

NATIONAL BOARD OF ACCREDITATION

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

Program Name : Electrical and Electronics Engineering	Discipline : Engineering & Technology
Level : Under Graduate	Tier : 1
Application No : 11963	Date of Submission : 18-06-2026

PART A- Profile of the Institute

A1.Name of the Institute : MALNAD COLLEGE OF ENGINEERING	
Year of Establishment : 1960	Location of the Institute: Hassan
A2. Institute Address :P.B.NO.21 SALAGAME ROAD HASSAN	
City:Hassan	State:Karnataka
Pin Code:573201	Website:WWW.MCEHASSAN.AC.IN
Email:OFFICE@MCEHASSAN.AC.IN	Phone No(with STD Code):08172-245317
A3. Name and Address of the Affiliating University (if any) :	
Name of the University : VISVESVARYA TECHNOLOGICAL UNIVERSIT	City: Belgaum
State : Karnataka	Pin Code: 590018
A4. Type of the Institution : Autonomous CAY(2008-09)	
A5. Ownership Status : Government Aided	

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

- No. of UG programs: **13**
- No. of PG programs: **7**

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	Computer Application	PG	Master of Computer Application	2025	--	Computer Application
2	Engineering & Technology	PG	Artificial Intelligence and Data Science	2023	--	Computer Science and Engineering
3	Engineering & Technology	UG	Automobile Engineering	1982	2021	Automobile Engineering
4	Engineering & Technology	UG	Civil Engineering	1960	--	Civil Engineering
5	Engineering & Technology	PG	Computer Aided Design of Structures	1993	--	Civil Engineering
6	Engineering & Technology	PG	Computer Application in Industrial Drives	1994	2022	Electrical and Electronics Engineering
7	Engineering & Technology	UG	Computer Science and Business Systems	2022	--	Computer Science and Engineering
8	Engineering & Technology	UG	Computer Science and Engineering	1983	--	Computer Science and Engineering

9	Engineering & Technology	UG	Computer Science and Engineering (Artificial Intelligence & Machine Learning)	2022	--	Computer Science and Engineering
10	Engineering & Technology	PG	Digital Electronics & Communication Engineering	1986	--	Electronics and Communication Engineering
11	Engineering & Technology	UG	Electrical and Electronics Engineering	1960	--	Electrical and Electronics Engineering
12	Engineering & Technology	UG	Electronics & Communication Engineering	1967	--	Electronics and Communication Engineering
13	Engineering & Technology	UG	Electronics & Instrumentation Engineering	1984	2023	Electronics and Communication Engineering
14	Engineering & Technology	UG	Electronics Engineering (VLSI Design and Technology)	2025	--	Electronics and Communication Engineering
15	Engineering & Technology	UG	Industrial & Production Engineering	1981	2021	Industrial and Production Engineering
16	Engineering & Technology	PG	Industrial Automation & Robotics	2004	2023	Mechanical Engineering
17	Engineering & Technology	UG	Information Science & Engineering	2000	2025	Computer Science and Engineering
18	Engineering & Technology	UG	Mechanical Engineering	1960	--	Mechanical Engineering
19	Engineering & Technology	PG	Power and Energy Systems	2022	--	Electrical and Electronics Engineering
20	Engineering & Technology	UG	Robotics and Artificial Intelligence	2025	--	Robotics and Artificial Intelligence

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 and Electronics Engineering	No	Electrical and Electronics Engineering	UG
Mechanical Engineering	Yes	Mechanical 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	Electrical and Electronics Engineering	UG	1960 / --	50	Yes	2019	120	1960	1-4261877267/2019/EOA	Granted accreditation for 3 years for the period (specify period)	2023	2026	4	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 :	Dr.S.Rajanna
B. Nature of appointment:	Regular
C. Qualification:	Ph.D

B3. Program Details

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

Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)	2021-22 (CAYm4)	2020-21 (CAYm5)	2019-20 (CAYm6)
N=Sanctioned intake of the program (as per AICTE / Competent authority)	120	120	120	120	120	120	120
N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program	106	108	102	97	91	97	126
N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats	0	18	21	23	36	23	14
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	6	6	9	6	5	6	6
Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points.	112	132	132	126	132	126	146

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]
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2025-26 (CAY)	120	106	6	93.33
2024-25 (CAYm1)	120	108	6	95.00
2023-24 (CAYm2)	120	102	9	92.50

Average [(ER1 + ER2 + ER3) / 3] = 93.61≡ 20.00

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).	132.00	132.00	146.00
B=No. of students who graduated from the program in the stipulated course duration	120.00	105.00	130.00
Success Rate (SR)= (B/A) * 100	90.91	79.55	89.04

Average SR of three batches ((SR_1+ SR_2+ SR_3)/3): 86.50

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)
X=(Mean of 1st 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 1st year/10)	6.80	6.79	7.74
Y=Total no. of successful students	119.00	111.00	102.00
Z=Total no. of students appeared in the examination	119.00	111.00	102.00
API [X*(Y/Z)]	6.80	6.78	7.74

Average API[(AP1+AP2+AP3)/3] : 7.11

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

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

Academic Performance	CAYm1 (2024-25)	CAYm2 (2023-24)	CAYm3 (2022-23)
X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10)	6.60	6.67	6.58
Y=Total no. of successful students	123.00	124.00	130.00
Z=Total no. of students appeared in the examination	132.00	125.00	130.00
API [X * (Y/Z)]	6.15	6.62	6.58

Average API [(AP1 + AP2 + AP3)/3] : 6.45

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)	6.75	7.05	6.68

Y=Total no. of successful students	122.00	130.00	122.00
Z=Total no. of students appeared in the examination	124.00	130.00	122.00
API [$X*(Y/Z)$]:	6.64	7.05	6.68

Average API [(AP1 + AP2 + AP3)/3] : 6.79

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	132.00	132.00	146.00
X=No. of students placed	45.00	70.00	79.00
Y=No. of students admitted to higher studies	8.00	7.00	11.00
Z= No. of students taking up entrepreneurship	0.00	0.00	0.00
Placement Index(P) = $((X + Y + Z)/FS) * 100$:	40.15	58.33	61.64

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 53.37 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	Dr.S.Rajanna	XXXXXXXX89A	Ph.D	IIT Roorkee	Renewable energy	11/08/2008	17.10	Assistant Professor	Professor	27/02/2017	Regular	Yes		Yes
2	Mr.L.Kumarswamy	XXXXXXXX41E	M.E.	IISc	High Voltage Engineering	08/10/1990	35.8	Lecturer	Assistant Professor		Regular	Yes		No
3	Mr.N.A.Ranjan	XXXXXXXX33M	M.Sc. (Engineering)	VTU	Energy System Management	20/12/1990	35.4	Lecturer	Assistant Professor		Regular	No	30/04/2026	No
4	Dr. M. Ramesh	XXXXXXXX00P	Ph.D	IIT Roorkee	Renewable energy	16/11/2011	14.7	Lecturer	Associate Professor	30/12/2025	Regular	Yes		No
5	Mr.N.L.Varaprasad	XXXXXXXX94A	M.Tech	VTU	Power Electronics and Drives	07/10/2013	12.8	Assistant Professor	Assistant Professor		Regular	Yes		No
6	Dr.R.K.Dhavalala	XXXXXXXX59E	Ph.D	VTU	Renewable energy	16/09/2014	11.9	Assistant Professor	Associate Professor	03/05/2025	Regular	Yes		No

7	Mrs.V.S.Neethu	XXXXXXX64L	M.Tech	Kuvempu University	Power Systems and Power Electronics	20/08/2015	10.10	Assistant Professor	Assistant Professor		Regular	Yes	No
8	Mr.G.T.Arjun	XXXXXXX40G	M.Tech	VTU	Power Electronics and Drives	14/06/2021	5	Assistant Professor	Assistant Professor		Regular	Yes	No
9	Mrs. S.P. Kruthi	XXXXXXX78E	M.Tech	VTU	Power Electronics and Drives	14/06/2021	5	Assistant Professor	Assistant Professor		Regular	Yes	No
10	Mrs. S. K. Yogitha	XXXXXXX13H	M.Tech	VTU	Power Electronics and Drives	12/07/2021	4.11	Assistant Professor	Assistant Professor		Regular	Yes	No
11	Mrs. Pooja Suman	XXXXXXX11R	M.Tech	VTU	Power Electronics and Drives	12/07/2021	4.11	Assistant Professor	Assistant Professor		Regular	Yes	No
12	Mrs. B. A. Swathy	XXXXXXX74M	M.Tech	Reva university	Advanced Power Electronics	26/08/2021	4.9	Assistant Professor	Assistant Professor		Regular	Yes	No
13	Mrs. H. V. Prathima	XXXXXXX11C	M.Tech	VTU	Power Electronics and Drives	11/08/2022	3.10	Assistant Professor	Assistant Professor		Regular	Yes	No
14	Mrs. G. R. Sowmya	XXXXXXX08A	M.Tech	Sri Siddhartha University	Computer Applications in Industrial Applications	29/08/2022	3.9	Assistant Professor	Assistant Professor		Regular	Yes	No
15	Mr. Kiran Kumar Naik	XXXXXXX68J	M.Tech	Sri Siddhartha University	Computer Applications in Industrial Applications	29/08/2022	3.9	Assistant Professor	Assistant Professor		Regular	Yes	No
16	Mr. H. K. Pramodh	XXXXXXX66J	M.E.	Bangalore university	Power and Energy systems	06/10/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes	No
17	Mr. G. K. Mohan	XXXXXXX02P	M.Tech	VTU	Electronics	14/10/2022	3.8	Assistant Professor	Assistant Professor		Regular	Yes	No
18	Dr. Mohanlakshmi. J.	XXXXXXX60R	Ph.D	VTU	Power Electronics and Drives	22/05/2024	2	Associate Professor	Associate Professor	22/05/2024	Regular	Yes	No
19	Dr. Gowrishankar M.	XXXXXXX29P	Ph.D	Anna University	RES, Bio-signal processing, Medical image processing, AIML Techniques.	27/05/2024	2	Associate Professor	Associate Professor	27/05/2024	Regular	Yes	No

20	Dr. Kaveri K.B	XXXXXXX73C	Ph.D	VTU	Power System	15/07/2024	1.11	Associate Professor	Associate Professor	15/07/2024	Regular	Yes		No
21	Mr. Nagendra Prasad H.K	XXXXXXX09P	M.Tech	VTU	Power system	29/07/2024	1.10	Assistant Professor	Assistant Professor		Regular	Yes		No
22	Dr. N. S. Jyothi	XXXXXXX77P	Ph.D	IISc	High Voltage Engineering	22/11/1988	35.6	Lecturer	Professor	19/09/2015	Regular	No	31/05/2024	No
23	Mr. M.E Tejamoorthy	XXXXXXX38Q	B.E.	Mysore university	Electrical and Electronics Engineering	09/09/1992	33.9	Lecturer	Assistant Professor		Regular	Yes		No
24	Mrs. M .M. Suchithra	XXXXXXX06R	M.Tech	VTU	Power Electronics and Drives	12/12/2022	3.6	Assistant Professor	Assistant 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	132	132	132
UG1.C	132	132	132
UG1.D	132	132	132
UG1: Electrical and Electronics Engineering	396	396	396
PG1.A	6	18	18
PG1.B	18	18	18
PG1: Power and Energy Systems	24	36	36
DS=Total no. of students in all UG and PG programs in the Department	420	432	432

Description	CAY(2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)
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= 420	S2= 432	S3= 432
DF=Total no. of faculty members in the Department	22	22	19
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= 22	F2= 22	F3= 19
FF=The faculty members in F who have a 100% teaching load in the first-year courses	2	2	1
Student Faculty Ratio (SFR)=S/(F-FF)	SFR1= 21.00	SFR2= 21.60	SFR3= 24.00
Average SFR for 3 years	SFR= 22.20		

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 = $2.5 \times [(10X + 4Y) / RF]$
2025-26(CAY)	6	16	20.00	15.50
2024-25(CAYm1)	6	16	21.00	14.76
2023-24(CAYm2)	3	16	21.00	11.19

C4. Faculty Cadre Proportion

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

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

Year	Professors		Associate Professors		Assistant Professors	
	Required RF1	Available AF1	Required RF2	Available AF1	Required RF3	Available AF3
2025-26	2.00	1.00	5.00	4.00	14.00	17.00
2024-25	2.00	1.00	5.00	3.00	14.00	18.00
2023-24	2.00	2.00	5.00	0.00	14.00	17.00
Average	RF1=2.00	AF1=1.33	RF2=5.00	AF2=2.33	RF2=14.00	AF2=17.33

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	Bharath.Y.K.	Assistant Engineer	KPTCL, Hassan	PLC in Industrial Applications	26.00
2	Mr.Sachin C	Application Engineer	Crafronics India Pvt.Ltd.	Routing Hackathon with PCB	24.00

(CAYm2)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Venkatesh H R	Business Development	PRDC Pvt. Development	Communication Protocolsin Power systems	26.00

(CAYm3)

S.No	Name of the Person	Designation	Organization	Name of the Course	No. of hours handled
1	Venkatesh H R	Business Development	PRDC Pvt. Development	Communication Protocolsin Power systems	26.00

C6. Academic Research

Table No. C6.1: Faculty publication details.

S.No.	Item	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
1	No. of peer reviewed journal papers published	4	1	1
2	No. of peer reviewed conference papers published	7	0	1
3	No. of books/book chapters published	0	0	0

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. Mohana Lakshmi J	Nil	Electrical and Electronics Engineering	Cupture	Rajiv Gandhi Entrepreneurship Program (RGEP)	One Year	3.33
Dr. Mohana Lakshmi J	Nil	Electrical and Electronics Engineering	Startup Tumkuru	Rajiv Gandhi Entrepreneurship Program (RGEP)	One Year	3.33
Dr. Mohana Lakshmi J	Nil	Electrical and Electronics Engineering	Smart area nut plucking machine with remote control and sensor based ripe nut detection	New Age Innovation Network 2.0 Department of Electronics, IT, BT, S&T – Government of Karnataka	One year six months	2.00
Dr. Mohana Lakshmi J	Nil	Electrical and Electronics Engineering	Scootlite	New Age Innovation Network 2.0 Department of Electronics, IT, BT, S&T – Government of Karnataka	One year six months	1.00
Kiran Kumar Naik	Nil	Electrical and Electronics Engineering	Multi- functional Borewell Rescue Robot for Enhanced Child Safety	New Age Innovation Network 2.0 Department of Electronics, IT, BT, S&T – Government of Karnataka	One year six months	3.00
						Amount received (Rs.):12.66

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

Total Amount (Lacs) Received for the Past 3 Years: 12.66

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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

(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
0	0	0	0	0	0	0.00
						Amount received (Rs.):0.00

Total amount (Lacs) received for the past 3 years: 0.00**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
0	0	0	0.00	0.00	0
			Amount received (Rs.): 0.00		

(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
0	0	0	0.00	0.00	0
			Amount received (Rs.): 0.00		

(CAYm3)

Faculty name	Project title/ Support for Activity	Duration of the project	Amount(Lacs) i.e. 15,25,000=15.25	Amount Utilized(Lacs) i.e. 15,25,000=15.25	Outcomes of the project
0	0	0	0.00	0.00	0
			Amount received (Rs.): 0.00		

Total amount (Lacs) received for the past 3 years : 0.00

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	Transformers & Induction Machines Lab	20	• Single-phase Transformers of various KVA ratings. • Single- phase and three- phase auto-	8 x 2 hrs.	Mrs. Kavya K. R.	Instructor	B.E. (E&E)
2	Synchronous & Special Electrical Machines Lab	20	• Alternators • Synchronizing arrangement • Measuring instruments and meters of various range	4 x 2 hrs.	Mrs. Kavya K. R.	Instructor	B.E. (E&E)
3	Analog Electronic Circuits Laboratory	20	• Function generator • Digital Storage Oscilloscope • Regulated Power Supplies	8 x 2 hrs.	Mr. Yogesh D. D.	Instructor	B. Sc
4	Digital Electronic Circuits Laboratory	20	• Digital IC Trainer Kits • Digital IC Tester • Regulated Power Supplies	8 x 2 hrs.	Mr. Yogesh D. D.	Instructor	B. Sc
5	Power Electronics Laboratory	20	• Function generator • Digital Storage Oscilloscope • Power scope • Chopper modules • AC controller • IGBT Amplifier	6 x 2 hrs.	Mrs. Sheela H. S.	Mechanic	Diploma (Electrical)
6	Electric Circuits Laboratory	20	• Decade R/ L/ C boxes • Regulated Power Supplies • Loading devices	2 x 2 hrs.	Mrs. Sheela H. S.	Mechanic	Diploma (Electrical)
7	Electrical Measurements Laboratory	20	• Wheatstone bridge • Kelvin's Bridge • Decade R/ L/ C boxes • Fixed Inductor/ Capacitor • Loading devices	2 x 2 hrs.	Mrs. Sheela H. S.	Mechanic	Diploma (Electrical)
8	Microcontrollers Lab	30	• Microcontroller Accessories • Keil Application software • Interfacing units	4 x 2 hrs.	Mr. Pramodh B. S.	Mechanic	Diploma (E & E)
9	Control Systems Laboratory	20	• MATLAB Software package with Control System tool box • Synchro pair unit • PID controller kit • Storage oscilloscope • Transfer	6 x 2 hrs.	Mr. S. B. Venkatesh	Technical Helper	JODC in Electrical

10	Power System Simulation Laboratory	20	Personal computers with necessary software packages- MATLAB, Mi-Power, etc.	4 x 2 hrs.	Mr. S. B. Venkatesh	Technical Helper	JODC in Electrical
11	Relay & High Voltage Laboratory	20	- HV Control unit - Cascaded HV AC/DC generator - Impulse generator - Sphere	6 x 2 hrs.	Mr. Prashanth Kumar	Technical Helper	ITI in Electrical
12	Renewable Energy Laboratory	20	- Solar Cooker - Wind Monitoring System - Hydro Power Simulator - Prototype of a	2 x 2 hrs.	Mr. Pramodh B. S.	Mechanic	Diploma (E & E)

D2. Safety Measures in Laboratories

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

Sr. No	Laboratory Name	Safety Measures
1	Relay and High Voltage Laboratory	5 Mother earthing pits are provided inside the lab. - Entire building of HV laboratory (including floor, walls and control room) is completely mesh earthed. - Lightning rod is provided to the building - HV bay is demarked separately from Relay Bay - Siren (alarm) and pilot lamp is mounted. - Grounding rod is specifically used to clear remnant charges on HV equipment. - MCB with fuse cut-outs are mounted on relay modules. 11kV rated rubber hand gloves are available for working personnel. - Fire extinguisher is provided. - First aid box is made available. - Do's and Don'ts instruction charts for students are displayed.
2	Electrical Machines Laboratory: - Transformers & Induction Machines lab - Synchronous & Special Electrical Machines lab	- Separate control panels are provided for electrical machines with individual fuse cut-outs and Metal clad switches. - Rubber mat is provided near the control panel. - Fire extinguisher is provided. - First aid box is made available. - Shock treatment procedure chart is displayed. - Do's and Don'ts instruction charts for students are displayed.
3	Electrical Measurements & Power Electronics Laboratory	- Rubber mat is provided near the control panel. - Fire extinguisher is provided. - First aid box is made available. - Do's and Don'ts instruction charts are displayed.
4	Computer Lab - Control systems Laboratory - Power System Simulation Laboratory - Microcontrollers Laboratory	- Main MCB is provided. - DP switches with fuse element are installed on each panel board. - Fire extinguisher is provided. - First aid box is made available. - Do's and Don'ts instruction charts for students are displayed.
5	Electronics Laboratory	- Main MCB is provided. - DP switches with fuse element are installed on each panel board. - Fire extinguisher is provided. - First aid box is made available. - Do's and Don'ts instruction charts for students are displayed.

D3. Project Laboratory/Research Laboratory

7.5.1 Project Laboratory/Research Laboratory

To cater the needs of project and research students of the department a separate laboratory is setup with required infrastructure and equipment. The internet facility as well as Wi-Fi is made available in all the laboratories. This facility has been extensively used by the final year students for carrying out the project, both software and hardware. The research students of the department also make use of this facility for carrying out the research. Various licensed version of the software modules are available in this laboratory. It is an open laboratory where all the UG and PG students have ready access to the different equipment as follows.

Table 7.5.1: Hardware Facilities	
SN	Item Name
1.	Oscilloscope
2.	Function Generator
3.	Microcontroller Board
4.	Microcontroller Interfacing units
5.	Power Supply
6.	AC/DC Current Probe
7.	Differential PROBE
8.	Digital Earth Tester
9.	Digital insulation Tester
10.	Digital Storage Oscilloscope
11.	Power Analyzer
12.	Desktop Computers

Table 7.5.2: Software Facilities	
SN	Item Name
1.	MiPower
2.	SCILAB
3.	PSPICE
4.	Windows 10 operating system (Through Central Facility)
5.	K7 Antivirus (Through Central Facility)
6.	Office 365 (Through Central Facility)
7.	Keil

Figure 7.5.1: Project/Research Lab

7.5.1.1 Utilization accountability:

The Department Research Laboratory is extensively utilized by students for carrying out projects as part of their academic curriculum. The laboratory provides access to advanced instruments and technical resources that support design, simulation, implementation, and testing of project work. Under the guidance of faculty members, students use the facility to explore innovative ideas, conduct experiments, analyze results, and validate their solutions. This hands-on research exposure enhances problem-solving skills, promotes independent and collaborative learning, and bridges the gap between theoretical concepts and practical applications.

The following practices are adopted in the department to monitor and ensure effective utilization of the laboratory.

- Log books are maintained to account for the utilization of the facility
- Hardware modules developed are selectively maintained.
- Software based project backups are stored in the form of soft copy.
- Project reports submitted are maintained chronologically.

The major projects completed during the assessment period are summarized in Tables 7.5.3 and 7.5.4. The projects executed during this period are illustrated in Figures 7.5.2 to 7.5.11.

Table 7.5.3: List of Student Projects completed during CAY 2024–25 (2021 Admitted Batch)

SN	Name of Student	USN	Name of the project	Name of the Guide
1	VINAY K. M.	4MC21EE094	Solar Powered Street lighting with Automatic damaged Light alert and Battery deep discharge protection system	Dr. Ramesh M.
	VINAY M. C.	4MC21EE095		
	SHIVA BASAVA KUMAR	4MC21EE066		
	SRINIVASA S. N.	4MC21EE071		
2	ANJALI K. R.	4MC21EE005	Rechargeable Battery powered E-cycle	Dr. Mohana Lakshmi J.
	SUDEEPA P. V.	4MC21EE075		
	PRAJWAL CHOWAN	4MC21EE048		
	DIVYASHREE H. N.	4MC21EE020		
3	MAHANTHESHA N.	4MC21EE038	Solar powered wireless charging station for E bicycle with IoT	Mr. Varaprasad N. L.
	DIVIN PONNANNA M. N.	4MC21EE019		
	SUTHESH D. P.	4MC20EE109		
	SACHIN H. N.	4MC21EE425		
4	CHAITHANYA S. L.	4MC21EE010	Smart AI-Driven Tablet Dispensing Machine	Mr. Nagendra Prasad H. K.
	LATHIK A. P.	4MC21EE034		
	CHANDANA A. U.	4MC21EE012		
	KARTHIK RAJ H.	4MC21EE030		

Figure 7.5.2: Solar Powered Street lighting with Automatic damaged Light alert and Battery deep discharge protection system

Figure 7.5.3: Rechargeable Battery powered E-cycle

Figure 7.5.4: Solar powered wireless charging station for E bicycle with IoT

Figure 7.5.5: Smart AI-Driven Tablet Dispensing Machine

Table 7.5.4: List of Student Projects completed during CAY-M1 2023–24 (2020 Admitted Batch)

SN	Name of Student	USN	Name of the project	Name of the Guide
1	KIRAN KUMAR H. T.	4MC20EE033	IoT Based Solar Powered Street Light control and monitoring	Prof. Kumaraswamy L
	MADHUSUDHAN V. M.	4MC20EE037		
	PUNIT KUMAR H. G.	4MC20EE064		
	ROHITH S. N.	4MC20EE068		
2	LAVANYA U. J.	4MC20EE036	Thermal Scout Rover for Enhancing Search Efforts in Hazardous Environments	Mrs. Pooja Suman
	MANUSHREE M. K.	4MC20EE039		
	MOHAMMED RAIHAAN	4MC20EE042		
	GURUPRASAD B. R.	4MC21EE406		
3	PRIYA A. D.	4MC21EE413	Conversion of IC Engine Based Scrap Scooter into an Electric Vehicle	Mr. Kiran Kumar Naik
	VINUTHA M. R.	4MC21EE420		
	CHAITHRA H. S.	4MC21EE404		
	RUKSHAR FATHIMA	4MC21EE417		

Figure 7.5.6: IoT Based Solar Powered Street Light control and monitoring

Figure 7.5.7: Thermal Scout Rover for Enhancing Search Efforts in Hazardous Environments

Figure 7.5.8: Conversion of IC Engine Based Scrap Scooter into an Electric Vehicle

Table 7.5.5: List of Student Projects completed during CAY-M2 2022-23 (2019 Admitted Batch)

SN	Name of Student	USN	Name of the project	Name of the Guide
1	REVANTH GOWDA H. P.	4MC19EE083	Remotely Located energy meter monitoring with load control and mobile billing system	Dr. Vishwanath Hegde
	SUMANTH A.	4MC19EE108		
	THUSHAR H. L.	4MC19EE116		
	KUNAIN BAIC	4MC19EE128		
2	ROHITHRAMAN S. J.	4MC19EE053	Design and Implementation of LUO Converter FED BLDC Motor Drive	Dr. N. S. Jyothi
	SHASHANK K. M.	4MC19EE129		
	RACHANA D. L.	4MC20EE407		
	PUNITH B. S.	4MC19EE077		
3	CHETHANA C. N.	4MC19EE025	Hybrid Stationary bicycle Design for Power Generation	Dr. Rajanna S
	DARSHAN A. R.	4MC19EE027		
	OSAMA	4MC19EE067		
	HARSHA C. J.	4MC19EE038		

Figure 7.5.9: Remotely Located energy meter monitoring with load control and mobile billing system

Figure 7.5.10: Design and Implementation of LUO Converter FED BLDC Motor Drive

Figure 7.5.11: Hybrid Stationary bicycle Design for Power Generation

Table 7.5.6 highlights student publications in reputed International and National journals and conferences developed through the effective utilization of the Department Research Laboratory facilities. Utilization of the department's research facilities, along with guidance from faculty members, enabled students to carry out experimental work, validate results, and produce quality research papers.

Table 7.5.6: Student Publications in reputed International/National Journals and conferences

Academic year	Publication	Total
CAY (2024-25)	International Journal/ Conference	12
CAY-M1 (2023-24)	International Journal/ Conference	13

7.5.2 Centre of Excellence

Center of excellence in an organization acts as a centre for innovation, best practices, and knowledge exchange in a specific field. Utilising knowledge, standardising procedures, and promoting uniformity within an organisation are ways to increase efficiency and competitiveness. Details of facility listed in table 7.5.7.

Table 7.5.7: List of Centre of Excellence facility

SN	Name of the Facility	Details	Purpose for creating facility	Utilization	Relevance to PO, PSO
1.	Make in MCE Centre	It supports student and faculty-led projects and startup ventures	To enhance learning	Skill development, startup, internship, Projects	PO5, PO12, PSO1
2.	ME-RIISE	It supports student and faculty-led projects and startup ventures	To enhance learning	Skill development, startup, internship, Projects	PO5, PO12, PSO1
3.	AICTE IDEA Lab	A hub for innovation and hands-on learning for UG students to transform ideas to prototypes	To enhance learning	Skill development, startup, internship, Projects	PO5, PO12, PSO1
4.	DST-FIST	It supports student and faculty-led projects and startup ventures	To enhance learning	Skill development, startup, internship, Projects	PO5, PO12, PSO1

7.5.2.1 Make in MCE

- Malnad College of Engineering aims to be recognized as a global hub for technology transfer through intellectual property creation and collaborative initiatives under the **MAKE IN MCE** program.
- The institution promotes active involvement of faculty, students, alumni, industry, and partner organizations to foster innovation, research, and entrepreneurship.
- MCE serves as a consultant and mentor to support start-ups, local skilled workers, and industries by transforming innovative ideas and regional resources into globally competitive products.
- Strong collaborations are established with industries, research institutes, universities, government bodies, and professional organizations to enhance research, consultancy, and technology development.
- The Alumni Association plays a key role in strengthening industry linkages, collaborations, and start-up initiatives.
- The institution integrates education, research, and interdisciplinary activities to ensure student success and global competence.

Table 7.5.8 presents the student projects executed using the MAKE IN MCE Centre facilities. The projects executed during this period are illustrated in Figures 7.5.12 to 7.5.16.

Table 7.5.8: Details of student projects carried out in association with the MAKE IN MCE Centre during CAY 2024–25 (2021 Admitted Batch)

SN	Name of Student	USN	Name of the project	Name of the Guide
1	DEEKSHITH V.	4MC21EE016	Automated boom barrier control with intelligent Image processing for vehicle management	Dr. Gowri Shankar M
	SUDEEP C. K.	4MC21EE074		
	KRUPAL T.	4MC21EE033		
2	CHETHANA K. R.	4MC21EE014	Computational Intelligence Approaches for Automated Detection of Breast Cancer in Ultra Sound Images	Dr. Rajanna S
	ASRA FIRDOSE	4MC21EE007		
	BHARATH C.	4MC21EE009		
	ADITHYA N.	4MC21EE002		
3	LIKHITH H. S.	4MC22EE417	Design of Power Converter for EV Charging Station	Dr. Gowri Shankar M
	CHANDANA D. V.	4MC22EE405		
	LAKSHMI URS K. N.	4MC22EE416		
	S. M. RISHA	4MC21EE062		
4	SIDDESH	4MC22EE429	Design Of Hybrid Inverter for Solar Based Applications	Dr. Gowri Shankar M
	SANJU R.	4MC22EE426		
	ABHIN M. S.	4MC21EE001		
	SUMANTH N. R.	4MC22EE432		
5	SINCHANA A. R.	4MC21EE067	AI Based Skin Cancer Diagnosis Detection	Dr. Kaveri K B
	SHIFA FATHIMA	4MC22EE427		
	SONIKA T. M.	4MC21EE068		
	PRIYA D. P.	4MC22EE421		

Figure 7.5.12: Automated boom barrier control with intelligent Image processing for vehicle management

Figure 7.5.13: Design of Power Converter for EV Charging Station

7.5.2.2 ME-RIISE

Malnad Enclave for Research, Innovation, Incubation, Start-ups and Entrepreneurship (ME-RIISE) was formed by MCE in the year 2018 supported by Management, Teaching staff and Students. Over the years, ME-RIISE has orchestrated more than 100 events and initiatives, spearheaded by Dr. Geetha Kiran A resulting in significant benefits for over 3000 students. Through these endeavours, ME-RIISE has successfully supported in bringing out eight innovative prototypes and created nine new applications.

As a step towards further expanding its reach and enhancing its impact, ME-RIISE has set up a distinct entity, a Section 8 company, ME-RIISE FOUNDATION promoted by Malnad College of Engineering in September 2022. This Section 8 company is composed of 5 Directors and 2 Advisors. ME-RIISE FOUNDATION is committed to promote innovation, incubation, start-ups, and entrepreneurship in the region and expand its reach, enabling students/ youth and aspiring entrepreneurs to realize their potential and contribute towards the growth of the economy. ME-RIISE FOUNDATION is committed to build upon the legacy of innovative activities established by ME-RIISE and further expanding its scope. To realize its vision, the foundation will work in collaboration with Malnad College of Engineering (MCE) to promote innovation, incubation, start-ups, and entrepreneurship. Electrical and Electronics department students participated in various events conducted in ME RIISE. Figure give us the proofs of our student participation in different events.

Figure 7.5.17: ME-RIISE facility entrance

Table 7.5.9: Details of student projects carried out in collaboration with ME-RIISE during CAY 2024-25 (2021 Admitted Batch)

SN	Name of Student	USN	Name of the project	Name of the Guide
1	RASHMI M. H.	4MC21EE059	Multi-functional Borewell Rescue Robot for Enhanced Child Safety	Kiran Kumar Naik
	SOWMYA S. K.	4MC21EE069		
	AYESHA ZAMEER	4MC21EE008		
	M. GOUTHAM	4MC22EE414		
2	KOTESHA N.	4MC21EE032	Automated Harvest Machine for Precision Farming	Dr. Mohana Lakshmi J.
	PUNITHGOWDA B. K.	4MC21EE056		
3	PAVAN KUMAR P. K.	4MC21EE046	AI Model for Early Detection of Oral Cancer	Dr. Mohana Lakshmi J.
	PRAJWAL M. D.	4MC21EE049		

7.5.2.3 AICTE IDEA Lab

Idea Development Evaluation and Application (IDEA) LAB, introduced by AICTE, New Delhi, is a movement in the country to enhance the required skill in youths to make them employable in the engineering domain. Aim is also to expose our next generation to the advanced tools and technology available at the global standard. Malnad College of Engineering is proud to receive this prestigious project, which is one among 49 institutions in the country and one among 5 institutions in Karnataka state. We are happy that the present IDEA LAB has been inaugurated by our Honourable higher education minister of Govt. of Karnataka on 26th April 2022. The total cost of the project is 96.3 lakhs; 50% of the grant is provided by AICTE and another 50% by our college management. This is one of the AICTE Quality Improvement Schemes (AQIS) launched by Govt of India, which would align with the New Education Policy (NEP) to emphasis experience-based learning.

The stakeholders of the IDEA LAB are students and faculty members of all types of colleges and schools, local industry people, farmers, alumni, dropout students/unemployed youth in village/urban area. Such state-of-the-art facility has been established in the college campus area of more than 4000 square feet. The lab will be kept open for 24/7 for all its stakeholders to make their own schedule of training and working. Motto of the MCE-IDEA lab is to train up a person to design and prepare a prototype of a product starting from its scratch. The AICTE IDEA lab facility is shown figure 7.5.22 and figure 7.5.23.

Figure 7.5.22: AICTE IDEA Lab

Figure 7.5.23: AICTE IDEA Lab

7.5.2.4 DST-FIST

The "center for Innovative Teaching, learning and research (ITLR)" established during the year 2021-2022 with financial grants received under the scheme "fund for improvements of S & T Infrastructure in universities and higher Educational Institution program-2019 of the department of science & technology (DST), government of India. The center is intended to provide basic infrastructure and enabling facilities for promoting innovation teaching, learning training and R&D activities in new and emerging areas and attracting fresh talents in college & other educational institutions. it is consider as complimentary support for enabling different departments in colleges to pursue research activities more effectively and effectively. The DST-FIST facility is shown in figures 7.5.24 and 7.5.25.

Figure 7.5.24: DST-FIST facility entrance

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	25	54	64
2024-25(CAYm1)	1020	51	34	48	72
2025-26(CAY)	1140	57	37	64	74

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	200.00	111.63	200.00	143.57	150.00	125.60	0	41.07
Library	30.00	42.54	30.00	37.82	30.00	33.42	28.00	28.47
Laboratory equipment	175.00	17.18	175.00	119.30	165.00	248.52	98.00	169.50
Teaching and non-teaching staff salary	3960.49	3857.84	3598.01	3416.89	3537.96	3202.99	3455.45	3394.70
Outreach Programs	2.00	1.19	3.00	2.67	3.00	1.19	2.00	1.72
R&D	0	0	3.00	5.08	2.00	3.80	1.00	0
Training, Placement and Industry linkage	5.00	8.99	5.00	7.94	5.00	9.25	3.00	15.42
SDGs	50.00	42.75	50.00	75.81	40.00	43.10	25.00	15.02
Entrepreneurship	0	0	5.00	0.86	5.00	0.74	5.00	9.38
Others, specify	900.00	618.36	884.00	685.15	570.00	849.24	593.00	458.11
Total	5322.49	4700.48	4953.01	4495.09	4507.96	4517.85	4210.45	4133.39

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	9.08	0	9.83	0	7.98	1.51	6.82	20.02
Software	12.11	0	13.10	9.03	13.96	20.95	6.54	9.19
SDGs	6.06	5.18	6.55	9.93	5.32	5.73	4.09	2.05
Support for faculty development	3.03	0.86	3.93	0.43	3.99	0.49	4.09	3.55
R & D	1.09	0	1.18	0.67	1.06	0.51	1.09	0
Industrial Training, Industry expert, Internship	6.66	1.09	10.35	1.04	5.32	1.23	4.77	2.10
Miscellaneous Expenses*	115.19	74.90	106.40	89.78	71.39	112.90	75.53	62.45
Total	153.22	82.03	151.34	110.88	109.02	143.32	102.93	99.36