EED	Grid connection studies for Chakla Mine	Chakla Mines --Hindalco Industries	01 Year	3.20
Dr. Manohar Singh	-	EED	Fault studies for 220 kV Burn substation Jammu-JKPTCL.	Sun city Urja Pvt. ltd	01 Year	1.60
Dr. Jagdish Kumar	-	EED	TPI of 20 kW (10X2kWp)grid connected rooftop SPV power plants at 10 No.s of different government residence houses	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.10
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 50 kWp grid connected rooftop SPV power plant at Govt. High school, Sec-30 A, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.21
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 50 kWp grid connected rooftop SPV power plant at 66 KV substation Sec-52, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.21
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 45kWp grid connected rooftop SPV power plant at Govt middle school Sec-46, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.19
Dr. Jagdish Kumar	-	EED	Testing of online UPS (3 KVA & 6 KVA)	Techser Power Solution Pvt. Ltd., Parwanoo	01 Year	0.14
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 50 kWp grid connected rooftop SPV power plant at Govt model high school , Sec-II, Maloya, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.25
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 99 kWp (12X5kWp + 13X3kWp) grid connected rooftop SPV power plant at 25 No. of different Govt residential houses in Sec-19, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.48
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 90 kWp (18X5kWp) grid connected rooftop SPV power plant at 18 No. of different Govt residential houses in Sec-7, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.43

Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 60 kWp grid connected rooftop SPV power plant at GMSS School, Dhanas Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.26
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 40 kWp (5X5kWp + 5X3kWp) grid connected rooftop SPV power plant at 10 No. of different Govt residential houses in Sec-19, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.14
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 41 kWp (7X5kWp + 2X3kWp) grid connected rooftop SPV power plant at 9 No. of different Govt residential houses in Sec-39, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.16
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 90 kWp grid connected rooftop SPV power plant at GMCH South campus hospital, Sec-48, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.39
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 210 kWp grid connected roodtop SPV power plant at 5 no.s different barracks at model jail, Sec-51, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.89
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 270 kWp (36X3kWp + 82X2kWp) & 272 kWp (36X3kWp + 82X2kWp) grid connected rooftop SPV power plant at 117 of 118 No.s of different Govt residential houses in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.71
Dr. Jagdish Kumar	-	EED	Checking of quality of electrical works of HBCH&RC, Mullanpur, Mohali	HBCH&RC, Mullanpur, Mohali	01 Year	1.77
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 250 kWp grid connected floating SPV power plant at Sri Guru Gobind Singh College, Sec-26, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	1.24
Dr. Jagdish Kumar	Dr. Ajay Kumar	EED	TPI for the work of aggregate capacity of 198 kWp (90 kWp + 61 kWp + 47 kWp) grid connected rooftop SPV power plant at 22 No. of different Govt sites in Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.86
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 41 kWp grid connected rooftop SPV power plant at 09 No. of different Govt residential houses in Sec-39, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.14
Dr. Jagdish Kumar	-	EED	TPI for the work of aggregate capacity of 40 kWp grid connected rooftop SPV power plant at 10 No. of different Govt residential houses in Sec-19, Chandigarh	Chandigarh renewable energy & science technology Promotion Society (CREST)	01 Year	0.13
						Amount received (Rs.):26.56

Total amount (Lacs) received for the past 3 years: 140.40

Note*:

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Ajay Kumar	Flexible Current Reference	2024-25	7.00	4.99	Two Journal Paper published
Dr. Shimi SL	Energy Management of Battery	2024-25	8.50	0.00	-
Dr. Manohar Singh	Development of an Algorithm	2024-2025	10.00	10.00	One Journal Paper published
			Amount received (Rs.): 25.50		

(CAYm2)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
Dr. Manohar Singh	Development of an Algorithm	2023-24	0.00	0.00	The project was allotted in 2023-24 but the fund utilization was in progress
Dr. Ajay Kumar	Flexible Current Reference	2 years	0.00	0.00	\The project was allotted in 2023-24 but the fund utilization was in progress
Dr. Shimi SL	Energy Management of Battery	2 years	0.00	0.00	-
			Amount received (Rs.): 0.00		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
			Amount received (Rs.): 0		

Total amount (Lacs) received for the past 3 years : 25.50

PART D: Laboratory Infrastructure in the Department

(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment	Weekly utilization status(all the courses for which the lab is utilized)	Technical Manpower Support		
					Name of the Technical staff	Designation	Qualification
1	Mechatronics Lab.	20	1. Electro Pneumatic kit 2. Digital storage Oscilloscope 3. FZ & GOT Training Kit 4. Q	10x2 = 20hrs p	1. Shobi George 2.	S.L.A. S.L.A.	10+2 B. Tech in Electrica
2	Analog & Digital Electronics Lab	20	1. Scientech Analog Lab scientech 2612, Function Generator, Modulation Generator, Continuity Tester,	5x2= 10hrs per	1. Shobi George 2.	S.L.A S.L.A	10+2 12th in Science ITI

3	Microprocessor Lab/ Power System simulation Lab	20	1. 8085 Microprocessor LC LCD trainer 2. 8086 Microprocessor trainer kit 3. Stepper motor controller	12x1= 12 hour	1. Shobi George 2. (	S.L.A M.T.S	10+2 Post Graduation
4	Energy Audit Lab	0	1. Power Quality Analyzer 2. Thermal Imager 3. Flue Gas Analyzer	0	1.Shobi George 2. Ajit Ku	S.L.A S.L.A	10+2 I.T.I
5	Control System Lab	20	1. DC Motor position control system 2. Second and first order network 3. AC Motor Position control	5x2 = 10 hrs pe	1. Karnail Singh 2. /	Workshop Instructor S.L..	I.T.I Graduation
6	Measurement Lab.	20	1. CTPT	10x2= 20 hrs p	1. Varinder Kaur 2. I	Technician- IV C.A	10+2 Science and one ye
7	Advance Control Lab	0	Work Station -2	0	1. Varinder Kaur	Technician- IV	10+2 Science and one ye
8	Bio Medical Lab	0	1. ECG Machine	0	1. Varinder Kaur 2. I	Technician- IV C.A.	10+2 Science and one ye
9	Power Electronics and Electric Drives Lab	20	1.Scientech 2700 high voltage 2nos.	6x2= 12 hrs pe	1. Varinder Kaur 2. I	Technician- IV S.L.A.	10+2 Science and one ye
10	Electrical Machine Lab	20	1. Static Synchrounous Compensator (STATCOM) 2. Artificial wind Turbine 3. Solar Kit 4.	8x2= 16 hrs pe	1. Karnail Singh 2. /	Workshop Instructor S.I	I.T.I BCA,3 Year Diplom
11	T& D Lab	20	1. Merzprice generator Protection panel 2.Parallel feeder Protection panel 3.Directional over current	6x2= 12 hrs pe	1. Karnail Singh 2. /	Work shop Instructor S.I	I.T.I. I.T.I
12	Circuit Lab	20	0	4x2 =8 hrs per	1. Shobi George 2. S	S.L.A. S.L.A.	10+2 12th in Science ITI
13	Project Lab	0	0	0	1. Shobi George 2. Sanc	S.L.A S.L.A	10+2 12th in Science ITI
14	Research Lab I & II	0	0	0	1. Shobi George	S.L.A.	10+2

D2. Safety Measures in Laboratories

Table No. D2.1: List of various safety measures in laboratories.

Sr. No	Laboratory Name	Safety Measures
1	Mechatronics Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
2	Circuit Lab Analog & Digital Electronics Lab	Fire extinguisher, first-aid kit, display of electrical safety measures

3	Microprocessor Lab/ Power System simulation Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
4	Energy Audit Lab	First-aid kit, display of electrical safety measures
5	Control System Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
6	Measurement Lab Bio Medical Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
7	Advance Control Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
8	Power Electronics and Electric Drives Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
9	Electrical Machine Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
10	T & D Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
11	Project Lab	Fire extinguisher, first-aid kit, display of electrical safety measures
12	Research Lab I & II	Fire extinguisher, first-aid kit, display of electrical safety measures

D3. Project Laboratory/Research Laboratory

Powergrid Centre of Excellence: POWERGRID Corporation of India Limited (PGCIL) and Punjab Engineering College (PEC), Chandigarh have agreed to establish the POWERGRID Centre of Excellence (CoE) at PEC, fully funded by PGCIL under its Corporate Social Responsibility (CSR) initiative to strengthen academic and research capabilities at PEC. This Centre will be setup with total budget estimate of ₹17.19 crore (Rupees Seventeen Crore Nineteen Lakh and Twenty-Six Thousand). The CoE is envisioned as a cutting-edge facility that will drive innovation, skill development, and knowledge enhancement in the rapidly evolving Power and Energy sector. The CoE will house advanced laboratories including a Real-Time Digital Simulation Lab with Power Hardware-in-the-Lo…

This Centre will consist of below listed New Labs

1. Real time Digital Simulation Lab

2. Cybersecurity Lab

3. AC-DC Hybrid Microgrid Lab

4. E-mobility lab

5. Upgradation of T & D Lab

Research lab has facilities for real time implementation of power electronics, control systems and power electronic application to power systems. We have facilities of power quality analyzer, DSO, three phase converters, DSP processors TMS320F28335, transformers for real time implementation of B.Tech Projects, M.Tech and PhD thesis implementation.

TableNo.7.5.1: Listofprojectlaboratory/researchlaboratory/CentreofExcellence.

S.N.	Name of the laboratory	Relevance of POs/PSOs
1	Project Lab	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PO8, PO9, PO10, PO11, PO12, PSO1, PSO2, PSO3
2	Research Lab I & II	PO2, PO3, PO4, PO5, PSO2, PSO3
3	POWERGRID COE	PO2, PO3, PO4, PO5, PSO2, PSO3

PART E: First Year faculty and financial Resources

(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

Table No. E2.1: Budget and actual expenditure incurred at Institute level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Infrastructure Built-Up	350	301.67	439	388.73	660.00	535.18	386.64	360.33
Library	80	38.81	206.00	183.37	250.00	133.09	280	278.52
Laboratory equipment	2132.16	341.91	656.90	136.54	930.00	108.54	519	327.94
Teaching and non-teaching staff salary	6520	5436.32	6290.0	6243.95	6860.00	5836.31	5798.31	5695.81
Outreach Programs	0	0	0	00	0	0	0	0
R&D	100	41.41	80.00	56.37	300	0	1.00	0.48
Training, Placement and Industry linkage	35	29.56	30	13.22	25	26.82	32	20.85
SDGs	0	0	0	0	0	0	0	0
Entrepreneurship	8	6.71	5	3.59	6	3.95	25	4.71
Others, specify	6098	4337.49	6043.96	5260.24	5211.08	4558.45	5413.62	5001.57
Total	**15323.16**	**10533.88**	**13750.86**	**12286.01**	**14242.08**	**11202.34**	**12455.57**	**11690.21**

E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

Table No. E3.1: Budget and actual expenditure incurred at program level.

Items	Budgeted in 2025-26	Actual Expenses in 2025-26 till	Budgeted in 2024-25	Actual Expenses in 2024-25 till	Budgeted in 2023-24	Actual Expenses in 2023-24 till	Budgeted in 2022-23	Actual Expenses in 2022-23 till
Laboratory equipment	110.24	4.73	25.00	0.00	25.00	2.82	25.00	16.49
Software	18.00	17.94	0.00	0.00	0.00	0.00	0.00	0.00
SDGs	0.10	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Support for faculty development	13.00	5.93	13.00	7.22	14.00	6.51	14.00	0.79
R & D	16.00	14.71	25.50	14.99	2.00	1.80	9.00	8.72
Industrial Training, Industry expert, Internship	2.39	0.74	5.20	3.40	5.34	3.43	3.64	1.79

Miscellaneous Expenses*	3.75	2.36	4.00	2.92	3.75	3.38	7.16	3.99
Total	**163.48**	**47.41**	**72.70**	**28.53**	**50.09**	**17.94**	**58.80**	**31.78**