NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electronics & Instrumentation Engineering	**Discipline**: Engineering & Technology
Level : Under Graduate	**Tier**: 1
Application No: 11109	**Date of Submission**: 30-10-2025

PART A- Profile of the Institute

A1.Name of the Institute: INSTITUTE OF TECHNOLOGY, NIRMA UNIVERSITY	
Year of Establishment : 1995	Location of the Institute: Ahmedabad
A2. Institute Address:INSTITUTE OF TECHNOLOGY,NIRMA UNIVERSITY,S.G. HIGHWAY, VILL. CHHARODI	
City:Ahmedabad	State:Gujarat
Pin Code:382481	Website:www.technology.nirmauni.ac.in
Email:NIT@NIRMAUNI.AC.IN	Phone No(with STD Code):079-71652000
A3. Name and Address of the Affiliating University (if any):	
Name of the University :	City: Ahmedabad
State : Gujarat	Pin Code: 382481
A4. Type of the Institution: University	
A5. Ownership Status: Self financing	

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

- No. of UG programs: **8**
- No. of PG programs: **12**

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	Artificial Intelligence and Machine Learning	2024	--	Computer Science and Engineering
2	Engineering & Technology	UG	Chemical Engineering	1995	--	Chemical Engineering
3	Engineering & Technology	UG	Civil Engineering	1996	--	Civil Engineering
4	Engineering & Technology	PG	Computer Aided Structural Analysis & Design	2002	--	Civil Engineering
5	Engineering & Technology	PG	Computer Science and Engineering	2004	--	Computer Science and Engineering
6	Engineering & Technology	UG	Computer Science and Engineering	1998	--	Computer Science and Engineering

7	Engineering & Technology	PG	Computer Science and Engineering (Data Science)	2019	--	Computer Science and Engineering
8	Engineering & Technology	PG	Construction Technology and Management	2022	--	Civil Engineering
9	Engineering & Technology	PG	Cyber Security	2022	--	Computer Science and Engineering
10	Engineering & Technology	PG	Design Engineering	2022	--	Mechanical Engineering
11	Engineering & Technology	PG	Electric Vehicle Technology	2022	2024	Electrical Engineering
12	Engineering & Technology	UG	Electrical Engineering	1995	--	Electrical Engineering
13	Engineering & Technology	UG	Electronics & Communication Engineering	1995	--	Electronics and Communication Engineering
14	Engineering & Technology	UG	Electronics & Instrumentation Engineering	1995	--	Electronics and Instrumentation Engineering
15	Engineering & Technology	PG	Embedded Systems	2012	--	Electronics and Communication Engineering
16	Engineering & Technology	PG	Masters in Computer Applications	1999	--	Computer Science and Engineering
17	Engineering & Technology	UG	Mechanical Engineering	1995	--	Mechanical Engineering
18	Engineering & Technology	PG	Robotics and Artificial Intelligence	2025	--	Electronics and Instrumentation Engineering
19	Engineering & Technology	PG	Semiconductor Technology	2024	--	Electronics and Communication Engineering
20	Engineering & Technology	PG	VLSI Design	2003	--	Electronics and Communication 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
Electrical Engineering	No	Electrical Engineering	UG
Electronics and Instrumentation Engineering	No	Electronics & Instrumentation Engineering	UG
Civil Engineering	No	Civil 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	Electronics & Instrumentation Engineering	UG	1995 / --	60	No	NA	60	1995	UGC	Granted accreditation for 3 years for the period (specify period)	2024	2026	1	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 :	PATEL HIMANSHU KANTILAL
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)	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	65	70	74	67	61	51	65
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	7	8	3	4	6	9
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	3	3	3	3	2	3	3

Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	68	80	85	73	67	60	77

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	65	3	113.33
2024-25 (CAYm1)	60	70	3	121.67
2023-24 (CAYm2)	60	74	3	128.33

Average [(ER1 + ER2 + ER3) / 3] = 121.11≡ 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).	66.00	66.00	77.00
B=No. of students who graduated from the program in the stipulated course duration	58.00	52.00	76.00
Success Rate (SR)= (B/A) * 100	87.88	78.79	98.70

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 88.46

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)	8.12	7.90	7.54
Y=Total no. of successful students	73.00	77.00	70.00
Z=Total no. of students appeared in the examination	73.00	77.00	70.00
API [X*(Y/Z)]	8.12	7.90	7.54

Average API[(AP1+AP2+AP3)/3] : 7.85

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)	7.60	7.47	7.06
Y=Total no. of successful students	80.00	71.00	63.00

Z=Total no. of students appeared in the examination	85.00	73.00	67.00
API [X * (Y/Z)]	7.15	7.27	6.64

Average API [(AP1 + AP2 + AP3)/3] : 7.02

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)	7.79	7.49	7.24
Y=Total no. of successful students	68.00	62.00	55.00
Z=Total no. of students appeared in the examination	71.00	63.00	57.00
API [X*(Y/Z)]:	7.46	7.37	6.99

Average API [(AP1 + AP2 + AP3)/3] : 7.27

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	64.00	66.00	77.00
X=No. of students placed	48.00	34.00	56.00
Y=No. of students admitted to higher studies	6.00	14.00	8.00
Z= No. of students taking up entrepreneurship	3.00	2.00	1.00
Placement Index(P) = (((X + Y + Z)/FS) * 100):	89.06	75.76	84.42

Average Placement Index = (P_1 + P_2 + P_3)/3: 83.08 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	ADHYARU DIPAK MUKUNDRAY	XXXXXXX54P	Ph.D	INDIAN INSTITUTE OF TECHNOLOGY DELHI	CONTROL SYSTEMS	05/08/1998	27.2	Lecturer	Professor	21/09/2010	Regular	Yes		No
2	PATEL HIMANSHU KANTILAL	XXXXXXX04Q	Ph.D	KADI SARVA VISHWAVIDHYALAYA	BIOMEDICAL INSTRUMENTATION	16/05/2000	25.5	Lecturer	Associate Professor	06/07/2015	Regular	Yes		Yes
3	MEHTA SANDIP ANILBHAI	XXXXXXX62Q	Ph.D	NIRMA UNIVERSITY	CONTROL SYSTEMS	03/02/2003	22.8	Lecturer	Assistant Professor		Regular	Yes		No
4	PATEL NITAL SANJAY	XXXXXXX75A	Ph.D	NIRMA UNIVERSITY	SOFT SENSORS	29/06/2011	14.3	Assistant Professor	Assistant Professor		Regular	Yes		No
5	VAIDYA VISHAL MANOJKUMAR	XXXXXXX77P	M.E.	GUJARAT UNIVERSITY	ROBOTICS AND CONTROL	20/01/2009	16.8	Lecturer	Assistant Professor		Regular	Yes		No
6	SHARMA ANKIT RAVINDRA	XXXXXXX50A	Ph.D	NIRMA UNIVERSITY	IMAGE PROCESSING AND MACHINE LEARNING	30/11/2011	13.10	Assistant Professor	Assistant Professor		Regular	Yes		No
7	KAPADIA HARSH KHODIDAS	XXXXXXX56D	Ph.D	NIRMA UNIVERSITY	MACHINE VISION AND DEEP LEARNING	23/07/2012	13.2	Assistant Professor	Assistant Professor		Regular	Yes		No
8	PATEL ALPESHKUMAR ISHWARBHAI	XXXXXXX07H	Ph.D	NIRMA UNIVERSITY	APPLIED INSTRUMENTATION	21/07/2012	13.2	Assistant Professor	Assistant Professor		Regular	Yes		No
9	SONI SNEH KALPESH	XXXXXXX64E	M.Tech	NIRMA UNIVERSITY	SYSTEM IDENTIFICATION USING FILTERING AND ML TECHNIQUES	20/12/2018	6.9	Assistant Professor	Assistant Professor		Regular	Yes		No
10	PRATEEK JAIN	XXXXXXX98C	Ph.D	MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR	SYSTEM DESIGN FOR HEALTHCARE	10/11/2022	2.11	Assistant Professor	Assistant Professor		Regular	Yes		No
11	ARVINDKUMAR R YADAV	XXXXXXX85C	Ph.D	INDIAN INSTITUTE OF TECHNOLOGY ROORKEE	IMAGE PROCESSING AND MACHINE LEARNING	16/01/2024	1.8	Associate Professor	Associate Professor		Regular	Yes		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 Department1

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

Description	**CAY(2025-26)**	**CAYm1 (2024-25)**	**CAYm2 (2023-24)**
UG1.B	66	66	66
UG1.C	66	66	66
UG1.D	66	66	66
UG1: Electronics & Instrumentation Engineering	**198**	**198**	**198**
PG1.A	18	0	0
PG1.B	0	0	0
PG1: Robotics and Artificial Intelligence	**18**	**0**	**0**
DS=Total no. of students in all UG and PG programs in the Department	216	198	198
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=** 216	**S2=** 198	**S3=** 198
DF=Total no. of faculty members in the Department	11	11	10
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=** 11	**F2=** 11	**F3=** 10
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= 19.64**	**SFR2= 18.00**	**SFR3= 19.80**
Average SFR for 3 years	**SFR= 19.15**		

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)	8	3	10.00	23.00
2024-25(CAYm1)	8	3	9.00	25.56
2023-24(CAYm2)	6	4	9.00	21.11

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	2.00	7.00	8.00
2024-25	1.00	1.00	2.00	2.00	6.00	8.00
2023-24	1.00	1.00	2.00	1.00	6.00	8.00
Average	RF1=1.00	AF1=1.00	RF2=2.00	AF2=1.67	RF2=6.33	AF2=8.00

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	16	14	10
2	No. of peer reviewed conference papers published	16	18	12
3	No. of books/book chapters published	1	2	1

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 PATEL HIMANSHU KANTILAL, DR DHAVAL PATEL	DR KAPADIA HARSH KHODIDAS, DR VIPULKUMAR BHOJAWALA	ELECTRONICS AND INSTRUMENTATION ENGINEERING	Design and development of single axis solar tracking system	Kosol Energie Pvt Ltd	1 Year	15.67
						Amount received (Rs.):15.67

(CAYm2)

(CAYm3)

Total Amount (Lacs) Received for the Past 3 Years: 15.67

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 KAPADIA HARSH KHODIDAS,	DR HIREN M PRAJAPATI, DR DHAVAL B SHAH, PROF ALPESH I PATEL, DR ABSAR LAKDAWALA	ELECTRONICS AND INSTRUMENTATION ENGINEERING	CFD analysis of exhaust fan	Shree Siddhi Vinayak Engineering Company, Ahmedabad	6 months	0.70
						Amount received (Rs.):0.70

(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 ADHYARU DIPAK MUKUNDRAY	DR MANISHA T SHAH	ELECTRONICS AND INSTRUMENTATION ENGINEERING	MMC- Mathematical modelling scope development	Virbhu India Pvt. Ltd., Vadodara	8 months	3.50
						Amount received (Rs.):3.50

(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 ADHYARU DIPAK MUKUNDRAY	DR PATEL HIMANSHU KANTILAL	ELECTRONICS AND INSTRUMENTATION	Three days Training Program for employee of IFFCO, Kalol	IFFCO, Kalol	3 day	0.75
DR PATEL HIMANSHU KANTILAL	DR NIRAJ K SHAH	ELECTRONICS AND INSTRUMENTATION	Development of technical contents for temperature sensor – User's guide	Recos Sensors and Control Private Limited, Ahmedabad	1 year	0.83
						Amount received (Rs.):1.58

Total amount (Lacs) received for the past 3 years: 5.78

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 KAPADIA HARSH KHODIDAS, DR VIPUL BHOJAWALA	Development of a single axis solar tracker control system	1 YEAR	1.00	1.00	A research paper for journal publication will be prepared. Working model will be developed.
DR ATH SINGHAL DR KAPADIA HARSH KHODIDAS	Performance and Feasibility study of savonius rotor as prime mover	1 YEAR	1.00	1.00	A research paper for journal publication will be prepared. Working model will be developed.
DR MEHTA SANDIP ANILBHAI, PROF. VAIDYA VISHAL MANOJKUMAR	Behavioral cloning using deep learning for self-driving robotic vehicle	1 YEAR	1.00	1.00	A research paper for journal publication will be prepared. Working model will be developed.
DR PRATEEK JAIN, DR PATEL NITAL SANJAY	Design and development of prototype for Uric acid measurement for smart healthcare	1 YEAR	1.00	1.00	A research paper for journal publication will be prepared. Working model will be developed.
			Amount received (Rs.): 4.00		

(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
DR PATEL NITAL SANJAY, DR PRATEEK JAIN	Non-invasive haemoglobin measurement device	12 months	1.00	1.00	Patent Publication, working model and publication submitted
			Amount received (Rs.): 1.00		

(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. SONI SNEH KALPESH, DR KAPADIA HARSH KHODIDAS	Coordinated Control of Multi Robots	12 months	1.00	1.00	Working model developed. Journal paper under review.
			Amount received (Rs.): 1.00		

Total amount (Lacs) received for the past 3 years : 6.00

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	Process Control Lab (D108A)	20	Computerized Temperature Control Loop (With SCADA software and PC) Advanced Process	12 hours / wee	Mr. Jignesh Shihora	Sr. Laboratory Assista	Diploma In Instrument
2	Soft computing Laboratory (D109B)	20	Matlab Intel workstation CPU, 8GB DDR2, 1TB HDD,Intel CORE I5-6400, TVSE gold keyboard,	16 hours / wee	Mr. Jignesh Shihora	Sr. Laboratory Assista	Diploma In Instrument
3	Industrial Electronics Laboratory (D109A)	20	Power Electronics multipurpose trainer kits Power scope, source meter Digital Multimeter	16 Hours per w	Mrs. Krupali Shah	Laboratory Superviso	Diploma in Instrument
4	Sensors & Measurement Laboratory (D109D)	20	Pressure measurement trainer kit using bellows Hall Effect Transducer, Temperature calibration	16 Hours /weel	Mrs. Krupali Shah	Laboratory Superviso	Diploma in Instrument

5	Virtual Instrumentation Laboratory (D108C)	20	Computer System(Intel Core i5-12700 CPU, 12th generation, (2.50 GHZ), 8 GB DDR3 RAM, 512 GB HDD, Lenovo 19.5"LED Monitor Matlab	20 hours / wee	Mr. Jignesh Shihora	Sr. Laboratory Assista	Diploma in Instrument
6	Project & Robotics Laboratory (D209)	20	Arbitrary Waveform Generator, Digital Storage Scope, Function Generator, Digital Multi meter Robotic arm 6 DOF DIY kit with USB comp	30 hours/ week	Mrs. Krupali Shah	Laboratory Superviso	Diploma in Instrument
7	Factory Automation Laboratory. (D107)	20	Robot Training setup SCADA software kits IRQ series training kit and IQ platform Software FX PLC, Q PLC and IQ platform Software	16 hours / wee	Mr. Jignesh Shihora	Sr. Laboratory Assista	Diploma in Instrument
8	Industrial Instrumentation Laboratory (D109C)	20	Control valve trainer kit, Pressure to Current Converter, Current to Pressure Converter	08 hours / wee	Mr. Jignesh Shihora	Sr. Laboratory Assista	Diploma in Instrument
9	Machine Vision & Embedded system Laboratory (D108C)	20	Computer System(Intel Core i5-12700 CPU, 12th generation, (2.50 GHZ), 8 GB DDR3 RAM, 512 GB HDD, Lenovo 19.5"LED Monitor MATLAB	16 hours / wee	Mrs. Krupali Shah	Laboratory Superviso	Diploma in Instrument

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Industrial Electronics Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 7.Avoid using cell phones or earbuds in the active work area to maintain situational awareness. Wash hands before leaving the lab and before eating.
2	Soft computing Laboratory	1.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 2.Do not open or monitor the system unit casing, particularly when the power is turned on. 3.Do not forget to turn off the machine once work on it is over. 4.Do not plug in external devices without scanning them for viruses. 5.Ensure that the laboratory is adequately cooled to avoid damage to systems. 6.Always keep your files in proper folders and maintain an extra copy of all your important data files. Avoid using cell phones or earbuds in the active work area to maintain situational awareness.
3	Industrial Instrumentation Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 7.Avoid using cell phones or earbuds in the active work area to maintain situational awareness. Wash hands before leaving the lab and before eating.
4	Sensors & Measurement Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 7.Avoid using cell phones or earbuds in the active work area to maintain situational awareness. Wash hands before leaving the lab and before eating.

5	Process Control Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 7.Wash hands before leaving the lab and before eating. Avoid using cell phones or earbuds in the active work area to maintain situational awareness.
6	Machine Vision & Embedded system Laboratory	1.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 2.Do not open or monitor the system unit casing, particularly when the power is turned on. 3.Do not forget to turn off the machine once work on it is over. 4.Do not plug in external devices without scanning them for viruses. 5.Ensure that the laboratory is adequately cooled to avoid damage to systems. 6.Always keep your files in proper folders and maintain an extra copy of all your important data files. Avoid using cell phones or earbuds in the active work area to maintain situational awareness.
7	Virtual Instrumentation Laboratory	1.Do not open or monitor the system unit casing. 2.Do not insert metal objects such as clips, pins and needles into the computer casings. They may cause fire. 3.Do not remove anything from the computer laboratory without permission. 4.Do not touch, connect or disconnect any plug or cable without your faculty/laboratory assistant's permission. 5.Do not forget to turn off the machine once work on it is over. 6.Avoid touching any circuit boards and power sockets. Avoid using cell phones or earbuds in the active work area to maintain situational awareness.
8	Factory Automation Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Do not leave ongoing experiments unattended. 7.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 8.No eating, drinking, chewing gum, in the laboratory. 9.Avoid using cell phones or earbuds in the active work area to maintain situational awareness. Wash hands before leaving the lab and before eating.
9	Project & Robotics Laboratory	1.Shoes are compulsory in the lab. 2.Do not touch anything with which you are not entirely familiar. Carelessness may break the valuable equipment in the lab and cause serious injury to you and others. 3.Please follow instructions precisely as instructed by your supervisor. 4.Do not start the experiment unless your setup is verified & approved by your supervisor. 5.Do not crowd around the equipment & run inside the laboratory. 6.Report any broken plugs or exposed electrical wires to your faculty/laboratory assistant immediately. 7.Do not leave ongoing experiments unattended. 8.Maintain a clean and organized work area. Wash hands before leaving the lab and before eating.
10	General Safety Measures	Students are given following Instructions. 1.Always visit the safety instruction chart provided in laboratory. 2.Always be conscious while working in the laboratory. The floor shall be kept dry to avoid slippage. 3.One should take care of oneself while moving near machines to prevent accidents. 4.Laboratory equipment is arranged so that sufficient space is available for the movement. 5. It is compulsory to wear shoes in the lab. 6. Loose clothing should be avoided during laboratory sessions. 7. Be aware of electrical lines and connections. 8. Keep sufficient distance from the rotating equipment. 9. Report any damage to machines/equipment which could cause an accident. 10. Please do not leave the experiments unattended while they are in progress. 11. Always follow the specific guidelines for operating equipment. 12. Operate equipment in presence of laboratory assistant / Supervisor. 13.Never eat or drink while working in the laboratory. 14.Know the location and proper use of fire extinguishers. 15.Always work in a responsible and professional manner. No horseplay, pranks, or distracting others. 16.If working outside normal hours, notify your supervisor upon entering and leaving the lab. Do not misbehave or mischief in the laboratory.

D3. Project Laboratory/Research Laboratory

The details of the Project laboratory/research laboratory /centre of excellence are as follows:

Sr. No.	Name of Laboratory
1	Center for Robotics and Automation (CRA) Robotics Laboratory
2	Center of Excellence for Cyber Physical Systems
3	Tinkerers' Lab
4	Authorized Training Center-MEI
5	Project & Robotics Laboratory
6	Data Science 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)	960	48	37	29	74
2024-25(CAYm1)	1020	51	42	29	77
2025-26(CAY)	1020	51	45	29	82

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	23790000	7130691	94141895	21910646	34007425	14509388	161883377	6443377
Library	32135000	19914730	31535000	17803157	29362000	21799291	26262000	19320000

Laboratory equipment	50747000	8934417	51755000	12810805	44683000	18016465	32851000	21682000
Teaching and non-teaching staff salary	937553000	315571583	818553000	711167765	789433000	668591341	708067000	572462000
Outreach Programs	1200000	26400	1305000	1083296	1117000	1063648	883379	695794
R&D	60102000	9242566	46335000	62749165	46434000	63873869	49319000	37780032
Training, Placement and Industry linkage	22523000	420619	20922000	15802569	18931000	15741323	13706000	13997813
SDGs	6380000	1402461	9506263	5130800	7036951	4976179	5841659	6330702
Entrepreneurship	200000	0	1375000	35235	1730000	80718	970000	218812
Others (* Others include : Maintenance and Spares,	886543000	275640641	930509842	651916513	904089624	662821579	731376585	640158934
Total	**2021173000**	**638284108**	**2005938000**	**1500409951**	**1876824000**	**1471473801**	**1731160000**	**1319089464**

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	2140000	45691	3561000	547048	1921000	1550179	1085000	815623
Software	67000	5900	66200	7867	1161800	872867	308850	8309
SDGs	240938	52963	377202	203587	267997	189514	238190	258130
Support for faculty development	734000	41547	413500	181124	323500	145038	274000	126405
R & D	200000	20002	200000	176035	150000	78564	140000	131093
Industrial Training, Industry expert, Internship	150000	4345	125000	41195	65000	40112	75000	72551
Miscellaneous Expenses*	30000	5374	20000	14444	15000	13493	15000	13998
Total	**3561938**	**175822**	**4762902**	**1171300**	**3904297**	**2889767**	**2136040**	**1426109**