

NATIONAL BOARD OF ACCREDITATION

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

PART-A: Profile of the Institute

Name of the Program Applied for: Mechanical Engineering

A1: Name of the Institute: Thiagarajar College of Engineering

Year of Establishment: 1957

Location of the Institute: Madurai

A2: Institute Address: -

City : Madurai

State : Tamil Nadu

Pin Code : 625015

Website: www.tce.edu

E-mail : principal@tce.edu

Phone No (with STD Code): 0452 - 2482240

A3: Name and Address of the Affiliating University (If any): -

Name of the University: Anna University

City: Chennai

A4. Type of the Institution:

Institute of National Importance

☐

Deemed to be University

☐

University

☐

Autonomous

☒

Non-Autonomous (Affiliated)

☐

Any Other (Please specify*)

☐

Provide Details:

The year of grant of autonomous is 1987. The autonomous status is applicable till the academic year 2031-32.

A5. Ownership Status:

Central Government

☐

State Government

☐

Grant-in-Aid

☒

Self-financing Trust

☐

Any Other (Please specify*)

☐

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

No. of UG programs : 11

No. of PG programs : 11

Table No. A7: Details of all the programs being offered by the Institution.

| S. No | Level of Program | Program Name | Year of start | Year of Close | Name of the department |
|-------|------------------|--|---------------|---------------|---|
| 1. | UG | Civil Engineering | 1957 | -- | Civil Engineering |
| 2. | UG | Mechanical Engineering | 1957 | -- | Mechanical Engineering |
| 3. | UG | Electrical and Electronics Engineering | 1957 | -- | Electrical and Electronics Engineering |
| 4. | UG | Electronics and Communication Engineering | 1978 | -- | Electronics and Communication Engineering |
| 5. | UG | Computer Science and Engineering | 1984 | -- | Computer Science and Engineering |
| 6. | UG | Information Technology | 1999 | -- | Information Technology |
| 7. | UG | Mechatronics | 2014 | -- | Mechatronics |
| 8. | UG | Computer Science and Business System | 2020 | -- | Computer Science and Business System |
| 9. | UG | Architecture | 1995 | -- | Architecture |
| 10. | UG | Interior Design | 2024 | -- | Architecture |
| 11. | UG | Computer Science and Engineering (AI & ML) | 2024 | -- | Computer Science and Engineering |
| 12. | PG | Structural Engineering | 1972 | -- | Civil Engineering |
| 13. | PG | Construction Engineering and Management | 2022 | -- | Civil Engineering |
| 14. | PG | Communication Systems | 1995 | -- | Electronics and Communication Engineering |
| 15. | PG | Computer Science and Engineering | 2001 | -- | Computer Science and Engineering |
| 16. | PG | Master of Computer Applications | 1985 | -- | Computer Applications |
| 17. | PG | Urban Planning | 2024 | -- | Architecture |
| 18. | PG | Power System Engineering | 1972 | 2024 | Electrical and Electronics Engineering |
| 19. | PG | Engineering Design | 2022 | 2023 | Mechanical Engineering |

| S. No | Level of Program | Program Name | Year of start | Year of Close | Name of the department |
|-------|------------------|---|---------------|---------------|------------------------|
| 20. | PG | Industrial Engineering | 1986 | 2022 | Mechanical Engineering |
| 21. | PG | Infrastructure Engineering and Management | 2011 | 2022 | Civil Engineering |
| 22. | PG | Environmental Engineering | 2007 | 2023 | Civil Engineering |

A7. Programs to be considered for Accreditation vide this Application:

Table No. A7.1: List of programs to be considered for accreditation

| S.No | Name of the Department | Name of the Program |
|------|---|--|
| 1 | Civil Engineering | B.E. Civil Engineering |
| 2 | Mechanical Engineering | B.E. Mechanical Engineering |
| 3 | Electrical and Electronics Engineering | B.E. Electrical and Electronics Engineering |
| 4 | Electronics and Communication Engineering | B.E. Electronics and Communication Engineering |

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.

| S.No | Name of the Department | Name of Allied Departments/Cluster |
|------|---|------------------------------------|
| 1 | Mechanical Engineering | Mechatronics |
| 2 | Electronics and Communication Engineering | Mechatronics |

PART-B: Program information

(Data to be filled in for the program applied for Accreditation)

B1: Provide the Required Information for the Program Applied For: -**Table No. B1: Program details**

| S. No | Program Name | Year of start | Sanctioned Intake | Increase/decrease in intake | Year of increase/decrease | AICTE/ Approval details | Accreditation Status* | No. of times program accredited |
|-------|-----------------------------|---------------|-------------------|-----------------------------|---------------------------|---|---|---------------------------------|
| 1. | B.E. Mechanical Engineering | 1957 | 30 | 120 | 2007 | F.No. 730-52-256 (E)/ET/97 Dated 10-07-2007 | Granted Accreditation for 3 Years for the period 2021-22 to 2024-25 | 4 |

* Write applicable one:

- ❖ Applying first time
- ❖ Granted accreditation for 2/3 years for the period (specify period)
- ❖ Granted accreditation for 5/6 years for the period (specify period)
- ❖ Not accredited (specify visit dates, year).
- ❖ Withdrawn (specify visit dates, year)
- ❖ Not eligible for accreditation.

B2: Detail of Head of the Department for the program under consideration:**A. Name of the HoD:** Dr.K. Srithar**B. Nature of appointment: (Tick the applicable choice)**

- ❖ Regular ☒
- ❖ Contract ☐
- ❖ Ad hoc ☐

C. Qualification: (Tick the applicable choice)

- ❖ Ph.D ☒
- ❖ ME/M.Tech. ☐
- ❖ Any other* ☐

*Please provide details:-----

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

| Item (Information is to be provided cumulatively for all the shifts with explicit headings, wherever applicable) | CAY 2024-25 | CAYm1 2023-24 | CAYm2 2022-23 | CAYm3 2021-22 | CAYm4 (LYG) 2020-21 | CAYm5 (LYGm1) 2019-20 | CAYm6 (LYGm2) 2018-19 |
|--|----------------|------------------|------------------|------------------|---------------------------|-----------------------------|-----------------------------|
| 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 | 120 | 118 | 115 | 117 | 109 | 118 | 124 |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | NA | 22 | 24 | 22 | 25 | 18 | 16 |
| N3=Separate Divisions If any | 0 | 0 | 0 | 1 | 2 | 0 | 0 |
| N4=Total no. of students admitted in the 1 st year via all supernumerary quota | 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. | 120 | 140 | 139 | 140 | 136 | 136 | 140 |

B4: Enrolment Ratio in the First Year**Table No. B4.1:** Student enrolment ratio in the 1st year

| Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1 and CAYm2)) | CAY 2024-25 | CAYm1 2023-24 | CAYm2 2022-23 |
|--|----------------|------------------|------------------|
| N= Sanctioned intake of the program in 1st year (as per AICTE/ Competent Authority) | 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 | 120 | 118 | 115 |
| N4=Total no. of students admitted in the 1st year via all super numeracy quotas | 0 | 0 | 0 |
| Enrolment Ratio (ER) = $(N_1 + N_4)/N$ | 100 | 98.33 | 95.83 |
| Average ER = $(ER_1 + ER_2 + ER_3)/3$ | 98.05 | | |

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 | LYG (2023-24) | LYGm1 (2022-23) | LYGm2 (2021-22) |
|---|------------------|--------------------|--------------------|
| 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). | 136 | 136 | 138 |
| B=No. of students who graduated from the program in the stipulated course duration | 120 | 126 | 130 |
| Success Rate (SR) = $(B/A) \times 100$ | 88.24 | 92.65 | 94.20 |
| Average SR of three batches $((SR_1 + SR_2 + SR_3)/3)$ | 91.70 | | |

B6: Academic Performance of the First-Year Students of the Program**Table No.B6.1:** Academic Performance of the First-Year Students of the Program

| Academic Performance | CAYm1 (2023-24) | CAYm2 (2022-23) | CAYm3 (2021-22) |
|---|--------------------|--------------------|--------------------|
| 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 1 st year/10) | 7.53 | 7.41 | 7.68 |
| Y=Total no. of successful students | 114 | 112 | 117 |
| Z=Total no. of students appeared in the examination | 114 | 115 | 117 |
| API=X*(Y/Z) | 7.53 | 7.22 | 7.68 |
| Average API=(AP1+AP2+AP3)/3 | 7.48 | | |

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

| Academic Performance | CAYm1 (2023-24) | CAYm2 (2022-23) | CAYm3 (2021-22) |
|---|--------------------|--------------------|--------------------|
| X= (Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10) | 7.46 | 7.34 | 8.06 |
| Y=Total no. of successful students | 135 | 137 | 130 |
| Z=Total no. of students appeared in the examination | 135 | 137 | 131 |
| API=X*(Y/Z) | 7.46 | 7.34 | 8.00 |
| Average API=(AP1+AP2+AP3)/3 | 7.60 | | |

B8: Academic Performance of the Third Year Students of the Program**Table No.B8.1:** Academic Performance of the Third Year Students of the Program

| Academic Performance | CAYm1 (2023-24) | CAYm2 (2022-23) | CAYm3 (2021-22) |
|---|--------------------|--------------------|--------------------|
| X= (Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of The Percentage of marks of all successful students in 3rd year/10) | 7.44 | 7.99 | 8.51 |
| Y=Total no. of successful students | 134 | 130 | 133 |
| Z=Total no. of students appeared in the examination | 137 | 130 | 133 |
| API=X*(Y/Z) | 7.28 | 7.99 | 8.51 |
| Average API=(AP1+AP2+AP3)/3 | 7.93 | | |

B9: Placement, Higher Studies, and Entrepreneurship**Table No.B9.1:** Placement, higher studies, and entrepreneurship details

| Item | LYG (2023-24) | LYG m1 (2022-23) | LYGm2 (2021-22) |
|--|------------------|---------------------|--------------------|
| FS*=Total no. of final year students | 127 | 133 | 133 |
| X=No. of students placed | 85 | 102 | 99 |
| Y=No. of students admitted to higher studies | 12 | 08 | 11 |
| Z=No. of students taking up entrepreneurship | 0 | 0 | 0 |
| X+Y +Z= | 97 | 110 | 110 |
| Placement Index (P)= (((X+Y+Z)/ FS) *100) | 76 | 83 | 83 |
| Average Placement Index = (P_1 +P_2 +P_3)/3 | 81.00 | | |

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
Faculty details (2024-25)-CAY

| S. No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly based) | Currently Associated (Y/N) | Date of Leaving if any (In case currently Associated is "No") |
|--------|---------------------|----------------|----------------------------|------------------------|-------------------------------------|--|---|---------------------|---|---|---|----------------------------|---|
| 1. | Dr.K.Chockalingam | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 01.12.1994 | 30.1 | Assistant Professor | Professor | 01.12.2010 | Regular | NA | Y | NA |
| 2. | Dr.PL.K.Palaniappan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 02.06.1997 | 27.7 | Assistant Professor | Professor | 06.09.2013 | Regular | NA | Y | NA |
| 3. | Dr.A.Valan Arasu | Ph.D | Anna University | Mechanical Engineering | 30.11.1998 | 26.1 | Assistant Professor | Professor | 04.03.2014 | Regular | NA | Y | NA |
| 4. | Dr.C.Paramasivam | Ph.D | Anna University | Mechanical Engineering | 06.12.1999 | 25.1 | Assistant Professor | Professor | 08.12.2015 | Regular | NA | Y | NA |
| 5. | Dr.K.Srithar | Ph.D | IIT-Madras | Mechanical Engineering | 19.01.2000 | 25 | Assistant Professor | Professor | 05.07.2015 | Regular | NA | Y | NA |
| 6. | Dr.P.Maran | Ph.D | Anna University | Mechanical Engineering | 13.03.2002 | 22.10 | Assistant Professor | Professor | 23.12.2017 | Regular | NA | Y | NA |
| 7. | Dr.S.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 29.11.2002 | 22.1 | Assistant Professor | Professor | 25.12.2017 | Regular | NA | Y | NA |
| 8. | Dr.ML.Mahadevan | Ph.D | Anna University | Mechanical Engineering | 10.09.2004 | 20.4 | Assistant Professor | Associate Professor | 10.09.2016 | Regular | NA | Y | NA |
| 9. | Dr.V.Balasubramani | Ph.D | Anna University | Mechanical Engineering | 07.11.2001 | 23.2 | Assistant Professor | Associate Professor | 01.03.2022 | Regular | NA | Y | NA |
| 10. | Dr.M.Balamurali | Ph.D | Anna University | Mechanical Engineering | 06.07.2006 | 18.6 | Assistant Professor | Associate Professor | 01.09.2023 | Regular | NA | Y | NA |
| 11. | Dr.B.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 01.11.2004 | 20.2 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 12. | Dr.M.S.Govardhanan | Ph.D | Anna University | Mechanical Engineering | 05.03.2012 | 12.10 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

| S. No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly based) | Currently Associated (Y/N) | Date of Leaving if any (In case currently Associated is "No") |
|--------|---------------------|----------------|----------------------------|------------------------|-------------------------------------|--|---|---------------------|---|---|---|----------------------------|---|
| 13. | Dr.R.Sivasankaran | Ph.D | Anna University | Mechanical Engineering | 04.04.2014 | 10.9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 14. | Mr.T.Prakash | M.E | Anna University | Mechanical Engineering | 21.07.2014 | 10.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 15. | Dr.C.Vignesh | Ph.D | Anna University | Mechanical Engineering | 22.01.2015 | 9.11 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 16. | Mr.C.Selva Kumar | M.E | Anna University | Mechanical Engineering | 19.06.2015 | 9.7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 17. | Dr.M.Karthic | Ph.D | Anna University | Mechanical Engineering | 02.01.2017 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 18. | Dr.M.Seramaraj | Ph.D | Anna University | Mechanical Engineering | 27.04.2018 | 6.8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 19. | Dr.S.Umar Sherif | Ph.D | NIT-Trichy | Mechanical Engineering | 10.07.2023 | 1.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 20. | Dr. S.Arunkumar | Ph.D | Anna University | Mechanical Engineering | 27.07.2023 | 1.5 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 21. | Dr. R. Maniarasu | Ph.D | NIT - Rourkela | Mechanical Engineering | 03.01.2024 | 1 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 22. | Dr.R.Kamalakaran | Ph.D. | Anna University | Mechanical Engineering | 03.07.2024 | 0.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 23. | Dr.S. Muralidharan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 15.07.1987 | 37.3 | Assistant Professor | Professor | 01.01.2009 | Regular | NA | N | 31.10.2024 |

Faculty details (2023-24) – CAYm1

| S. No. | Name of the Faculty | 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/Adhoc) | If contractual mention Full time or Part time | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is “No”) |
|--------|---------------------|----------------|----------------------------|------------------------|-------------------------------------|--|---|---------------------|---|---|---|----------------------------|---|
| 1. | Dr.S. Muralidharan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 15.07.1987 | 36 | Assistant Professor | Professor | 01.01.2009 | Regular | NA | Y | NA |
| 2. | Dr.K.Chockalingam | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 01.12.1994 | 29 | Assistant Professor | Professor | 01.12.2010 | Regular | NA | Y | NA |
| 3. | Dr.PL.K.Palaniappan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 02.06.1997 | 27 | Assistant Professor | Professor | 06.09.2013 | Regular | NA | Y | NA |
| 4. | Dr.A.Valan Arasu | Ph.D | Anna University | Mechanical Engineering | 30.11.1998 | 25 | Assistant Professor | Professor | 04.3.2014 | Regular | NA | Y | NA |
| 5. | Dr.C.Paramasivam | Ph.D | Anna University | Mechanical Engineering | 06.12.1999 | 24 | Assistant Professor | Professor | 08.12.2015 | Regular | NA | Y | NA |
| 6. | Dr.K.Srithar | Ph.D | IIT-Madras | Mechanical Engineering | 19.01.2000 | 24 | Assistant Professor | Professor | 05.07.2015 | Regular | NA | Y | NA |
| 7. | Dr.P.Maran | Ph.D | Anna University | Mechanical Engineering | 13.03.2002 | 22 | Assistant Professor | Professor | 23.12.2017 | Regular | NA | Y | NA |
| 8. | Dr.S.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 29.11.2002 | 21 | Assistant Professor | Professor | 25.12.2017 | Regular | NA | Y | NA |
| 9. | Dr.ML.Mahadevan | Ph.D | Anna University | Mechanical Engineering | 10.09.2004 | 19 | Assistant Professor | Associate Professor | 10.09.2016 | Regular | NA | Y | NA |
| 10. | Dr.V.Balasubramani | Ph.D | Anna University | Mechanical Engineering | 07.11.2001 | 22 | Assistant Professor | Associate Professor | 01.03.2022 | Regular | NA | Y | NA |
| 11. | Dr.M.Balamurali | Ph.D | Anna University | Mechanical Engineering | 06.07.2006 | 18 | Assistant Professor | Associate Professor | 01.09.2023 | Regular | NA | Y | NA |
| 12. | Dr.B.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 01.11.2004 | 19 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 13. | Dr.M.S.Govardhanan | Ph.D | Anna University | Mechanical Engineering | 5.03.2012 | 12 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

| S. No. | Name of the Faculty | 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/Adhoc) | If contractual mention Full time or Part time | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is "No") |
|--------|-----------------------|----------------|-----------------|------------------------|-------------------------------------|--|---|---------------------|---|---|---|----------------------------|---|
| 14. | Dr.R.Sivasankaran | Ph.D | Anna University | Mechanical Engineering | 04.04.2014 | 10 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 15. | Mr.T.Prakash | M.E | Anna University | Mechanical Engineering | 21.07.2014 | 10 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 16. | Mr.C.Vignesh | M.E | Anna University | Mechanical Engineering | 22.01.2015 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 17. | Mr.C.Selva Kumar | M.E | Anna University | Mechanical Engineering | 19.06.2015 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 18. | Mr.M.Karthic | M.E | Anna University | Mechanical Engineering | 02.01.2017 | 7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 19. | Dr.M.Sermaraj | Ph.D | Anna University | Mechanical Engineering | 27.04.2018 | 6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 20. | Dr.S.Umar Sherif | Ph.D | NIT - Trichy | Mechanical Engineering | 10.07.2023 | 1 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 21. | Dr. S.Arunkumar | Ph.D | Anna University | Mechanical Engineering | 27.07.2023 | 1 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 22. | Dr.M.Kannan | Ph.D | Anna University | Mechanical Engineering | 15.07.2011 | 12.8 | Assistant Professor | Assistant Professor | NA | Regular | NA | N | 31.03.2024 |
| 23. | Dr.S.Saravanaperumaal | Ph.D | Anna University | Mechanical Engineering | 02.07.2003. | 20 | Assistant Professor | Assistant Professor | NA | Regular | NA | N | 27.06.2023 |

Faculty details (2022-23) – CAYm2

| S. No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is “No”) |
|--------|-----------------------|----------------|----------------------------|------------------------|-------------------------------------|--|---|---------------------|---|--|--|----------------------------|---|
| 1. | Dr.S. Muralidharan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 15.07.1987 | 35 | Assistant Professor | Professor | 01.01.2009 | Regular | NA | Y | NA |
| 2. | Dr.K.Chockalingam | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 01.12.1994 | 28 | Assistant Professor | Professor | 01.12.2010 | Regular | NA | Y | NA |
| 3. | Dr.PL.K.Palaniappan | Ph.D | Madurai Kamaraj University | Mechanical Engineering | 02.06.1997 | 26 | Assistant Professor | Professor | 06.09.2013 | Regular | NA | Y | NA |
| 4. | Dr.A.Valan Arasu | Ph.D | Anna University | Mechanical Engineering | 30.11.1998 | 24 | Assistant Professor | Professor | 04.03.2014 | Regular | NA | Y | NA |
| 5. | Dr.C.Paramasivam | Ph.D | Anna University | Mechanical Engineering | 06.12.1999 | 23 | Assistant Professor | Professor | 08.12.2015 | Regular | NA | Y | NA |
| 6. | Dr.K.Srithar | Ph.D | IIT-Madras | Mechanical Engineering | 19.01.2000 | 23 | Assistant Professor | Professor | 05.07.2015 | Regular | NA | Y | NA |
| 7. | Dr.P.Maran | Ph.D | Anna University | Mechanical Engineering | 13.03.2002 | 21 | Assistant Professor | Professor | 23.12.2017 | Regular | NA | Y | NA |
| 8. | Dr.S.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 29.11.2002 | 20 | Assistant Professor | Professor | 25.12.2017 | Regular | NA | Y | NA |
| 9. | Dr.S.Saravanaperumaal | Ph.D | Anna University | Mechanical Engineering | 02.07.2003. | 20 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 10. | Dr.ML.Mahadevan | Ph.D | Anna University | Mechanical Engineering | 10.09.2004 | 18 | Assistant Professor | Associate Professor | 10.09.2016 | Regular | NA | Y | NA |
| 11. | Dr.V.Balasubramani | Ph.D | Anna University | Mechanical Engineering | 07.11.2001 | 21 | Assistant Professor | Associate Professor | 01.03.2022 | Regular | NA | Y | NA |
| 12. | Dr.B.Karthikeyan | Ph.D | Anna University | Mechanical Engineering | 01.11.2004 | 18 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 13. | Dr.M.Balamurali | Ph.D | Anna University | Mechanical Engineering | 06.07.2006 | 17 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

| S. No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is "No") |
|--------|---------------------|----------------|-----------------|------------------------|-------------------------------------|--|---|---------------------|---|--|--|----------------------------|---|
| 14. | Dr.M.Kannan | Ph.D | Anna Universit | Mechanical Engineering | 15.07.2011 | 12 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 15. | Dr.M.S.Govardhanan | Ph.D | Anna University | Mechanical Engineering | 5.03.2012 | 11 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 16. | Dr.R.Sivasankaran | Ph.D | Anna University | Mechanical Engineering | 04.04.2014 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 17. | Mr.T.Prakash | M.E | Anna University | Mechanical Engineering | 21.07.2014 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 18. | Mr.C.Vignesh | ME | Anna University | Mechanical Engineering | 22.01.2015 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 19. | Mr.C.Selva Kumar | M.E | Anna University | Mechanical Engineering | 19.06.2015 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 20. | Mr.M.Karthic | M.E | Anna University | Mechanical Engineering | 02.01.2017 | 6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 21. | Dr.M.Sermaraj | Ph.D | Anna University | Mechanical Engineering | 27.04.2018 | 5 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 22. | Dr.M.Elango | Ph.D | Anna University | Mechanical Engineering | 28.06.2006 | 16.8 | Assistant Professor | Associate Professor | 01.03.2022 | Regular | NA | N | 15.03.2023 |
| 23. | Dr.A.Samuelraja | Ph.D | Anna University | Mechanical Engineering | 13.09.2007 | 15.5 | Assistant Professor | Assistant Professor | NA | Regular | NA | N | 18.02.2023 |

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY
Faculty details (2024-25) - CAY

| S.No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is |
|-------|------------------------|----------------|-----------------------|---|-------------------------------------|--|---|---------------------|---|--|--|----------------------------|---|
| 1 | Dr.M.Palaninantharaja | Ph.D | IIT Delhi | Mechanical - Quality Materials and Design | 01.08.1997 | 27.5 | Assistant Professor | Professor | 02.09.2011 | Regular | NA | Y | NA |
| 2 | Dr.G.Kumaragurupan | Ph.D | Anna University | Mechanical - Thermal Power | 15.11.2000 | 24.2 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 3 | Dr.G.Kanagaraj | Ph.D | Anna University | Mechanical - Engineering Design | 14.12.2000 | 24.1 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 4 | Dr.S.Julius Fusic | Ph.D | Anna University | Electrical-Power Electronics | 14.07.2014 | 10.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 5 | Mr.S.Parthasarahti | ME | Anna University | Electrical-Embedded System, | 23.12.2014 | 10 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 6 | Dr.H.Ramesh | Ph.D | Anna University | Information and Communication-Applied Electronics | 06.04.2015 | 9.8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 7 | Mr.M.A.Ganesh | M.Tech | VIT, Vellore | Electrical - Mechatronics | 19.06.2015 | 9.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 8 | Mr.S.A.R.Sheik Masthan | ME | Sathyabama University | Electrical- Applied Electronics | 06.06.2016 | 8.7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 9 | Mr.M.M.Devarajan | ME | Anna University | Mechanical – Industrial Engg. | 09.09.2015 | 9.4 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 10 | Mr.S.Rajkumar | ME | Anna University | Mechanical- Industrial Engg. | 05.07.2017 | 7.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 11 | Dr.M.Rajalakshmi | Ph.D | Anna University | Electrical-Control and Instrumentation | 07.07.2023 | 1.6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

Faculty details (2023-24) – CAYm1

| S.No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is |
|-------|------------------------|----------------|-----------------------|---|-------------------------------------|--|---|---------------------|---|--|--|----------------------------|---|
| 1 | Dr.M.Palaninantharaja | Ph.D | IIT Delhi | Mechanical - Quality Materials and Design | 01.08.1997 | 26 | Assistant Professor | Professor | 02.09.2011 | Regular | NA | Y | NA |
| 2 | Dr.G.Kumaragurupan | Ph.D | Anna University | Mechanical - Thermal Power | 15.11.2000 | 23 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 3 | Dr.G.Kanagaraj | Ph.D | Anna University | Mechanical - Engineering Design | 14.12.2000 | 23 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 4 | Dr.S.Julius Fusic | Ph.D | Anna University | Electrical-Power Electronics | 14.07.2014 | 10 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 5 | Mr.S.Parthasarahti | ME | Anna University | Electrical-Embedded System, | 23.12.2014 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 6 | Dr.H.Ramesh | Ph.D | Anna University | Information and Communication-Applied Electronics | 06.04.2015 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 7 | Mr.M.A.Ganesh | M.Tech | VIT, Vellore | Electrical - Mechatronics | 19.06.2015 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 8 | Mr.S.A.R.Sheik Masthan | ME | Sathyabama University | Electrical- Applied Electronics | 06.06.2016 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 9 | Mr.M.M.Devarajan | ME | Anna University | Mechanical – Industrial Engg. | 09.09.2015 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 10 | Mr.S.Rajkumar | ME | Anna University | Mechanical- Industrial Engg. | 05.07.2017 | 6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 11 | Dr.M.Rajalakshmi | Ph.D | Anna University | Electrical-Control and Instrumentation | 07.07.2023 | 1 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

Faculty details (2022-23) – CAYm2

| S. No. | Name of the Faculty | 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/ Adhoc) | If contractual mention Full time or (Part time or hourly | Currently Associated (Y/N) | Date of Leaving if any (In case Currently Associated is |
|--------|------------------------|----------------|-----------------------|---|-------------------------------------|--|---|---------------------|---|--|--|----------------------------|---|
| 1 | Dr.M.Palaninantharaja | Ph.D | IIT Delhi | Mechanical - Quality Materials and Design | 01.08.1997 | 25 | Assistant Professor | Professor | 02.09.2011 | Regular | NA | Y | NA |
| 2 | Dr.G.Kumaragurupan | Ph.D | Anna University | Mechanical - Thermal Power | 15.11.2000 | 22 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 3 | Dr.G.Kanagaraj | Ph.D | Anna University | Mechanical - Engineering Design | 14.12.2000 | 22 | Assistant Professor | Professor | 01.03.2022 | Regular | NA | Y | NA |
| 4 | Dr.S.Julius Fusic | Ph.D | Anna University | Electrical-Power Electronics | 14.07.2014 | 9 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 5 | Mr.S.Parthasarahti | ME | Anna University | Electrical-Embedded System | 23.12.2014 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 6 | Dr.H.Ramesh | Ph.D | Anna University | Information and Communication-Applied Electronics | 06.04.2015 | 7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 7 | Mr.M.A.Ganesh | M.Tech | VIT, Vellore | Electrical – Mechatronics | 19.06.2015 | 8 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 8 | Mr.S.A.R.Sheik Masthan | ME | Sathyabama University | Electrical- Applied Electronics | 06.06.2016 | 7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 9 | Mr.M.M.Devarajan | ME | Anna University | Mechanical – Industrial Engg. | 09.09.2015 | 7 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |
| 10 | Mr.S.Rajkumar | ME | Anna University | Mechanical-Industrial Engg. | 05.07.2017 | 6 | Assistant Professor | Assistant Professor | NA | Regular | NA | Y | NA |

C2: Student-Faculty Ratio (SFR)**Table No.C2.1: Student-faculty ratio**

| Year | CAY (2024-25) | CAYm1 (2023-24) | CAYm2 (2022-23) |
|---|----------------------|------------------------|------------------------|
| UG1. B II Year | 132 | 132 | 132 |
| UG1. C III Year | 132 | 132 | 132 |
| UG1. D IV Year | 132 | 132 | 132 |
| UG1 B (UG – Engineering –Mechanical) | 396 | 396 | 396 |
| PG ₁ . A | - | - | 18 |
| PG ₁ . B | - | 18 | 18 |
| PG ₁ (PG-Engineering- Mechanical Engineering) | 0 | 18 | 36 |
| DS=Total no. of students in all UG and PG programs in the Department | 396 | 414 | 432 |
| UG2. B | 66 | 66 | 66 |
| UG2. C | 66 | 66 | 66 |
| UG2. D | 66 | 66 | 66 |
| UG2 (UG –Engineering–Mechatronics) | 198 | 198 | 198 |
| PG1. A I Year | - | - | - |
| PG1. B II Year | - | - | - |
| PG _m | - | - | - |
| AS=Total no. of students of all UG and PG programs in allied Departments | 198 | 198 | 198 |
| S=Total no. of students in the Department (DS) and allied departments (AS) | S1=594 | S2=612 | S3=630 |
| DF=Total no. of faculty members in the Department | 22 | 21 | 21 |
| AF= Total no. of faculty members in the allied Departments | 11 | 11 | 10 |
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF) | 33 | 32 | 31 |

| | | | | | |
|---|----------------|-----------------------------|--|-----------------------|-----------------------|
| 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= 594/33 18 | SFR2=612/32 19.125 | SFR3=630/31 20.323 |
| Average SFR for 3 years | | | Average SFR=(SFR1+SFR2+SFR3)/3 =19.15 | | |

C3: Faculty Qualification

Table No.C3.1: Faculty qualification

| Year | X | Y | RF | FQI= 2.5 * [(10X +4Y)/RF] |
|---------------------------|-------------|-----------|---------------|---------------------------------|
| CAY (2024-25) | 20 + 6 = 26 | 2 + 5 = 7 | 594/20 = 30.0 | = 2.5 [(10*26 +4*7)/30] = 24.00 |
| CAYm1 (2023-24) | 17 +6 = 23 | 4 + 5 = 9 | 612/20 = 30.6 | = 2.5 [(10*23 +4*9)/31] = 21.45 |
| CAYm2 (2022-23) | 17 + 5 = 22 | 4 + 5 = 9 | 630/20 = 31.5 | = 2.5 [(10*22 +4*9)/32] = 20.00 |
| Average Assessment | | | | 21.81 |

C4: Faculty Cadre Proportion

Table No.C4.1: Faculty cadre proportion details

| Year | Professors | | Associate Professors | | Assistant Professors | |
|------------------------|-----------------------|------------------------|-----------------------|------------------------|-----------------------|------------------------|
| | Required Faculty(RF1) | Available Faculty(AF1) | Required Faculty(RF2) | Available Faculty(AF2) | Required Faculty(RF3) | Available Faculty(AF3) |
| CAY (2024-25) | 4 | 7+3=10 | 7 | 3+0=3 | 19 | 12+8=20 |
| CAYm1 (2023-24) | 4 | 8+3=11 | 7 | 3+0=3 | 20 | 10+8=18 |
| CAYm2 (2022-23) | 4 | 8+3=11 | 8 | 2+0=2 | 20 | 11+7=18 |
| Average Numbers | RF1=4 | AF1=10.67 | RF2=7.34 | AF2=2.67 | RF3=19.67 | AF3=18.67 |

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

| S.N. | Name of the Person | Designation & Organization | Name of the Course | No. of hours handled |
|------------------------|--------------------|---|--|----------------------|
| CAYm1 (2023-24) | | | | |
| 1 | Dr. N. Nagarajan | Post Doctoral Fellow, University of Toronto, Canada. | 18MEPZ0 - Energy Conversion System 18ES790 Capstone Design Project | 36 24 |
| Total number of hours: | | | | 60 |
| CAYm2 (2022-23) | | | | |
| 1 | Dr. N. Nagarajan | Post-Doctoral Fellow, University of Toronto, Canada. | 22ME240 Engineering Thermodynamics – II SEM A 22ME240 Engineering Thermodynamics – II SEM B | 36 36 |
| Total number of hours: | | | | 72 |
| CAYm3 (2021-22) | | | | |
| 1 | Mr.A.Mani | Proprietor M/S Karun Tolling Enterprises. Bengaluru | 18MEPD0- Design for sheet metal manufacturing 18ME2F0- Design of Jigs and Fixtures | 36 28 |
| Total number of hours: | | | | 64 |

C6: Academic Research**Table No. C6.1:** Faculty publication details

| S.No. | Item | CAYm1 2023-24 | CAYm2 2022-23 | CAYm3 2021-22 |
|-------|--|------------------|------------------|------------------|
| 1 | No. of peer reviewed journal papers published | 22 | 17 | 12 |
| 2 | No. of peer reviewed conference papers published | 01 | 01 | - |
| 3 | No. of books/book chapters published | - | 01 | 04 |

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

| S.No. | 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 (Lakhs) |
|---|---|--------------------|--|---|--|---------------------------------------|-----------------|
| 2023-24 | | | | | | | |
| 1 | Dr. A. Valan Arasu Dr.S.Umar Sherif | --- | Mechanical | Zetasizer | DST-FIST | 2019 - 2024 | Rs.26,00,000/- |
| Amount received (Rs.) | | | | | | | 13,00,000/- |
| 2022-23 | | | | | | | |
| NIL | NIL | NIL | NIL | NIL | NIL | NIL | NIL |
| Amount received (Rs.) | | | | | | | NIL |
| 2021-22 | | | | | | | |
| 1 | Dr. K. Chockalingam Dr. B. Karthikeyan | --- | Mechanical | Modernization of Internal Combustion Engines Laboratory | <u>AICTE</u> Grant-in-Aid under the Scheme Modernization and Removal of Obsolescence (MODROB) | 2 years (14.01.2020 to 14.01.2022) | Rs. 11,00,000/- |
| Amount received (Rs.) | | | | | | | 11,00,000/- |
| Total Amount (Lakhs) Received for the Past 3 Years | | | | | | | 24,00,000/- |

C8: Consultancy Work**Table No. C8.1:** List of consultancy projects received from external agencies

| S.No. | 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 (Rs) |
|------------------------------|--------------------------------|--------------------|--|--------------------------------|--|-------------------------|-------------|
| 2023-24 | | | | | | | |
| 1 | Dr. V. Balasubramani | --- | Mechanical | Design model | Aruna Industrial Products (p) Ltd., Madurai | 23.9.2023 | 21,240 |
| 2 | Dr.M.Balamurali | Mr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 13.06.2024 | 1,27,440 |
| 3 | Dr.M.Balamurali | Mr. C.Vignesh | Mechanical | Thermal Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 13.06.2024 | 4,80,373 |
| 4 | Dr.M.Balamurali | Mr. C.Vignesh | Mechanical | Thermal Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 12.01.2024 | 1,27,440 |
| Amount received (Rs.) | | | | | | | 7,56,493/- |
| 2022-23 | | | | | | | |
| 1 | Dr.M.Balamurali | Dr. C.Vignesh | Mechanical | Thermal Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 30.03.2023 | 80,931 |
| 2 | Dr.M.Balamurali | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 30.11.2022 | 1,55,760 |
| 3 | Dr.M.Balamurali, Mr.M.Karthic, | Dr. C.Vignesh | Mechanical | Thermal Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 21.11.2022 | 7,85,092 |

| S.No. | 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 (Rs) |
|------------------------------|----------------------|--------------------|--|--|--|-------------------------|-------------|
| 4 | Dr. V. Balasubramani | --- | Mechanical | Static Sturctural Analysis of the Wedge System | Sree Engineering, Madurai | 2.11.2022 | 17,700 |
| 5 | Dr.M.Balamurali | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 29.9.2022 | 1,34,520 |
| 6 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 6.9.2022 | 1,41,600 |
| 7 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 27.7.2022 | 1,41,600 |
| Amount received (Rs.) | | | | | | | 14,57,203 |
| 2021-22 | | | | | | | |
| 1 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 24.6.2022 | 1,13,280 |
| 2 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Thermal Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 31.03.2022 | 8,65,893 |
| 3 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, | 29.03.2022 | 99,120 |
| 4 | Dr.M.Balamurali, | Dr.C.Vignesh | Mechanical | Spacer guide pins - CNC Manufacturing | M/s Kagan Industries, Coimbatore | 31.01.2022 | 10,186 |

| | | | | | | | |
|---|----------------------|--------------|------------|--|--|------------|-----------|
| 5 | Mr. T. Prakash | --- | Mechanical | CNC Wirecut EDM Machining of Hydraulic Punch | Sun Pressing Pvt. Ltd., Madurai | 17.12.2021 | 31,227 |
| 6 | Dr.M.Balamurali, | Dr.M.Karthic | Mechanical | Vibration Analysis on Antennas | Thiagarajar Telekom Solutions Private Ltd, Madurai | 3.12.2021 | 1,20,360 |
| 7 | Dr.M.Balamurali | Dr.M.Karthic | Mechanical | Flag Post (car accessory) - CNC Manufacturing | M/s Karthik Engineering, Madurai | 3.12.2021 | 4,154 |
| 8 | Dr.M.Balamurali | Dr.C.Vignesh | Mechanical | SS Radome Manufacturing CNC | M/s Kagan Industries, Coimbatore | 24.11.2021 | 25,771 |
| 9 | Dr. V. Balasubramani | --- | Mechanical | Design and Development of 3D model of the fixture to accommodate the piston in UTM, and estalish the experimental setup to test the piston | SI Air Springs Pvt. Ltd., Madurai | 18.11.2021 | 42,500 |
| 10 | Dr. V. Balasubramani | --- | Mechanical | Design & Development of 3D model of the fixture, fabrication and estalish the experimental setup to test the piston | SI Air Springs Pvt. Ltd., Madurai | 18.11.2021 | 21,520 |
| Amount received (Rs.) | | | | | | | 13,34,011 |
| Total amount (Rs.) received for the past 3 years | | | | | | | 35,47,707 |

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

| S.No. | Faculty name | Project title/ Support for Activity | Duration | Amount (Lakhs) | Amount Utilized (Lakhs) | Outcomes of the project |
|---|--|---|-----------|-------------------|----------------------------|--|
| 2023-24 | | | | | | |
| 1 | Dr. M.S. Govardhanan Dr. C. Vignesh | Advanced all Terrain Vehicle - Model Design and fabrication | 12 months | 8 | 6.61 | Fabricated the vehicle and participated in the contest |
| Amount received (Rs.) 6.61 lakhs | | | | | | |
| 2022-23 | | | | | | |
| 1 | Dr. M.S. Govardhanan Dr. C. Vignesh | Advanced all Terrain Vehicle - Model Design and fabrication | 12 months | 7 | 6.80 | Fabricated the vehicle and participated in the contest |
| Amount received (Rs.) 6.80 lakhs | | | | | | |
| 2021-22 | | | | | | |
| 1 | Dr. M.S. Govardhanan Mr. C. Vignesh | Designing all terrain vehicle model and its fabrication and fabrication | 12 months | 4 | 3.61 | Fabricated the vehicle and participated in the contest |
| Amount received (Rs.) 3,61,000/- | | | | | | |
| Total amount (Rs.) received for the past 3 years | | | | | 17,02,000/- | |

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

| Sl. No | Name of the Laboratory | Number of students per setup (batch Size) | Name of the Important Equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Man Power support | | |
|--------|---------------------------------|---|--|---|-----------------------------|----------------|----------------|
| | | | | | Name of the Technical staff | Designation | Qualifications |
| 1. | Production System Support Lab | 1 | ANSYS Academic Teaching Introductory Version 14.5-32000 nodes- 50 users PKG- 4081p-FN University Plus lab pack (excluding EDU_COM) 50 seat perpetual package -50 users HP Compaq 6000 Pro Intel core 2Duo CPU-23 HP Compaq 8300 core i5 Processor-02 HP 280G2 Intel core TM-i5 - 6500 CPU-13 HP 280 GB/ i5 -11500 -01 HP 28084 /i5 -8500-01 GP ELITED ESE 800G2 SFF CORW i5-03 | 28 | Mr.K.Devaraj | Lab Technician | DME |
| 2 | Internal Combustion Engines Lab | 4 | Ruston Vertical Engine , Twin cylinder UniInsta Engine,Computerized Kirloskar Engine ,Lister Engine, Campbell engine and model engine, Two stage compressor, Redwood Viscometer, Bomb calorimeter | 8 | Mr.M.Veeraputhiran | Lab Assistant | DME |

| Sl. No | Name of the Laboratory | Number of students per setup (batch Size) | Name of the Important Equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Man Power support | | |
|--------|------------------------|---|---|---|-----------------------------|---------------------|----------------|
| | | | | | Name of the Technical staff | Designation | Qualifications |
| 3 | CFD Lab | 1 | ANSYS, Academic Teaching Introductory Version 14.5-32000 nodes- 50 users perpetual HP Compaq 6000 Pro Intel core 2Duo CPU-09 HP 280G2 Intel core TM-i5 - 6500 CPU-07 HP 280 GB/ i5 -11500 -06 HP 28084 /i5 -8500-01 GP ELITED ESE 800G2 SFF CORW i5-03 | 20 | Mr.A.Ravi Murugan | Lab Assistant | DME |
| | | | | | Mr.K.Saravanakumar | Lab Technecian | DME |
| 4 | Heat Transfer Lab | 4 | Specific heat capacity of air apparatus, Conduction heat transfer and Metal bar Apparatus, Pin-fin apparatus, Natural Convection apparatus, Forced convection apparatus, Stefan-Boltzman Apparatus, Emissivity test rig, Parallel and counter flow heat exchange, Heat pump test rig ,Lagged pipe apparatus ,Transient heat, transfer apparatus | 8 | Mr.N.Raj kumar | Artisian Grade - II | ITI (DME) |

| Sl. No | Name of the Laboratory | Number of students per setup (batch Size) | Name of the Important Equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Man Power support | | |
|--------|------------------------|---|---|---|---|---|---------------------------------------|
| | | | | | Name of the Technical staff | Designation | Qualifications |
| 5 | Machine Shop | 3 | Horizontal Milling Machine, Vertical Milling Machine, Surface grinding Machine, Universal grinding Machine , Bench grinding Machining, Pedestal Drilling Machine, Radial Drilling Machine, Upright Drilling Machine ,Centre Lathe-15, Capstan Lathe, CNC Lathe, Gear Hobbing Machine, Shaping Machine, Slotting Machine, Tapping Machine, Planar Machine, Lapping Machine | 8 | Mr.V.Saravanakumar Mr.R.Nagakrishnan Mr.N.Ambili Mr.K.Sundararajan Mr.M.Sasikumar | Foreman Instructor Artisian Grade - II Lab Technician Lab Technician Lab Technician | B.E, M.E, ITI ITI DME DME |
| 6 | CAM Lab | 3 | Master CAM software Ver - 2024, Denford FANUC V 1.42 Package, TRIAC offline Software (Denford) HP make Core i5-6400 T -15 HP make 11 th Gen.Core i5 Core i5-11500-5 | 8 | Mr.R.Ashwinkumar | Lab Technician | DME(BE) |
| 7 | Metrology lab | 4 | Tool Makers Microscope, Profile Projector , Mitutoyo Surface roughness tester , Autocollimator – Holmarc, Pneumatic Compomator – BAKER. Electronic | 8 | Mr.K.Sundararajan | Lab Technician | DME |

| Sl. No | Name of the Laboratory | Number of students per setup (batch Size) | Name of the Important Equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Man Power support | | |
|--------|--|---|---|---|-----------------------------|--------------------|----------------|
| | | | | | Name of the Technical staff | Designation | Qualifications |
| 8 | Foundry Shop | 2 | Forging tools, Moulding boxes, Injection Moulding Machine | 4 | Mr.A.Srinivasan | Lab Instructor | DME |
| 9 | Smithy Shop | 2 | Open Hearth Furnace | 4 | Mr.A.Srinivasan | Lab Instructor | DME |
| 10 | Instrumentation and Dynamics lab | 4 | Universal Vibration Apparatus, Gyroscope, Governor, Balancing of Rotating mass, Balancing of Reciprocating mass, Cam& follower apparatus, Whirling of Shaft, Linear Variable Differential Transformer, Strain gauge trainer kit, Torque meter trainer kit | 16 | Mr.S.Sankar | Lab Technician | ITI |
| 11 | Composite Materials and Metallurgy Lab | 4 | Muffle Furnace , Brinell Hardness Tester , Metallurgical Microscope, Fatigue testing machine, Sieve shaker, Moulding sand strength testing machine. | 8 | Mr. A. Ramkumar | Lab Assistant | ITI |
| 12 | Fitting Shop | 1 | Flat File 12" 10", Triangle File 6", Safe Edge File 8", Marking Tools, Bench Vice | 8 | Mr.SK.Mohandoss | Artisan Grade - II | ITI |

| Sl. No | Name of the Laboratory | Number of students per setup (batch Size) | Name of the Important Equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Man Power support | | |
|--------|--|---|--|---|-----------------------------|---------------------|----------------|
| | | | | | Name of the Technical staff | Designation | Qualifications |
| 13 | Sheet Metal shop | 1 | Rivet shaping rod, Bench Vice, Snips | 8 | Mr.PM.OSA.Prawin | Mechanic | BE |
| 14 | Carpentry shop | 1 | Jack Plane, Try Square, 1" chisel, 3/4" chisel, 1/2 " chisel ,Bench Vice, Marking gauge | 8 | Mr.G.Udayathevan | Instructor | ITI |
| 15 | Welding Shop | 4 | Welding Simulator -1, MIG welding Machine 210 s model - 24.5 volt, Spot welding Machine, TIG Welding Machine, Oxy acetylene Gas welding, Arc welding machine | 8 | Mr.T.Manivannan | Lab Technecian | ITI |
| 16 | Steam Power Lab | 4 | Non-IBR Boiler with steam turbine Condenser , Throttling calorimeter | 8 | Mr.R.Thinagaran | Mechanic Grade - II | BE |
| 17 | Refrigeration and Air conditioning lab | 4 | Vapour Compression refrigeration test rig, Air Conditioning unit | 8 | Mr.N.Rajkumar | Lab Assistant | DME |

D2: Safety Measures in Laboratories**Table No. D2.1:** List of various safety measures in laboratories

| S. No. | Name of the Laboratory | Safety measures (Available) |
|--------|--|---|
| 1 | Production System Support Lab | Fire Extinguisher is installed First Aid Box is available Safety Instructions are given |
| 2 | CFD lab | Safety Instructions are displayed in Notice board Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed Structured Cabling to all the systems with Network Switches. |
| 3 | Machine Shop | Fire Extinguisher is installed First Aid Box is available Safety slogans are displayed in shop floor. Machine guards are available for all machines 5S housekeeping is implemented Provided sufficient number of fans for Air circulation Safety marking is used in electrical switchboxes Provided very good ventilation by windows and exhaust fans Sufficient electrical lighting /natural light arrangement made. |
| 4 | Internal Combustion Engines Lab | Fire Extinguisher is installed First Aid Box is available Safety Instructions are given Safety Instructions are displayed in Notice board Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed |
| 5 | Heat Transfer Lab | |
| 6 | Composite Materials and Metallurgy Lab | |
| 7 | Industrial Engineering lab | |
| 8 | Steam Power Lab | |
| 9 | Instrumentation and Dynamics Lab | |
| 10 | CAM Lab | Fire Extinguisher is installed First Aid Box is available Safety Instructions are given Safety Instructions are displayed in Notice board Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed Structured Cabling to all the systems with Network Switches. |
| 11 | Fitting Shop | Safety slogans are displayed in shop floor. |
| 12 | Sheet metal Shop | Fire Extinguisher is installed First Aid Box is available |
| 13 | Carpentry Shop | Safety Instructions are given |

| S. No. | Name of the Laboratory | Safety measures (Available) |
|--------|--|---|
| | | Safety Instructions are displayed in Notice board Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed |
| 14 | Welding Shop | Safety slogans are displayed in shop floor Fire Extinguisher is installed First Aid Box is available Safety Instructions are given Safety Instructions are displayed in Notice board Goggles and welding shield are used during welding Students are instructed to wear shoes Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed |
| 15 | Foundry & Smithy Shop | Safety slogans are displayed in shop floor Fire Extinguisher is installed First Aid Box is available Safety Instructions are given Safety Instructions are displayed in Notice board Students are instructed to wear shoes Miniature Circuit Breaker is available Earth Leakage Circuit Breaker is installed |
| 16 | Metrology Lab | Fire Extinguisher is installed First Aid Box is available Safety Instructions are given Safety Instructions are displayed in Notice board Earth Leakage Circuit Breaker is installed Miniature Circuit Breaker is available |
| 17 | Refrigeration and Air conditioning lab | |

D3: Project Laboratory/Research Laboratory

Table No. D3.1: List of project laboratory/research laboratory /Centre of Excellence

| S.No. | Name of the Laboratory |
|-------|---|
| 1. | Project Laboratory (110 sq.m) |
| 2. | Nanotechnology Lab (33 sq.m) |
| 3. | TS Srinivasan Center for research (1430 sq.m) |

Part E: First Year Faculty and Financial Resources**E1: First Year Student-Faculty Ratio (FYSFR)****Table No. E1.1 FYSFR Details**

| Year | Sanctioned intake of allUG 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= $((NS1*0.8)+(NS2*0.2))/RF4$ |
|---------------------------|--|--------------------------------------|---|---|---|
| 2024-25 | 1089 | 54 | 52 | 54 | $((52 * 0.8) + (54 * 0.2)) / 54$ = 97.03 |
| 2023-24 | 1029 | 51 | 46 | 51 | $((46 * 0.8) + (51 * 0.2)) / 51$ = 92.15 |
| 2022-23 | 885 | 44 | 35 | 39 | $((35 * 0.8) + (39 * 0.2)) / 44$ = 81.36 |
| Average Percentage | | | | | 90.18 |

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 2024-25 | Actual Expenses in 2024-25 (Till Feb 25) | Budgeted in 2023-24 | Actual Expenses in 2023-24 | Budgeted in 2022-23 | Actual Expenses in 2022-23 | Budgeted in 2021-22 | Actual Expenses in 2021-22 |
|--|------------------------|---|------------------------|----------------------------------|------------------------|----------------------------------|------------------------|----------------------------------|
| Infrastructure Built-up | 37500000 | 34087015 | 20000000 | 19961745 | 11440000 | 23641439 | 6720000 | 1811376 |
| Library | 4512000 | 4749428 | 2170000 | 3728829 | 1700000 | 2808000 | 1882000 | 2431000 |
| Laboratory Equipment | 12900000 | 30290176 | 9550000 | 34428169 | 34000000 | 45247125 | 29100000 | 22275277 |
| Teaching and Non- Teaching staff Salary | 500000000 | 454846927 | 480000000 | 453029717 | 420000000 | 398383720 | 450000000 | 449856429 |
| Outreach Programme | 8500000 | 7288143 | 7500000 | 6634433 | 5000000 | 4826847 | 2500000 | 2297232 |
| R&D | 50000000 | 45340242 | 55000000 | 54769766 | 23500000 | 16812466 | 17500000 | 16767576 |
| Training Placement and Industry linkage | 4000000 | 3440664 | 10000000 | 9865322 | 4500000 | 4358414 | 3000000 | 2935137 |
| SDGs | 22500000 | 20356702 | 18000000 | 18800686 | 13500000 | 14119133 | 12000000 | 11762580 |
| Entrepreneurship | 1500000 | 1026882 | 2500000 | 2510922 | 2200000 | 1302856 | 500000 | 303146 |
| Others | 45000000 | 43725577 | 35000000 | 37344337 | 45000000 | 48437295 | 20000000 | 18136928 |
| Total Amount | 686412000 | 645151756 | 639720000 | 641073926 | 560840000 | 559937295 | 543202000 | 528576681 |

E3: Budget Allocation, Utilization, and Public Accounting at Program Specific Level**Table No.E3.1:** Budget and Actual Expenditure incurred at Programme Level

| ITEM | Budgeted in CFY | Actual expenses in CFY (till Feb 2025) | Budgeted in 2023-24 | Actual expenses in 2023-24 | Budgeted in 2022-23 | Actual expenses in 2022- 23 | Budgeted in 2021- 22 | Actual expenses in 2021-22 |
|---|--------------------|---|------------------------|----------------------------------|------------------------|--------------------------------------|----------------------------|----------------------------------|
| Laboratory Equipment | 500000 | 781190 | 500000 | 599138 | 1000000 | 837365 | 1000000 | 771450 |
| Software | 2000000 | 1035514 | 2000000 | 1970588 | 1500000 | 1499760 | 1500000 | 506888 |
| SDGs | 2000000 | 2125467 | 2000000 | 2082687 | 2500000 | 1642352 | 1500000 | 1404975 |
| Support for faculty development | 500000 | 124707 | 500000 | 428717 | 500000 | 452154 | 200000 | 197354 |
| R&D | 500000 | 495893 | 500000 | 460669 | 500000 | 353329 | 300000 | 291916 |
| Industrial training, Industry Expert, Internship | 2000000 | 1120207 | 2000000 | 1827796 | 1000000 | 1068439 | 1000000 | 624977 |
| Miscellaneous Expenses | 4500000 | 4565439 | 4500000 | 4136900 | 5000000 | 5634275 | 2000000 | 2166355 |
| TOTAL AMOUNT | 12000000 | 10248417 | 12000000 | 11506495 | 12000000 | 11487674 | 7500000 | 5963915 |