NATIONAL BOARD OF ACCREDITATION

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

Program Name : Computer Science and 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	Computer Science and Engineering	UG	1984 / --	30	Yes	2000	60	2000	F.No. Northern/ 44643637092/2 , Date:20.03.20

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 :	ANITA YADAV
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	60	60
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	60	70	62	61	64	63	60
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	3	3	9	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	12	11	16	7	17	17	7
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	72	84	81	77	81	80	67

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	60	12	120.00
2023-24 (CAYm1)	60	70	11	135.00
2022-23 (CAYm2)	60	62	16	130.00

Average [(ER1 + ER2 + ER3) / 3] = 128.33≡ 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).	81.00	80.00	67.00
B=No. of students who graduated from the program in the stipulated course duration	76.00	84.00	74.00
Success Rate (SR)= (B/A) * 100	93.83	105.00	110.45

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 103.09

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)	7.23	6.90	7.83
Y=Total no. of successful students	71.00	77.00	67.00
Z=Total no. of students appeared in the examination	74.00	79.00	76.00
API [X*(Y/Z)]	6.94	6.73	6.90

Average API[(AP1+AP2+AP3)/3] : 6.86

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)	6.25	6.85	7.02
Y=Total no. of successful students	71.00	83.00	79.00
Z=Total no. of students appeared in the examination	78.00	86.00	67.00
API [X * (Y/Z)]	5.69	6.61	8.28

Average API [(AP1 + AP2 + AP3)/3] : 6.86

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)	7.74	7.55	8.26
Y=Total no. of successful students	78.00	76.00	84.00
Z=Total no. of students appeared in the examination	83.00	79.00	85.00
API [X*(Y/Z)]:	7.27	7.26	8.16

Average API [(AP1 + AP2 + AP3)/3] : 7.56

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	76.00	84.00	76.00
X=No. of students placed	55.00	55.00	51.00
Y=No. of students admitted to higher studies	7.00	5.00	5.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	81.58	71.43	73.68

Average Placement Index = (P_1 + P_2 + P_3)/3: 75.56 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 Associatio (Regular/ Contract/ Ad hoc)
1	RAGHURAJ SINGH	XXXXXXX17B	Ph.D	UPTU, Lucknow	Software Engineering	26/11/1998	26.6	Assistant Professor	Professor	18/01/2007	Regular
2	ANITA YADAV	XXXXXXX57C	Ph.D	Dr. AKTU LUCKNOW	COMPUTER NETWORKS	08/01/1993	32.4	Lecturer	Professor	16/01/2016	Regular
3	PRABHAT VERMA	XXXXXXX57R	Ph.D	UTTARAKHAND TECHNICAL UNIVERSITY, DEHRADUN, UTTARAKHAND	COMPUTER SCIENCE AND ENGINEERING	09/04/2003	22.1	Lecturer	Professor		Regular
4	Vandana Dixit Kaushik	XXXXXXX07L	Ph.D	GBTU, Lucknow	Image Processing, Biometrics	27/02/2003	22.3	Lecturer	Professor	27/02/2019	Regular
5	VIVEK SINGH VERMA	XXXXXXX04D	Ph.D	IIIT JABALPUR	IMAGE PROCESSING	24/08/2022	2.9	Associate Professor	Associate Professor	24/08/2022	Regular
6	IMRAN KHAN	XXXXXXX53H	Ph.D	JAMIA MILIA ISLAMIA NEW DELHI	MACHINE LEARNING	20/07/2022	2.10	Assistant Professor	Assistant Professor		Regular
7	RASHI AGARWAL	XXXXXXX06M	Ph.D	UPTU LUCKNOW	IMAGE PROCESSING	12/07/2022	2.10	Associate Professor	Associate Professor	12/07/2022	Regular
8	SHASHWATI BANERJEA	XXXXXXX26A	Ph.D	MNNIT, ALLAHABAD	MACHINE LEARNING	02/11/2023	1.6	Associate Professor	Associate Professor	02/11/2023	Regular
9	Bharat Bhushan Sagar	XXXXXXX70D	Ph.D	SHUATS, Allahabad	Software Engineering, Machine Learning	18/10/2023	1.7	Associate Professor	Associate Professor	18/10/2023	Regular
10	PRIYANKA PANDEY	XXXXXXX70G	Ph.D	HBTU Kanpur	MOBILE AD HOC NETWORK	12/10/2022	2.7	Assistant Professor	Assistant Professor		Contractua Fulltime
11	POOJA AGNIHOTRI	XXXXXXX93C	M.Tech	BANASTHALI UNIVERSITY	COMPUTER NETWORKS	12/10/2022	2.7	Assistant Professor	Assistant Professor		Contractua Fulltime
12	RASHMIKIRAN PANDEY	XXXXXXX54F	M.Tech	MOSCOW INSTITUTE OF PHYSICS & TECHNOLOGY RUSSIA	APPLIED MATHEMATICS & INFORMATICS	01/08/2024	0.9	Assistant Professor	Assistant Professor		Contractua Fulltime
13	AMIT GUPTA	XXXXXXX36P	Ph.D	AKTU LUCKNOW	NEURAL NETWORK	05/08/2019	5.9	Assistant Professor	Assistant Professor		Contractua Fulltime
14	MEKHLA SHUKLA	XXXXXXX31M	M.Tech	AKTU LUCKNOW	DATA MINING	18/08/2023	1.9	Assistant Professor	Assistant Professor		Contractua Fulltime
15	AMLENDRA KUMAR	XXXXXXX21K	M.Tech	AKTU	DATA STRUCTURE	29/08/2022	2.8	Lecturer	Assistant Professor		Contractua Fulltime

16	PRAGYA TRIPATHI	XXXXXXX03C	M.Tech	UNIVERSITY OF MUMBAI	DEEP LEARNING	05/03/2022	3.2	Assistant Professor	Assistant Professor		Contractua Fulltime
17	RAJAT MISHRA	XXXXXXX41H	M.Tech	AKTU	DEEP LEARNING	30/08/2022	2.8	Assistant Professor	Assistant Professor		Contractua Fulltime
18	INDRESH GUPTA	XXXXXXX10K	M.Tech	IIIT GWALIOR	MACHINE LEARNING	28/08/2021	1.10	Assistant Professor	Assistant Professor		Contractua Fulltime
19	PARUL PANDEY	XXXXXXX04Q	M.Tech	AKTU	DEEP LEARNING	16/08/2019	3.10	Assistant Professor	Assistant Professor		Contractua Fulltime
20	VINAY SINGH	XXXXXXX91E	M.Tech	GALGOTIA UNIVESITY	DEEP LEARNING	02/12/2022	0.7	Assistant Professor	Assistant Professor		Contractua Fulltime
21	VAISHNAVI SHUKLA	XXXXXXX65M	M.Tech	AKTU LUCKNOW	DEEP LEARNING	05/08/2023	1.3	Assistant Professor	Assistant Professor		Contractua Fulltime
22	TAMMANA	XXXXXXX45D	M.Tech	JAMIA HAMDARD UNIVERSITY	DEEP LEARNING	05/08/2023	1.3	Assistant Professor	Assistant Professor		Contractua Fulltime
23	MUNINDRA TRIPATHI	XXXXXXX31A	M.Tech	IIIT GWALIOR	DEEP LEARNING	26/08/2022	0.3	Assistant Professor	Assistant Professor		Contractua Fulltime
24	SONIA GUPTA	XXXXXXX03F	M.Tech	IFTM MORADABAD	DEEP LEARNING	02/03/2022	3.2	Assistant Professor	Assistant Professor		Contractua Fulltime
25	VINAY KURMAR PATHAK	XXXXXXX78D	Ph.D	UPTU LUCKNOW	Image Processing	18/09/1993	31.8	Lecturer	Professor	18/01/2007	Regular
26	NARENDRA KOHLI	XXXXXXX42K	Ph.D	IIT KANPUR	IMAGE PROCESSING	23/12/1991	33.5	Lecturer	Professor	21/02/2012	Regular
27	BIPIN KUMAR TRIPATHI	XXXXXXX30A	Ph.D	IIT KANPUR	SOFT COMPUTING	16/11/1995	29.6	Lecturer	Professor	17/11/2014	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 Department1

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

Description	**CAY(2024-25)**	**CAYm1 (2023-24)**	**CAYm2 (2022-23)**
UG1.B	60	60	60
UG1.C	60	60	60
UG1.D	60	60	60
UG1: Computer Science and Engineering	**180**	**180**	**180**
PG1.A	60	60	60
PG1.B	60	60	60
PG1: Masters in Computer Applications	**120**	**120**	**120**
DS=Total no. of students in all UG and PG programs in the Department	300	300	300
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=** 300	**S2=** 300	**S3=** 300
DF=Total no. of faculty members in the Department	21	20	17
AF= Total no. of faculty members in the allied Departments	0	0	0

Description	CAY(2024-25)	CAYm1 (2023-24)	CAYm2 (2022-23)
F=Total no. of faculty members in the Department (DF) and allied Departments (AF)	**F1=** 21	**F2=** 20	**F3=** 17
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= 15.79**	**SFR2= 16.67**	**SFR3= 20.00**
Average SFR for 3 years	**SFR= 17.49**		

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)	14	7	14.00	30.00
2023-24(CAYm1)	12	8	14.00	27.14
2022-23(CAYm2)	11	6	14.00	23.93

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	7.00	3.00	4.00	10.00	1.00
2023-24	1.00	7.00	3.00	2.00	10.00	1.00
2022-23	1.00	7.00	3.00	2.00	10.00	1.00
Average	RF1=1.00	AF1=7.00	RF2=3.00	AF2=2.67	RF2=10.00	AF2=1.00

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	Vikas Nigam	Director	Hatsoff Technologies Software Private Limited, Kanpur	Summer Training Program on Skill development(Technical and Soft Skill)	80.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Millan Saxena	CEO and Founder	E-cosys consultancy	Training in AI & ML Technologies	60.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Millan Saxena	CEO and Founder	E-cosys consultancy	Training in AI & ML Technologies	55.00

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	32	28	25

2	No. of peer reviewed conference papers published	18	24	13
3	No. of books/book chapters published	8	4	7

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
Prof. Raghuraj Singh	Prof. Anita Yadav		Design and Development of Near-Infrared Vein Visualizing Device	Council of Science & Technology, Uttar Pradesh	3 years	13.08
						Amount received (Rs.):13.08

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 13.08

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. Raghuraj Singh Dr. Anita Yadav Dr. Prabhat Verma "		Department of Computer Science and Engineering	Third Party Audit of the Software Developed for the Compliance of Online Services under the Boiler Act 1923 and Factories Act 1948	Office of the Labour Commissioner, Uttar Pradesh, Kanpur	2 Months (June/July 2024)	236000.00
						Amount received (Rs.):236000.00

(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. Raghuraj Singh Dr. Anita Yadav"		Department of Computer Science and Engineering	Vetting of the DPR for Pan City Surveillance and it's Integration with Integrated Control & Command Centre of Kanpur Smart City Ltd. (Safe City Ecosystem for Kanpur City)	Kanpur Smart City Ltd., Kanpur.	"2 Months (May/June 2023) "	793297.00
						Amount received (Rs.):793297.00

(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. Raghuraj Singh Dr. Anita Yadav		Department of Computer Science and Engineering	Evaluation/Inspection (Vetting) of the Estimate/RFP for the proposed work of Integration of Electric Buses with ICCC & EBUS Mobile App Development 118000.00 Kanpur Smart City Ltd., Kanpur. Duration 3 Months (April/May 2022) Principal Investigator Dr. Raghuraj Singh Dr. Anita Yadav under Kanpur Smart City Ltd., Kanpur	Kanpur Smart City Ltd., Kanpur	3 Months (April/May 2022	118000.00
						Amount received (Rs.):118000.00

Total amount (Lacs) received for the past 3 years: 1147297.00

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. Raghuraj Singh	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Anita Yadav	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Narendra Kohli	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Prabhat Verma	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Vandana Dixit Kaushik	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Vivek Singh Verma	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Rashi Agarwal	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Imran Khan	Research Activity	1 year	180000.00	180000.00	Research Paper Published
			Amount received (Rs.): 1440000.00		

(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. Raghuraj Singh	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Anita Yadav	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Narendra Kohli	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Prabhat Verma	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Vandana Dixit Kaushik	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Vivek Singh Verma	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Rashi Agarwal	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Dr. Imran Khan	Research Activity	1 year	180000.00	180000.00	Research Paper Published
			Amount received (Rs.): 1440000.00		

(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. Raghuraj Singh	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Anita Yadav	Research Activity	1 year	180000.00	180000.00	Research Paper Published
Prof. Narendra Kohli	Research Activity	1 year	180000.00	180000.00	Research Paper Published
			Amount received (Rs.): 540000.00		

Total amount (Lacs) received for the past 3 years : 3420000.00

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	Lab-1 (DBMS Lab) + (M.Tech Lab)	60	Desktop Systems (50+16) OS: Windows 8.1	Odd Semester:	Manisha Verr	Computer Op	Diploma
2	Lab-2 & Lab-3 (Windows Lab)	60	Desktop Systems (47) OS: Linux Windows 8.1	Odd Semester:	V. P. Dixit	Computer Op	MCA, Diplom
3	Lab-5 (Internet Lab)	60	Desktop Systems (50) OS: Windows 8.1	Odd Semester:	M. C. Kureel	Computer Op	B.Sc., PGDC
4	Lab-6 (New Windows Lab)	60	Desktop Systems (49) OS: Windows 8.1	Odd Semester:	Manisha Verr	Computer Op	Diploma
5	Lab-7 (CP Lab)	60	Desktop Systems (50) OS: Linux	Odd Semester:	M. C. Kureel	Computer Op	B.Sc., PGDC
6	Virtual Class Room/ Project Lab-8	60	AIO Desktop Systems (15) Digital E-Learning Podium (01), HD PTZ	Odd Semester:	Rahul Singh	Research Ass	MBA

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Lab-1 (DBMS Lab)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras
2	Lab-2 & Lab-3 (Windows Lab)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras
3	Lab-5 (Internet Lab)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras
4	Lab-6 (New Windows Lab)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras
5	Lab-7 (CP Lab)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras
6	Lab-8 (Project)	• Fire extinguishers are placed at various locations in the department • First Aid Boxes are available in the Labs/Department • CCTV Cameras

D3. Project Laboratory/Research Laboratory

The **CSE Department** has established a dedicated **Project and Research Laboratory** to foster innovation, interdisciplinary learning, and hands-on technical expertise among students. This facility is equipped with computing systems, IoT kits, and essential software tools required for advanced research and project development.

The laboratory serves as a hub for executing **minor and major projects**, guided research by faculty members, and collaborative activities such as **industry-sponsored projects**, **internships**, and **hackathons**. Students utilize this space to work on emerging areas including **Artificial Intelligence, Machine Learning, Cybersecurity, IoT, Blockchain**, and **Data Science**.

Additionally, the department is progressing towards the development of a **Centre of Excellence (CoE)** through partnerships with industries and premier institutions, providing exposure to the latest technologies and tools.

These facilities allow department to conduct workshops, seminars, and prototype development.

This facility significantly contributes to the attainment of **Program Outcomes (POs)** such as problem analysis, design and development of solutions, usage of modern tools, project management, and lifelong learning. It also directly supports **Program Specific Outcomes (PSOs)** by enabling students to demonstrate technical competence and pursue innovative computing solutions.

Specifically for B.Tech CSE projects, our Project Laboratory is equipped with a sufficient number of desktop computer systems and other necessary facilities. Students make full use of this laboratory to carry out their project work during the 7th and 8th semesters. The details of various facilities available in the lab, specifically allocated to B.Tech CSE students, are given below:

Sr. No.	Brief Specifications of Items/Equipment	Qty.
1.	• Video System- 42” Commercial Full High Definition, 10X Full HD PTZ Camera, TV ceiling mounted, Ceiling mount kit for 42”LED TV etc. • Audio System – Digital E-Learning Podium with inbuilt table monitor, 7”touch panel, microphone etc. Wall mounts speakers.	1 Unit
2.	Desktop Systems AIO Intel 2.4 GHz 2GB DDR3, 500 GB HDD, 19.5”LED, DOS	15
3.	UPS 10 KVA Online.	01
4.	LCD Projector with Motorized Screen	01

List of projects carried out by B.Tech CSE students in project lab in academic year 2024-25 is as follows:

Department of Computer Science and Engineering					
Project (Final CS : 2024-25)					
Sl.	**Name**	**Roll No.**	**GroupNo.**	**Project Name**	**Supervisor**
1	Vikas sharma	210104066	1	Stock Price Prediction Using ML	Prof. Prabhat Verma
2	Vishal Gond	210104067			
3	Aryan hayaran	210104021			
4	Aman	210104009			
5	Anurag Singh	210104018	2	Generating Reports and results using AI services	Dr. Imran Khan
6	Ankit Goel	210104014			
7	Subodh Gangwar	210104056			
8	Anagh Tiwari	210104011	3	Intrusion Detection System using Machine Learning	Prof. Prabhat Verma
9	Subrat Rajpoot	210104057			
10	Shikha Singh	210104045			
11	Sudhanshu Ranjan	210104058			

12	Shristi rathi	210104051	4	Text Summarization with the help of NLP	Dr. Rashi Agarwal	
13	Adya Shrivastava	210104004				
14	Beena pal	220004001				
15	Prashant	210103077				
16	Abhay Yadav	210103002	5	Generative Adversarial Network (GANs) for Art Creation	Prof. Anita Yadav	
17	Hemant Singh	210103030				
18	Anjal Kesarwani	210104013				
19	Sonali Saroj	210106064				
20	Ayush Mishra	210104023	6	Blockchain Based Secure Voting System(Cybersecurity Domain)	Prof. Anita Yadav	
21	Satkrit Rai	210104047				
22	Tejas Pandey	210104061				
23	Parit Kansal	200104043	7	Deep Learning for Image Recognition	Dr. Vivek Singh Verma	
24	Pankhuri Gupta	210108042				
25	Shubh Gupta	210104053				
26	Pranjal Dhar	210104037	8	Brain Tumor Detection Using Deep Learning	Dr. Amit Gupta	
27	Rajneesh	210104043				
28	Abhay Kumar	210104073				
29	Zeeshan Akkhhtar	210104068				
30	Keshav sudraniya	210104026	9	Emotion Recognition	Prof. Vandana Dixit Kaushik	
31	Ankit lekhak	210104017				
32	Nikhil Chaudhary	210104035				
33	Arjun	210104020	10	Predictive Analytics for Healthcare Data	Prof. Narendra Kohli	
34	Punit Pratap Bhushan	210104041				
35	Sutanshu Pratap Singh	210104060				
36	Rahul	210104042				
37	Akash Verma	210104008	11	Facial Recognition System for Home Security	Dr. Priyanka Pandey	
38	Shyam Mohan Gupta	210104054				
39	Himanshu Varshney	210104025				
40	Vaibhav Pal	210104065				

41	Pranav Prakash Saxena	210104036	12	Automated Essay Scoring System (AI/ML)	Prof. Narendra Kohli	
42	Abhishek singh	210104002				
43	Abhishek Rastogi	210104001				
44	Priyanshi Dhanuka	210104040	13	Face Similarity Detection using Siamese network	Dr. Rashi Agarwal	
45	Narendra Mohan Pathak	210104033				
46	Pratibha Singh	210104039				
47	Sangam verma	210104046	14	Rainfall Prediction using Machine Learning	Prof. Vandana Dixit Kaushik	
48	Shreya verma	210104050				
49	Dipanshu vishwakarma	210104023				
50	Shiwani kumari	210104049				
51	Umang Dahiya	210104063	15	Voice Recognition System Using Neural Networks	Dr. Shashwati Banerjea	
52	Pratham Chaturvedi	210104038				
53	Kushagra Gupta	210104070				
54	Ankush	210106014				
55	Aniruddh Singh	210104012	16	AI Chatbot for E-Commerece Customer Service	Prof.Anita Yadav	
56	Aman Kamal	210104010				
57	Agraj Katiyar	210104005				
58	Shagun Thakyal	210104072				
59	Aditya kasaundhan	210104003	17	Sentiment Analysis using Natural Language Processing	Prof. Raghuraj Singh	
60	Mohit Chaudhary	210104031				
61	Mukund bajpai	210104032				
62	Japneet kaur.	210106030				
63	Saurabh Singh	210104048	18	Credit Card Fraud Detection (ML Domain)	Dr. Bharat Bhusan Sagar	
64	Ankit Kumar	210104016				
65	Ankit Gupta	210104015				
66	Prince Keshari	210104071				
67	Apoorv Singh	210104019	19	Recommendation System for Online Streaming Services	Dr. Rashi Agarwal	
68	Kinjal Singh	210104028				
69	Sindhu Kumari	210104055				
70	Kshama Gaurav	210104030				

71	Uday Raj Singh	210104062	20	Gesture Control User Interface	Prof. Raghuraj Singh	
72	Nikesh Kumar Giri	210104034				
73	Khushi Gar	210104027				
74	Utkarsh Prasad Nirmal	210104064				
75	Utkarsh Agarwal	220004003	21	Automated Crack Detection	Dr. Vivek Singh Verma	
76	Yashvardhan Singh Rathore	210111051				
77	Shashi kaushal Singh	220004002	22	Hand Gesture Recognition System Using Image Processing	Prof. Vandana Dixit Kaushik	
78	Prince Upadhyay	210111035				
79	Pranav Singh	210105046				

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	12	13	38
2023-24(CAYm1)	645	32	13	19	44
2024-25(CAY)	645	32	18	33	66

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	3000000	1156537	2000000	373097	2000000	76312	1500000	272930
Software	2000000	30862	1200000	0	1000000	0	1000000	0
SDGs	0	0	0	0	0	0	0	0
Support for faculty development	300000	57958	300000	82936	300000	0	100000	0
R & D	2000000	95003	500000	61000	400000	0	400000	0
Industrial Training, Industry expert,	100000	0	100000	0	100000	0	50000	0
Miscellaneous Expenses*	1600000	127812	700000	286368	600000	0	450000	0
Total	**9000000**	**1468172**	**4800000**	**803401**	**4400000**	**76312**	**3500000**	**272930**