NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electronics Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 10746	**Date of Submission**: 29-05-2025

PART A- Profile of the Institute

A1.Name of the Institute: HARCOURT BUTLER TECHNICAL UNIVERSITY	
Year of Establishment : 1921-1994	Location of the Institute: KANPUR
A2. Institute Address:NAWABGANJ, KANPUR-208002	
City:KANPUR	State:Uttar Pradesh
Pin Code:208002	Website:www.hbtu.ac.in
Email:vc@hbtu.ac.in	Phone No(with STD Code):0512-253400125340022
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Kanpur(Nagar)
State : Uttar Pradesh	Pin Code: 208002
A4. Type of the Institution: University	
A5. Ownership Status: State Government	

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

- No. of UG programs: **12**
- No. of PG programs: **6**

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	Biochemical Engineering	1964	--	Biochemical Engineering
2	Engineering & Technology	PG	Biochemical Engineering	1966	--	Biochemical Engineering
3	Engineering & Technology	PG	Chemical Engineering	1960	--	Chemical Engineering
4	Engineering & Technology	UG	Chemical Engineering	1954	--	Chemical Engineering
5	Engineering & Technology	PG	Chemical Technology	1966	--	Oil Technology
6	Engineering & Technology	UG	Civil Engineering	1966	--	Civil Engineering
7	Engineering & Technology	PG	Computer Aided Design	2000	--	Mechanical Engineering
8	Engineering & Technology	UG	Computer Science and Engineering	1984	--	Computer Science and Engineering
9	Engineering & Technology	UG	Electrical Engineering	1965	--	Electrical Engineering
10	Engineering & Technology	UG	Electronics Engineering	1990	--	Electronics Engineering
11	Engineering & Technology	UG	Food Technology	1964	--	Food Technology
12	Engineering & Technology	PG	Food Technology	1966	--	Food Technology
13	Engineering & Technology	UG	Leather Technology	1978	--	Leather Technology
14	Engineering & Technology	PG	Masters in Computer Applications	1987	--	Computer Science and Engineering
15	Engineering & Technology	UG	Mechanical Engineering	1964	--	Mechanical Engineering
16	Engineering & Technology	UG	Oil Technology	1921	--	Oil Technology

17	Engineering & Technology	UG	Paint Technology	1964	--	Paint Technology
18	Engineering & Technology	UG	Plastics Technology	1964	--	Plastic Technology

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
Computer Science and Engineering	No	Computer Science and Engineering	UG
Food Technology	No	Food Technology	UG
Electronics Engineering	No	Electronics Engineering	UG
Plastic Technology	No	Plastics Technology	UG
Mechanical Engineering	No	Mechanical 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/COMPE AUTHORITY A DETAILS
1	Electronics Engineering	UG	1990 / --	30	Yes	2021	60	1990	F.No. Northern/ 44643637092/2 20-03-2025

Sanctioned Intake for Last Five Years for the Electronics Engineering	
Academic Year	**Sanctioned Intake**
2024-25	60
2023-24	60
2022-23	60
2021-22	60
2020-21	45
2019-20	45

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 :	ASHUTOSH SINGH
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)	2024-25 (CAY)	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)	2020-21 (CAYm4)	2019-20 (CAYm5)	2018-19 (CAYm6)
N=Sanctioned intake of the program (as per AICTE /Competent authority)	60	60	60	60	60	45	45

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	59	68	66	59	60	45	46
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	9	3	3	9	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	13	15	14	14	17	13	1
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	72	92	83	76	86	58	47

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]
2024-25 (CAY)	60	59	13	120.00
2023-24 (CAYm1)	60	68	15	138.33
2022-23 (CAYm2)	60	66	14	133.33

Average [(ER1 + ER2 + ER3) / 3] = 130.55≡ 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	(2020-21) LYG	(2019-20) LYGm1	(2018-19) 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).	86.00	58.00	47.00
B=No. of students who graduated from the program in the stipulated course duration	80.00	53.00	46.00
Success Rate (SR)= (B/A) * 100	93.02	91.38	97.87

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 94.09

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(2023-24)	CAYm2(2022-23)	CAYm3 (2021-22)
Mean of CGPA or mean percentage of all successful students(X)	7.51	7.11	7.21
Y=Total no. of successful students	72.00	75.00	72.00
Z=Total no. of students appeared in the examination	77.00	80.00	74.00
API [X*(Y/Z)]	7.02	6.66	7.02

Average API[(AP1+AP2+AP3)/3] : 6.90

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.50	7.11	6.86
Y=Total no. of successful students	71.00	74.00	82.00
Z=Total no. of students appeared in the examination	78.00	75.00	88.00
API [X * (Y/Z)]	5.92	7.02	6.39

Average API [(AP1 + AP2 + AP3)/3] : 6.44

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 (2023-24)	CAYm2 (2022-23)	CAYm3 (2021-22)
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)	6.52	7.03	6.88
Y=Total no. of successful students	70.00	80.00	53.00
Z=Total no. of students appeared in the examination	74.00	82.00	58.00
API [X*(Y/Z)]:	6.17	6.86	6.29

Average API [(AP1 + AP2 + AP3)/3] : 6.44

B9. Placement, Higher Studies, and Entrepreneurship

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

Item	LYG (2020-21)	LYGm1(2019-20)	LYGm2(2018-19)
FS*=Total no. of final year students	80.00	53.00	46.00
X=No. of students placed	49.00	35.00	36.00
Y=No. of students admitted to higher studies	2.00	4.00	3.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	63.75	73.58	84.78

Average Placement Index = (P_1 + P_2 + P_3)/3: 74.04 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 Associa (Regula Contrac Ad hoc)
1	RACHNA ASTHANA	XXXXXXX37C	Ph.D	IIT KANPUR	OPTICAL COMMUNICATION AND NETWORKS	21/10/1991	33.7	Lecturer	Professor	11/03/2010	Regular
2	KRISHNA RAJ	XXXXXXX59K	Ph.D	MMMEC GORAKHPUR	SIGNAL PROCESSING	25/01/2007	18.4	Assistant Professor	Professor	25/01/2013	Regular
3	NAND KISHORE	XXXXXXX88R	Ph.D	MNNIT ALLAHABAD	MICROSTRIP PATCH ANTENNA	30/12/2021	3.4	Assistant Professor	Assistant Professor		Regular
4	ASHUTOSH SINGH	XXXXXXX85G	Ph.D	IIT KANPUR	COMMUNICATION SYSTEMS AND NETWORKS	20/08/1999	25.9	Lecturer	Professor	14/09/2018	Regular
5	MANOJ KUMAR SHUKLA	XXXXXXX40J	Ph.D	MNNIT ALLAHABAD	MOBILE COMMUNICATION	03/02/2007	18.3	Assistant Professor	Professor	03/02/2015	Regular
6	ASHOK KUMAR SHANKHWAR	XXXXXXX52D	Ph.D	MNNIT ALLAHABAD	ANALOG CIRCUITS	31/05/1996	29	Lecturer	Professor	23/10/2017	Regular
7	KUMAR GAURAV	XXXXXXX79N	Ph.D	IIT KANPUR	COMMUNICATION SYSTEMS AND NETWORKS	30/12/2021	3.4	Assistant Professor	Assistant Professor		Regular
8	VIPIN KUMAR UPADDHYAY	XXXXXXX14R	Ph.D	MMMUT GORKAHPUR	WIRELESS COMMUNICATION	21/09/2023	1.8	Assistant Professor	Assistant Professor		Regular
9	PREETI AGARWAL MITTAL	XXXXXXX34D	Ph.D	MNNIT ALLAHABAD	DIGITAL ELECTRONICS	29/07/2013	11.3	Assistant Professor	Assistant Professor		Contract Fulltime
10	DEO CHANDRA JAISWAL	XXXXXXX48H	Ph.D	AKTU LUCKNOW	OPTICAL NETWORKS	05/08/2023	1.9	Assistant Professor	Assistant Professor		Contract Fulltime

11	AJEET KUMAR	XXXXXXX50L	M.Tech	AKTU LUCKNOW	ELECETRONICS AND COMMUNICATION ENGINEERING	11/01/2023	2.4	Assistant Professor	Assistant Professor		Contract Fulltime
12	MOHIT SRIVASTAVA	XXXXXXX21G	Ph.D	AKTU LUCKNOW	WIRELESS COMMUNICATION	23/09/2023	0.11	Assistant Professor	Assistant Professor		Contract Fulltime
13	DINESH KUMAR KOTARY	XXXXXXX01R	Ph.D		COMMUNICATION SYSTEMS	05/08/2023	0.11	Assistant Professor	Assistant Professor		Contract Fulltime
14	SHAEQUE AFROZ KAZMI	XXXXXXX67A	M.Tech	JNTU HYDERABAD	ELECETRONICS AND COMMUNICATION ENGINEERING	10/10/2024	0.7	Assistant Professor	Assistant Professor		Contract Fulltime
15	SHARAD KUMAR GUPTA	XXXXXXX71D	M.Tech	HBTI KANPUR	POWER ELECTRONICS AND CONTROL	18/10/2024	0.7	Assistant Professor	Assistant Professor		Contract Fulltime
16	ANJU YADAV	XXXXXXX09N	Ph.D	MNNIT ALLAHABAD	ELECTRICAL ENGINEERING	13/01/2025	0.4	Assistant Professor	Assistant Professor		Contract Fulltime
17	RITESH SACHAN	XXXXXXX90D	M.Tech	NIT KURUSHETRA	INSTRUMENTATION	20/01/2025	0.4	Assistant Professor	Assistant Professor		Contract Fulltime
18	APARNA SINGH	XXXXXXX28A	M.Tech	MMMUT GORKAHPUR	COMMUNICATION ENGINEERING	11/01/2023	0.6	Assistant Professor	Assistant Professor		Contract Fulltime
19	VARUNIKA DIXIT	XXXXXXX80H	M.Tech	HBTU KANPUR	WIRELESS COMMUNICATION	11/01/2023	0.6	Assistant Professor	Assistant Professor		Contract Fulltime
20	ARCHANA TRIPATHI	XXXXXXX29C	M.Tech	ISM DHANBAD	ECE	11/01/2023	0.6	Assistant Professor	Assistant Professor		Contract Fulltime
21	RAJANI BISHT	XXXXXXX47F	Ph.D	IIT KANPUR	SOLID STATE ELECTRONICS	18/10/1993	29.5	Lecturer	Professor	28/10/2021	Regular

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 Department0

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	66	62	64
UG1.C	61	64	49
UG1.D	63	49	45
UG1: Electronics Engineering	**190**	**175**	**158**
DS=Total no. of students in all UG and PG programs in the Department	190	175	158
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=** 190	**S2=** 175	**S3=** 158
DF=Total no. of faculty members in the Department	10	11	8
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=** 10	**F2=** 11	**F3=** 8
FF=The faculty members in F who have a 100% teaching load in the first-year courses	1	0	1
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 21.11**	**SFR2= 15.91**	**SFR3= 22.57**

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
Average SFR for 3 years	**SFR= 19.86**		

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)]
2024-25(CAY)	9	1	9.00	26.11
2023-24(CAYm1)	10	1	8.00	32.50
2022-23(CAYm2)	8	0	7.00	28.57

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
2024-25	1.00	5.00	2.00	0.00	6.00	3.00
2023-24	1.00	5.00	1.00	0.00	5.00	2.00
2022-23	1.00	5.00	1.00	0.00	5.00	2.00
Average	RF1=1.00	AF1=5.00	RF2=1.33	AF2=0.00	RF2=5.33	AF2=2.33

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	Mr. Amit Kumar	Engineer-E & HOD Department	IIA-Bengaluru	Deep Space Communication	8.00
2	Mr. Niraj Kumar	Assistant manager	Aditya Birla group	Electrical Measurement and Measuring Instruments	18.00
3	Mr.Sandeep Tiwari	Regional head sales & marketing (North india)	Paharpur 3P Pvt Ltd	Advance Instrumentation	20.00
4	Dr. Vinay Tripathi	Assositate Professor	MNIT Allahabad	Wireless communication	8.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Arvind Vidyarthi	Team Leader	Intel California	VLSI Silicon Implementation at Intel California	8.00
2	Mr. Niraj Kumar	Assistant manager	Aditya Birla group	Electrical Measurement and Measuring Instruments	14.00
3	Mr.Sandeep Tiwari	Regional head sales & marketing (North india)	Paharpur 3P Pvt Ltd	Advance Instrumentation	14.00
4	Dr. Vinay Tripathi	Associate professor	MNIT Allahabad	Wireless communication	8.00
5	Dr. Abhinav Gupta	Assistent Professor	Rajkiya Engineering College Sonbhadra	VLSI Desine	8.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Mr. Niraj Kumar	Assistant manager	Aditya Birla group	Electrical Measurement and Measuring Instruments	14.00
2	Mr.Sandeep Tiwari	Regional head sales & marketing (North india)	Paharpur 3P Pvt Ltd	Advance Instrumentation	14.00
3	Dr. Vinay Tripathi	associate professor	MNIT Allahabad	Wireless communication	12.00
4	Mr. Amit Kumar	Engineer-E & HOD Department	IIA-Bengaluru	Deep Space Communication	8.00
5	Dr. Preeti Mishra	Director	MITS LUCKNOW	Optical Fiber Communication	8.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2023-24 (CAYm1)	2022-23 (CAYm2)	2021-22 (CAYm3)
1	No. of peer reviewed journal papers published	16	42	51
2	No. of peer reviewed conference papers published	9	9	2
3	No. of books/book chapters published	0	0	4

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

(CAYm3)

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

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)

(CAYm2)

(CAYm3)

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

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
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Nand Kishore	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof.A.K.Shankhwar	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof.Ashutosh Singh	Research Activity	1 year	90000.00	90000.00	Research Paper Published
			Amount received (Rs.): 810000.00		

(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
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
			Amount received (Rs.): 360000.00		

(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
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof.KRISHNA RAJ	Research Activity	1 year	180000.00	180000.00	Research Paper Published
			Amount received (Rs.): 360000.00		

Total amount (Lacs) received for the past 3 years : 1530000.00

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	Simulation Lab	2	1. Personal Computers (26 nos.) 2. MATLAB Software (30 users)	24 Hours/Week	Mr. Raj Kuma	Technical Ass	Diploma
2	Electronics Lab	4	1. DC Regulated Power Supply (20 units) 2. CRO (20 units) 3. Function	24 Hours/Week	Mr. Mohamm	Instructor	Instructor
3	Microprocessor Lab	4	1. 8085 Microprocessor training kit with LCD Display (17 units) 2. 8086	8 Hours/Week	Mr. Raj Kuma	Technical Ass	Diploma
4	PCB Lab	4	1. NVIS 72 Prototype PCB Machine (02 units)	8 Hours/Week	Mr. Mohamm	Instructor	B.Tech. (EC)
5	Communication Lab	4	1. DC Regulated power supply (06 units) 2. DSO (06 units) 3. Function	24 Hours/Week	Mr. Mohamm	Instructor	B.Tech. (EC)
6	VLSI Lab	2	1.Vivado Design suite (proposal submitted) 2. LTspice	12 Hours/Week	Mr. Raj Kuma	Technical Ass	Diploma
7	Micowave Engineering Lab	4	1. Scientech Microwave Bench 2. X-band Microwave Training Kit	12 Hours/Week	Mr. Mohamm	Instructor	B.Tech. (EC)
8	Digital Signal Processing Lab	2	Satellite Kit CDMA Up gradation Proposal Submitted	20 Hours/Week	Mr. Raj Kuma	Technical Ass	Diploma
9	Network Analysis Lab	4	Loop and Nodal Analysis Kit, Telligen's Theorem Kit, Reciprocity	4 Hours/Week	Ms. Dinu Nira	R.A.	M.Sc., Physic
10	Basic Electrical Lab	4	Verification of DC Theorems Kits (1 Thevenin's Theorem 2 Norton's	4 Hours/Week	Ms. Dinu Nira	R.A.	M.Sc., Physic
11	Department Library	4	B. Tech. Project Report 2. M. Tech. Thesis 3. Ph.D Thesis	24 Hours/Week	Mr.Ankit Sing	Junior Assiste	M.Com, MA(E

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	1. Electronics Lab 2. PCB Lab 3. Communication Lab 4. Simulation Lab	• Specific Safety Rules like Do's and Don'ts are displayed and instructed to all students. • Fire extinguishers are available near to the laboratory. • Well-trained technical supporting staff monitors the labs at all times. • Damaged equipment is identified and serviced at the earliest. • Laboratories are clean and organized. Sufficient storage space is available in each lab. • Fully and rightly loaded PC Systems with the needed software are readily available for students' usage. • Proper earthing in all the sockets • Provision of MCBs • First aid box available in the Department

D3. Project Laboratory/Research Laboratory

S.N.	Name of the Laboratory
1.	Project Lab
2.	Research Lab

7.5.1 Project laboratory

- Project labs are utilized by the students for their projects.
- Discussions and implementations of innovative ideas about mini projects and final year projects are carried out in Project laboratory.

B. TECH. PROJECT FINAL YEAR ELECTRONICS ENGINEERING 2024-25

S.No.	Student Names & Roll No.s	Faculty Guide	Project Title
1	VIVEK RAJPUT (210106071) Saundarya Sachan (210106062), Yash Pandey (21010607), Nitin Kumar (210106041)	Prof. Ashutosh Singh	Eye-gaze Controlled Wheelchair Prototype
2	RACHIT SUBODH DWIVEDI (210106049), Ankur Uttam (210106013), Pranav Gupta (210106046), Prabhat Shukla (210106043)	Dr. Kumar Gaurav	Posture Correction Using Flex Sensor
3	ROHAN KUMAR SINGH (210106053), Suryans (210113046), Roshan Maurya (210106054), Ankit Kumar (210106011)	Dr. Vipin Kumar Upaddhyay	Mobile Optimized Natural Language Model
4	MANSI AGRAWAL (210106036), Abhishek Srivastava (210106004), Medhavi Singh (210106037)	Dr. Kumar Gaurav	Crack Detection Bot for Rail Safety
5	ABHINAV SHARMA (210106002), Ayush Tripathi (210106020), Prakhar Singh (210106045), Samarjeet Singh (210106059)	Dr. Deo Chandra Jaiswal	Fashion Recommendation System
6	ARYA MANOCHA (210106017), Madhav Dwivedi (210106035), Akanksha Verma (210106007)	Ajit Kumar	Plant Disease Detection System
7	ARPAN SINGH (210102009), Abhyuday Shukla (210106005), Akhand Pratap Singh (210106008)	Ajit Kumar	Wireless Heart Rate Monitoring System
8	AAYUSH SRIVASTAVA (210112002), Aryan Singh (210102013), Harshit Awasthi (210106028), Devesh Gautam (210106023)	Dr. Nand Kishore	EMG-Controlled Prosthetic Arm
9	KUMARI AYUSHI (210106034), Om Saini (210106042), Harsh Vardhan (210106027), Saurabh Hoon (220006003)	Shaeque Afroz Kazmi	Design and Implementation of Li-Fi based Communication System
10.	RAHUL SHARMA (210106050), Raj Gupta (210106051), Ram Krishna Dixit (220006002)	Prof. Ashutosh Singh	Arduino Based Vehicle Immobilizer

11.	PAWAN KUMAR (210103041), Tanishq Singh (210113050) Sahil Verma (2101060560), Ranvijay Singh (210106052)	Dr. Nand Kishore	Leveraging Off-the-shelf Wi-Fi for Contactless Activity Monitoring (Intrusion Detection)
12.	YASH LAWANIYA (210106076) Anand Tiwari (210106075), Jai Krishna Tewari (210106029), Vasu Singh (210106068)	Sharad Kumar Gupta	Design and Implementation of a Robotic Arm
13.	UTKARSH CHANDRA (210102066), Anubhav Mishra (210106016), Anshuman Sharma (210106077), Gaurav Gautam (200106074)	Sharad Kumar Gupta	Clear Vision - Image Deblurring and OCR for Traffic Violation Enforcement
14.	PRIYANSHI SRIVASTAVA (210106048), Kashish Azhar (210106031), Swarnim Mishra (210106066), Mohammed Sayam Fareez (210106038)	Ritesh Sachan	Dual-band Antenna for Implantable Biomedical Devices
15.	AKSHAYA PRATAP SINGH (210106009), Bipin Singh (210106022), Anshu Dwivedi (210106015), Aayush Pandey (210006001)	Prof. Ashok Kumar Shankhwar	UPI Fraud Detection Using Machine Learning
16.	KAUSTUBH DIXIT (210106032), Tanisha Mishra (210106067), Abhishek Singh (210106003), Gaurav Gautam (210106024)	Dr. Vipin Kumar Upaddhyay	Online Examination Proctoring System
17.	MOHIT JAISWAL (210106039), Garvit Mohan Sharma (210106025), Sadiya Parveen (210106055), Nishant Kumar (210106040)	Dr. Deo Chandra Jaiswal	Assistance Stick for Visually Impaired
18.	ASHISH VASHISTH (210103076), Saumya Shisodiya (210106061), Vibhor Krishn Mishra (210106069), Samdarsh Singh (200106011)	Anju Yadav	IOT Based Surveillance System for Fire and Smoke Detection
19.	VIKAS CHAUDHARY (210106070), Harsh Agarwal (210106026), Alok Mishra (210106010), Love Kumar (210006002)	Prof. Ashok Kumar Shankhwar	Link Credibility Assessment
20.	ATUL KUMAR (210106019), Sonali Patel (210106063), Ankit Singh (210106012), Bhupesh Kumar (210106021)	Prof.Krishna Raj	Hospital Management Web Application

7.5.2 Research laboratory

- Research labs are utilized by the students for their research work.
- Sufficient no. of computer systems equiped with latest operating systems and software.

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.

Year	Sanctioned intake of all UG programs (S4)	No. of required faculty (RF4= S4/20)	No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1)	No. of faculty members in Engineering Science Courses (NS2)	Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) + (NS2*0.2))/RF
2022-23(CAYm2)	645	32	13	15	42
2023-24(CAYm1)	645	32	15	22	51
2024-25(CAY)	645	32	19	37	71

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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Infrastructure Built-Up	1279.52	1267.74	641.38	64138	500	163.04	2618.02	2001.57
Library	50	28.14	146	76.79	100.92	70.19	20	4.31
Laboratory equipment	300	213.03	500	104.79	500	163.04	200	27.80
Teaching and non-teaching staff	5408.06	4579.02	5163	2654.37	4982	4135.14	3534.46	2911.87
Outreach Programs	0	0	0	0	0	0	0	0
R&D	100	22.95	102.40	48.09	116.38	54.70	121	30.91
Training, Placement and	75	32.12	90	70.97	90	25.66	30	8.41
SDGs	0	0	0	0	0	0	0	0
Entrepreneurship	0	0	0	0	0	0	0	0
Others, specify	550	532.21	300	246.64	250	236.42	207	171.17
Total	**7762.58**	**6675.21**	**6942.78**	**67339.65**	**6539.30**	**4848.19**	**6730.48**	**5156.04**

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 2024-2025	Actual Expenses in 2024-2025 till	Budgeted in 2023-2024	Actual Expenses in 2023-2024 till	Budgeted in 2022-2023	Actual Expenses in 2022-2023 till	Budgeted in 2021-2022	Actual Expenses in 2021-2022 till
Laboratory equipment	2000000	2193437	800000	37850	800000	0	500000	0
Software	1000000	0	600000	0	400000	0	450000	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	400000	8858	200000	43277	200000	1190	150000	0
R & D	600000	86370	400000	25000	300000	0	200000	0
Industrial Training, Industry expert,	50000	0	50000	17110	50000	0	25000	0
Miscellaneous Expenses*	950000	416669	550000	166665	450000	36028	325000	1950
Total	**5000000**	**2705334**	**2600000**	**289902**	**2200000**	**37218**	**1650000**	**1950**