NATIONAL BOARD OF ACCREDITATION

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

Program Name : Mechanical Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 2
Application No: 11303	**Date of Submission**: 28-11-2025

PART A- Profile of the Institute

A1.Name of the Institute: GOVERNMENT ENGINEERING COLLEGE LAKHISARAI	
Year of Establishment : 2019	Location of the Institute: SHIVSONA HALSI ROAD
A2. Institute Address:GOVERNMENT ENGINEERING COLLEGE LAKHISARAI VILL-SHIVSONA PO - SHIVSONA PS- HALSI DIST - LAKHISARAI	
City:Lakhisarai	State:Bihar
Pin Code:811306	Website:
Email:principalgeclakhisarai@gmail.com	Phone No(with STD Code):-
A3. Name and Address of the Affiliating University (if any):	
Name of the University : BIHAR ENGINEERING UNIVERSITY PATNA	City: Patna
State : Bihar	Pin Code: 800001
A4. Type of the Institution: Non-Autonomous (Affiliated)	
A5. Ownership Status: State Government	

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

- No. of UG programs: **5**
- No. of PG programs: **0**

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	Civil Engineering	2019	--	Civil Engineering
2	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence)	2022	--	Computer Science and Engineering
3	Engineering & Technology	UG	Computer Science and Engineering (Data Science)	2023	--	Computer Science and Engineering
4	Engineering & Technology	UG	Electrical Engineering	2019	--	Electrical Engineering
5	Engineering & Technology	UG	Mechanical Engineering	2019	--	Mechanical 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
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 ARROVAL DET
1	Mechanical Engineering	UG	2019 / --	60	No	NA	60	2019	Northern/1-44638689953/2

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 :	Priyesh Kumar
B. Nature of appointment:	Regular
C. Qualification:	M.Tech

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)	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	43	27	6	5	2	1	3
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	18	0	5	9	13	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	0	0	0	0	0	0	0
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	43	45	6	10	11	14	3

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)	60	43	0	71.67
2024-25 (CAYm1)	60	27	0	45.00
2023-24 (CAYm2)	60	6	0	10.00

Average [(ER1 + ER2 + ER3) / 3] = 42.22≡ 5.00

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).	69.00	73.00	60.00
B=No. of students who graduated from the program in the stipulated course duration	9.00	13.00	3.00
Success Rate (SR)= (B/A) * 100	13.04	17.81	5.00

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 11.95

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)	5.98	5.89	7.14

Y=Total no. of successful students	27.00	4.00	5.00
Z=Total no. of students appeared in the examination	27.00	6.00	5.00
API [X*(Y/Z)]	5.98	3.93	7.14

Average API[(AP1+AP2+AP3)/3] : 5.68

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)	7.53	7.56	7.51
Y=Total no. of successful students	3.00	9.00	11.00
Z=Total no. of students appeared in the examination	4.00	15.00	20.00
API [X * (Y/Z)]	5.65	4.54	4.13

Average API [(AP1 + AP2 + AP3)/3] : 4.77

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)	7.45	7.30	7.86
Y=Total no. of successful students	9.00	10.00	14.00
Z=Total no. of students appeared in the examination	9.00	11.00	14.00
API [X*(Y/Z)]:	7.45	6.64	7.86

Average API [(AP1 + AP2 + AP3)/3] : 7.32

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	69.00	73.00	60.00
X=No. of students placed	3.00	3.00	3.00
Y=No. of students admitted to higher studies	0.00	0.00	0.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	4.35	4.11	5.00

Average Placement Index = (P_1 + P_2 + P_3)/3: 4.49 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)
1	GAPPU KUMAR	XXXXXXX16J	M.Tech	NIFFT RANCHI	MANUFACTURING ENGINEERING	06/05/2023	2.6	Assistant Professor	Assistant Professor		Regular
2	MRITUNJAY KUMAR	XXXXXXX11H	M.Tech	IIT (ISM) DHANBAD	MANUFACTURING ENGINEERING	18/04/2023	2.7	Assistant Professor	Assistant Professor		Regular
3	CHANDAN KUMAR	XXXXXXX31N	M.Tech	IIT DELHI	MECHANICAL DESIGN	25/05/2023	2.6	Assistant Professor	Assistant Professor		Regular
4	Sujit Kumar	XXXXXXX92E	M.Tech	NIT MANIPUR	Thermal and Fluid Engineering	19/04/2023	2.7	Assistant Professor	Assistant Professor		Regular
5	Satyendra Ram	XXXXXXX05R	M.Tech	NIT Agartala	Manufacturing Technology	18/04/2023	2.7	Assistant Professor	Assistant Professor		Regular

6	Krishna Raj	XXXXXXX63J	M.Tech	NIT Surat	Thermal System Design	20/04/2023	2.7	Assistant Professor	Assistant Professor		Regular
7	Priyesh Kumar	XXXXXXX76B	M.Tech	NIT Durgapur	FLUID MECHANICS AND HEAT TRANSFER	21/04/2023	2.7	Assistant Professor	Assistant Professor		Regular
8	Prof. Bimlesh Kumar	XXXXXXX85R	Ph.D	NIT JAMSHEDPUR	MECHANICAL VIBRATION	23/01/2023	2.10	Professor	Professor		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(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	66	60	64
UG1.C	60	64	66
UG1.D	64	66	66
UG1: Mechanical Engineering	**190**	**190**	**196**
DS=Total no. of students in all UG and PG programs in the Department	190	190	196
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=** 190	**S3=** 196
DF=Total no. of faculty members in the Department	8	8	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=** 8	**F2=** 8	**F3=** 8
FF=The faculty members in F who have a 100% teaching load in the first-year courses	0	0	0
Student Faculty Ratio (SFR)=S/(F-FF)	**SFR1= 23.75**	**SFR2= 23.75**	**SFR3= 24.50**
Average SFR for 3 years	**SFR= 24.00**		

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)	1	7	9.00	10.56
2024-25(CAYm1)	1	7	9.00	10.56
2023-24(CAYm2)	1	7	9.00	10.56

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	1.00	1.00	2.00	0.00	6.00	7.00
2024-25	1.00	1.00	2.00	0.00	6.00	7.00
2023-24	1.00	1.00	2.00	0.00	6.00	7.00
Average	RF1=1.00	AF1=1.00	RF2=2.00	AF2=0.00	RF2=6.00	AF2=7.00

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)

(CAYm2)

(CAYm3)

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	1	1	0
2	No. of peer reviewed conference papers published	0	0	0
3	No. of books/book chapters published	1	0	0

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)

(CAYm2)

(CAYm3)

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

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	ENGINEERING MECHANICS LAB	10	VIRTUAL LAB	6	ABHILASH K	LAB ASSISTA	B.TECH
2	FLUID MECHANICS LAB	10	BUOYANCY APPARATUS,FORCE VERTEX, V NOTCH APPRATUS	6	SHALENDRA	LAB ASSISTA	B.TECH
3	STRENGH OF MATERIAL	10	UTM APPARATUS,IZOD-CHARPY APPARATUS, FATIGUE APPARATUS, HARDNESS TEST	6	AMAN KUMA	LAB ASSISTA	B.TECH
4	WORKSHOP	10	Capstan Lathe,Turret Lathe,Norton Lathe ,Precision Lathe, Wood working lathe, Slotting Machine	6	SHALENDRA	LAB ASSISTA	B.TECH
5	DYNAMICS OF MACHINERY	10	VIRTUAL LAB	6	SHALENDRA	LAB ASSISTA	B.TECH
6	HEAT TRANSFER LAB	10	Heat transfer through composite wall with DTI, heat transfer through DTI, Stefin boltzman apparatus	6	MANOJ KUM	LAB ASSISTA	DIPLOMA
7	IC ENGINE LAB	10	Working model of four stroke of diesel engine Working model of four stroke of petrol engine Bomb	6	SHALENDRA	LAB ASSISTA	B.TECH
8	FLUID MACHINERY LAB	10	Working model of Pelton turbine,Francis Turbine, Kaplan Turbine,Notch & Weir Apparatus	6	ABHILASH K	LAB ASSISTA	B.TECH
9	DESIGN OF MACHINE ELIMENT LAB	10	VIRTUAL LAB	6	MANOJ KUM	LAB ASSISTA	DIPLOMA
10	AUTOMATION IN MANUFACTURING LAB	10	VIRTUAL LAB	6	ABHILASH K	LAB ASSISTA	B.TECH
11	ENGINEERING GRAPHICS & DESIGN	10	DRAWING TABLE CHAR,DRAWING BOARD, DRAFTER	6	ALTAMASH H	LAB ASSISTA	B.TECH
12	RAC LAB	10	Refrigeration tutor, air conditioning trainer, recirculating air reconditioning trainer, dissert cooler	6	MANOJ KUM	LAB ASSISTA	DIPLOMA

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Mechanics lab	1.Please keep working area clean and tidy 2.Please follow equipment or machine operating instructions 3.No food or beverage in the laboratory. 4. Do not wear sandals or slippers
2	Workshop	1.Must wear safety shoes for machining or sample preparation 2.Must tie up and cover long hair, if you have 3.Must wear safety goggles or face shield for machining 4.Must be familiar with the location of emergency stop button to turn off all electrical power for emergency 5.Do not wear loose hanging garment 6.Students are required to clear off all tools and materials from machine/work place.
3	Heat and Mass Transfer Lab	1.Please follow equipment or machine operating instructions 2.Keep all the assembly undisturbed. 3.Operate all the switches and controls gently 4.Always ensure that the equipment is earthed properly before switching on the supply. 5.Ensure steady state heat transfer before noting down the readings.

4	Measurement and Metrology	1.Do not touch anything with which you are not completely familiar. 2.Please follow instructions precisely as instructed by your supervisor. 3.If any part of the equipment fails while being used, report it immediately to supervisor. 4.Do not crowd around the equipment's & run inside the laboratory.
5	Theory of Machine	1.Please follow equipment or machine operating instructions 2.Keep all the assembly undisturbed. 3.Please keep working area clean and tidy
6	Manufacturing Science Lab I and II	1.Must wear safety shoes for machining or sample preparation 2.Must wear safety goggles or face shield for machining 3.To avoid injury, the student must take the permission of the laboratory staff before handling any machine. 4.Students must ensure that their work areas are clean and dry to avoid slipping. 5.Students are required to clear off all tools and materials from machine/work place.
7	RAC Lab	1.Please follow equipment or machine operating instructions 2.Keep all the assembly undisturbed. 3.Operate all the switches and controls gently
8	Applied Thermodynamics Lab	1.Please keep working area clean and tidy 2.Please follow equipment or machine operating instructions 3.No food or beverage in the laboratory. 4.Do not wear sandals or slippers

D3. Project Laboratory/Research Laboratory

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
2023-24(CAYm2)	360	18	1	8	13
2024-25(CAYm1)	360	18	2	12	22
2025-26(CAY)	360	18	2	15	26

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	00.00	00.00	00.00	00.00	00.00	00.00	11827789.00	11827789.00
Library	500000.00	500000.00	500000.00	500000.00	00.00	00.00	2000000.00	2000000.00
Laboratory equipment	24500000	24500000	28332160	28332160	54280971	54280971	50300000	50300000
Teaching and non-teaching staff	49075000	33736950	42479000	39498968	42752460	25514392	7359400	5427771
Outreach Programs	50000	50000	50000	50000	50000	50000	50000	50000
R&D	40000	40000	40000	40000	40000	40000	40000	40000
Training, Placement and	20000	20000	20000	20000	20000	20000	20000	20000

SDGs	300000	300000	350000	350000	200000	200000	210000	210000
Entrepreneurship	100000	100000	100000	100000	00	00	00	00
Others, specify	00	00	00	00	00	00	00	00
Total	**74585000.00**	**59246950.00**	**71871160.00**	**68891128.00**	**97343431.00**	**80105363.00**	**71807189.00**	**69875560.00**

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	24500000	24500000	28332160	28332160	54280971	54280971	50300000	50300000
Software	1000000	1000000	2000000	2000000	500000	500000	00	00
SDGs	300000	300000	350000	350000	200000	200000	210000	210000
Support for faculty development	50000	50000	50000	50000	50000	50000	50000	50000
R & D	40000	40000	40000	40000	40000	40000	40000	40000
Industrial Training, Industry expert,	20000	20000	20000	20000	20000	20000	20000	20000
Miscellaneous Expenses*	30000	30000	30000	30000	30000	30000	30000	30000
Total	**25940000**	**25940000**	**30822160**	**30822160**	**55120971**	**55120971**	**50650000**	**50650000**