**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: B.E – Aeronautical Engineering**

**A1: Name of the Institute:** **KIT-KalaignarKarunanidhi Institute of Technology**

Year of Establishment: 2008 Location of the Institute: Kannampalayam, Coimbatore

**A2: Institute Address: -**

City: Coimbatore State: Tamil Nadu

Pin Code: 641402 Website: www.kitcbe.com

E-mail: kitcbe@gmail.com Phone No (with STD Code): 0422-2367890

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

Name of the University : Anna University City : Chennai

State :Tamil Nadu Pin Code: 600 025

**A4: Type of the Institution: - (Tick the applicable choice)**

| | | | |
|---|---|---|---|
| Institute of National Importance | ☐ | Deemed University | ☐ |
| University | ☐ | Autonomous | ☑ |
| Non-Autonomous (Affiliated) | ☐ | Any other (Please specify) * | ☐ |

***Provide Details:** _____

**A5: Ownership Status: - (Tick the applicable choice)**

| | | | |
|---|---|---|---|
| Central Government | ☐ | State Government | ☐ |
| Government Aided | ☐ | Self-financing | ☑ |
| Any Other (Please specify) * | ☐ | ***Provide Details:** | _____ |

**A6: Details of all Programs being Offered by the Institution: -**

- No. of UG programs: 13
- No. of PG programs: 07

**Table No. A6.1:** List of all programs offered by the Institute.

| S.N. | Level of program (UG/PG) | Name of the program | Year of Start | Year of close* | Name of the Department |
|---|---|---|---|---|---|
| 1 | UG | B.E -Aeronautical Engineering | 2010 | - | - |
| 2 | UG | B.Tech - Agricultural Engineering | 2017 | - | - |

| | | | | | |
|---|---|---|---|---|---|
| 3 | UG | B.E - Biomedical Engineering | 2017 | - | - |
| 4 | UG | B.Tech.- Biotechnology | 2017 | - | - |
| 5 | UG | B.E - Computer Science and Engineering (NBA Accredited) | 2008 | - | - |
| 6 | UG | B.E - Electronics and Communication Engineering (NBA Accredited) | 2008 | - | - |
| 7 | UG | B.E- Electrical and Electronics Engineering (NBA Accredited) | 2008 | - | - |
| 8 | UG | B.E- Mechanical Engineering (NBA Accredited) | 2009 | - | - |
| 9 | UG | B.Tech-Artificial Intelligence and Data Science | 2021 | - | - |
| 10 | UG | B.Tech- Computer Systems and Business Systems | 2021 | - | - |
| 11 | UG | B.E Computer Science and Engineering (AI & ML) | 2023 | - | - |
| 12 | UG | B.E - Electronics and Engineering(VLSI Design & Technology) | 2024 | - | - |
| 13 | PG | M.E - Computer Science and Engineering | 2012 | - | - |
| | PG | M.E - VLSI Design | 2012 | - | - |
| 14 | PG | M.E- Power System Engineering | 2013 | - | - |
| 15 | PG | M.E - Applied Electronics | 2013 | - | - |
| 16 | PG | M.E- Engineering Design | 2014 | - | - |
| 17 | PG | MBA - Master of Business Administration | 2009 | - | - |
| 18 | PG | MCA - Master of Computer Application | 2011 | - | - |
| 19 | PG | M.E - Computer Science and Engineering | 2012 | - | - |

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

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

| Cluster ID. | Name of the Department | Name of the Program |
|---|---|---|
| **1.** | Aeronautical Engineering | B.E. (Aeronautical Engineering) |
| **2.** | Mechanical Engineering | B.E. (Mechanical Engineering) |
| **3.** | Management Studies | M.B.A (Master of Business Administration) |

**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) |
|---|---|---|
| **1.** | Aeronautical Engineering | NA |
| **2.** | Mechanical Engineering | NA |
| **3.** | Management Studies | NA |

## 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. N. | Program Name | Year of start | Sanctioned Intake | Increase/ decrease in intake, if any | Year of increase/ decrease | AICTE Approval Details | Accreditation Status* | No. of times program accredited |
|---|---|---|---|---|---|---|---|---|
| 1. | B.E Aeronautical Engineering | 2008 | 60 | - | - | F.No.Southern/1-43663177719/2024/EOA Dated: 22/05/2024 | Granted provisional accreditation for 2/3 years for the period(2022-23 To 2024-25) | 1 |

* 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. A. R. Saravanan**

**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) | 2024 - 2025 | 2023 - 2024 | 2022 - 2023 | 2021 - 2022 | 2020 - 2021 | 2019 - 2020 | 2018 - 2019 |
|---|---|---|---|---|---|---|---|
| N= Sanctioned intake of the program (as per AICTE /Competent authority) | 60 | 60 | 60 | 60 | 60 | 60 | 60 |
| N1= Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program | 62 | 64 | 56 | 51 | 52 | 58 | 36 |
| N2= Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | 0 | 2 | 2 | 8 | 12 | 3 | 0 |
| N3= Separate division if any | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N4= Total no. of students admitted in the 1st year via all supernumerary quotas | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 62 | 66 | 58 | 59 | 64 | 61 | 36 |

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.

| Item (Students enrolled in the First Year on average over 3 academic years (CAY, CAYm1, and CAYm2)) | 2024-2025 | 2023-2024 | 2022-2023 |
|---|---|---|---|
| N= Sanctioned intake of the program in the 1st year (as per AICTE/Competent authority) | 60 | 60 | 60 |
| N1= Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program | 62 | 64 | 56 |
| N4= Total no. of students admitted in the 1st year via all supernumerary quotas | 0 | 0 | 0 |
| Enrolment Ratio (ER)= (N1+N4)/N | 1.033 | 1.066 | 0.933 |
| **Average ER=** (ER_1+ ER_2+ ER_3)/3 | 1.010 | | |

## 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 | 2024 | 2023 | 2022 |
|---|---|---|---|
| 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). | 64 | 61 | 36 |
| B=No. of students who graduated from the program in the stipulated course duration | 44 | 49 | 33 |
| Success Rate (SR)= (B/A)*100 | 68.75 | 80.32 | 91.66 |
| Average SR of three batches ((SR_1+SR_2+ SR_3)/3) | 80.247 | | |

**Note** *: If the value of A in Table No. B5.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of A in Table No.B5.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

## 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 | 2023-2024 | 2022-2023 | 2021-2022 |
|---|---|---|---|
| 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) | 7.788 | 8.204 | 8.104 |
| Y= Total no. of successful students | 41 | 29 | 25 |
| Z = Total no. of students appeared in the examination | 64 | 53 | 48 |
| API = X* (Y/Z) | 4.989 | 4.488 | 4.22 |
| Average API = ( API_1 + API_2 + API_3)/3 | 4.565 | | |

## 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 | 2023-2024 | 2022-2023 | 2021-2022 |
|---|---|---|---|
| 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) | 8.29 | 8.029 | 8.737 |
| Y= Total no. of successful students | 26 | 37 | 38 |
| Z =Total no. of students appeared in the examination | 48 | 56 | 53 |
| API = X* (Y/Z) | 4.490 | 5.304 | 6.264 |
| Average API = ( API_1 + API_2 + API_3)/3 | 5.352 | | |

**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 | 2023-2024 | 2022-2023 | 2021-2022 |
|---|---|---|---|
| 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) | 8.12 | 8.409 | 8.265 |
| Y= Total no. of successful students | 33 | 45 | 46 |
| Z= Total no. of students appeared in the examination | 54 | 53 | 59 |
| API = X* (Y/Z) | 4.96 | 7.139 | 6.443 |
| Average API = ( API_1 + API_2 + API_3)/3 | 6.180 | | |

**B9: Placement, Higher Studies, and Entrepreneurship**

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

| Item | 2023-2024 | 2022-2023 | 2021-2022 |
|---|---|---|---|
| FS*=Total no. of final year students | 52 | 58 | 33 |
| X= No. of students placed | 39 | 46 | 23 |
| Y= No. of students admitted to higher studies | 1 | 3 | 2 |
| Z= No. of students taking up entrepreneurship | 1 | 0 | 0 |
| X + Y + Z = | 41 | 49 | 25 |
| Placement Index (P) = (((X + Y + Z)/FS) * 100) | 78.8 | 84.48 | 75.75 |
| Average placement index = (P_1 + P_2 + P_3)/3 | 79.676 | | |

**Note** ***:** If the value of FS in Table No. B9.1 is less than the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2), then the value of FS in Table No. B9.1 should be the sum of the sanctioned intake (N) and the lateral entry including leftover seats (N2) of Table No.B3.1.

**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 (2024-2025)

| S.N. | 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/ Ad hoc) | 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.S.Ravichandran | Ph.D | Anna University | Manufacturing Engineering | 13.06.2012 | 12.9 | Assistant Professor | Professor | 10.12.2018 | Regular | - | Y | - |
| 2 | Dr.A.R.Saravanan | Ph.D | Anna University | Propulsion | 02.01.2017 | 8 | Assistant Professor | Associate Professor | 25.02.2019 | Regular | - | Y | - |
| 3 | Dr. M.Bharathi | Ph.D | Anna University | Composite Materials | 18.07.2022 | 2.8 | Associate Professor | Associate Professor | 18.07.2022 | Regular | - | Y | - |
| 4 | Dr.B.Deeban | Ph.D | Anna University | Composite Materials | 01.07.2016 | 9 | Assistant Professor | Assistant Professor | | Regular | - | Y | - |
| 5 | Dr.M.Vimal Raja | Ph.D | Anna University | Material Science | 21.06.2013 | 11.9 | Assistant Professor | Assistant Professor | | Regular | - | Y | - |
| 6 | Mr G.A.Sivasankar | M.Tech | Hindustan University | Aircraft Maintenance Engineering | 21.06.2013 | 11.9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 7 | Ms. T. Vinitha | M.E. | Anna University | Aeronautical | 26.06.2013 | 11.9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 8 | Mr.D.Santhosh Kumar | M.Tech | Hindustan University | Aeronautical | 01.07.2016 | 9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 9 | Mr. S.L. Pradeep kumar | M.E | Anna University | CAD/CAM | 01.07.2016 | 9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 10 | Mr.M.Sasi kumar | M.E. | Anna University | Aeronautical | 18.01.2021 | 4.2 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 11 | Dr.K.Anusindhiya | Ph.D | Anna University | High Speed Aerodynamics | 01.07.2024 | 0.9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 12 | Mr.M.Vinoth | M.E. | Anna University | CAD/CAM | 01.07.2024 | 0.9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 13 | Mr.S.Sherbin sam | M.Tech. | Karunya University | Aerospace | 01.07.2024 | 0.9 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |

**ACY (2023-2024)**

| S.N. | 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/ Ad hoc) | 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.S.Ravichandran | Ph.D | Anna University | Manufacturing Engineering | 13.06.2012 | 12 | Assistant Professor | Professor | 10.12.2018 | Regular | - | Y | - |
| 2 | Dr.A.R.Saravanan | Ph.D | Anna University | Propulsion | 02.01.2017 | 7 | Assistant Professor | Associate Professor | 25.02.2019 | Regular | - | Y | - |
| 3 | Dr. M.Bharathi | Ph.D | Anna University | Composite Materials | 18.07.2022 | 1.11 | Associate Professor | Associate Professor | 18.07.2022 | Regular | - | Y | - |
| 4 | Mr.B.Deeban | M.E. | Anna University | Aeronautical | 01.07.2016 | 8 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 5 | Mr.M.Vimal Raja | M.E | Anna University | Mechanical | 21.06.2013 | 11 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 6 | Mr.G.A.Sivasankar | M.Tech | Hindustan University | Aircraft Maintenance Engineering | 21.06.2013 | 11 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 7 | Ms. T. Vinitha | M.E. | Anna University | Aeronautical | 26.06.2013 | 11 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 8 | Mr.D.Santhosh Kumar | M.Tech | Hindustan University | Aeronautical | 01.07.2016 | 8 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 9 | Mr.S.L.Pradeep kumar | M.E | Anna University | CAD/CAM | 01.07.2016 | 8 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 10 | Ms. K.Niranjana | M.E. | Anna University | Aeronautical | 28.06.2019 | 5 | Assistant Professor | Assistant Professor | - | Regular | - | N | 29.06.24 |
| 11 | Mr. M.Sasikumar | M.E. | Anna University | Aerodynamics | 18.01.2021 | 3.3 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 12 | Ms.W.Brightlin Abisha | M.E | Anna University | Avionics | 28.06.2019 | 4.3 | Assistant Professor | Assistant Professor | - | Regular | - | N | 30.09.23 |

**ACY (2022-2023)**

| S.N. | 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/ Ad hoc) | 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.S.Ravichandran | Ph.D | Anna University | Manufacturing Engineering | 13.06.2012 | 11 | Assistant Professor | Professor | 10.12.2018 | Regular | - | Y | - |
| 2 | Dr.A.R.Saravanan | M.E. | Anna University | Aeronautical | 02.01.2017 | 6.5 | Assistant Professor | Associate Professor | 25.02.2019 | Regular | - | Y | - |
| 3 | Dr. M.Bharathi | Ph.D | Anna University | Composite Materials | 18.07.2022 | 0.11 | Associate Professor | Associate Professor | 18.07.2022 | Regular | - | Y | - |
| 4 | Mr.B.Deeban | M.E. | Anna University | Aeronautical | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 5 | Mr.M.Vimal Raja | M.E | Anna University | Mechanical | 21.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 6 | Mr.G.A.Sivasankar | M.Tech | Hindustan University | Aircraft Maintenance Engineering | 21.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 7 | Ms. T. Vinitha | M.E. | Anna University | Aeronautical | 26.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 8 | Mr.D.Santhosh Kumar | M.Tech | Hindustan University | Aeronautical | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 9 | Mr.S.L.Pradeep kumar | M.E | Anna University | CAD/CAM | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 10 | Ms.W.Brightlin Abisha | M.E | Anna University | Avionics | 28.06.2019 | 4 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 11 | Ms.K.Niranjana | M.E. | Anna University | Aeronautical | 28.06.2019 | 4 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 12 | Mr.M.Sasikumar | M.E. | Anna University | Aeronautical | 18.01.2021 | 2.5 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |

**ACY (2021-2022)**

| S.N. | 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/ Ad hoc) | 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.S.Ravichandran | Ph.D | Anna University | Manufacturing Engineering | 13.06.2012 | 11 | Assistant Professor | Professor | 10.12.2018 | Regular | - | Y | - |
| 2 | Mr.A.R.Saravanan | M.E. | Anna University | Aeronautical | 02.01.2017 | 6.5 | Assistant Professor | Associate Professor | 01.03.2019 | Regular | - | Y | - |
| 3 | Mr.B.Deeban | M.E. | Anna University | Aeronautical | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 4 | Mr.M.Vimal Raja | M.E | Anna University | Mechanical | 21.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 5 | Mr.G.A.Sivasankar | M.Tech | Hindustan University | Aircraft Maintenance Engineering | 21.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 6 | Ms. T. Vinitha | M.E. | Anna University | Aeronautical | 26.06.2013 | 10 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 7 | Mr.D.Santhosh Kumar | M.Tech | Hindustan University | Aeronautical | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 8 | Mr.S.L.Pradeep kumar | M.E | Anna University | CAD/CAM | 01.07.2016 | 7 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 9 | Ms.W.Brightlin Abisha | M.E | Anna University | Avionics | 28.06.2019 | 4 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 10 | Ms.K.Niranjana | M.E. | Anna University | Aeronautical | 28.06.2019 | 4 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |
| 11 | Mr.M.Sasikumar | M.E. | Anna University | Aeronautical | 18.01.2021 | 2.5 | Assistant Professor | Assistant Professor | - | Regular | - | Y | - |

**2: Student-Faculty Ratio (SFR)**

- ❖ No. of UG(Engineering) programs in Department including allied departments/ clusters ($UG_n$):
  - ➢ $UG_1$=1st UG program
  - ➢ $UG_n$=$n^{th}$ 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 ($PG_m$):
  - ➢ PG1=1st PG program.
  - ➢ $PG_m$=$m^{th}$ 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)).

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

| Year | CAY (2024-2025) | CAYm1 (2023-2024) | CAYm2 (2022-2023) |
|---|---|---|---|
| UG 2nd Year | 60+2=62 | 60+2=62 | 60+6=66 |
| UG 3rd Year | 60+2=62 | 60+6=66 | 60+6=66 |
| UG 4th Year | 60+6=66 | 60+6=66 | 60+3=63 |
| **S=Total no. of students in the Department (DS) and allied departments (AS)** | 190 | 194 | 195 |
| DF=Total no. of faculty members in t | 13 | 11 | 12 |
| AF= Total no. of faculty members in the allied Departments | - | - | - |
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF) | 13 | 11 | 12 |
| FF=The faculty members in F who have a 100% teaching load in the first-year courses | FF1 | FF2 | FF3 |
| **Student Faculty Ratio (SFR)=S/(F-FF)** | **14.615** | **17.636** | **16.25** |
| Average SFR for 3 years | **16.167** | | |

**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 | FQI= 2.5 * [(10X +4Y)/RF] |
|---|---|---|---|---|
| **2024-2025** | 6 | 7 | 9.5 | 23.157 |
| **2023-2024** | 3 | 8 | 9.7 | 15.979 |
| **2022-2023** | 2 | 10 | 9.75 | 15.384 |

## C4: Faculty Cadre Proportion

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

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

| Year | Professors | | Associate Professors | | Assistant Professors | |
|---|---|---|---|---|---|---|
| | Required Faculty(RF1) | Available Faculty(AF1) | Required Faculty(RF2) | Available Faculty(AF2) | Required Faculty(RF3) | Available Faculty(AF3) |
| **2024-2025** | 1 | 1 | 2 | 2 | 6 | 10 |
| **2023-2024** | 1 | 1 | 2 | 2 | 6 | 8 |
| **2022-2023** | 1 | 1 | 2 | 1 | 6 | 10 |
| **Average Numbers** | RF1=3 | AF1=3 | RF2=6 | AF2=5 | RF3=18 | AF3=28 |

## 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 (2023-2024)** | | | | |
| **1** | Mr.J.Abdullah | FEA&CFD Consultant& Coimbatore CAD Solution Pvt Ltd | Computational Fluid Dynamics<br>Aircraft Performance<br>Finite Element Methods<br>Low Speed Aerodynamics | |
| **Total no. of hours:** | | | | 54 |
| **CAYm2 (2022-2023)** | | | | |
| **1** | Mr.J.Abdullah | FEA&CFD Consultant& Coimbatore CAD Solution Pvt Ltd | Computational Fluid Dynamics<br>Aircraft Performance<br>Finite Element Methods<br>Low Speed Aerodynamics | |
| **Total no. of hours:** | | | | 54 |
| **CAYm3 (2021-2022)** | | | | |
| **1** | Mr.J.Abdullah | FEA&CFD Consultant& Coimbatore CAD Solution Pvt Ltd | Computational Fluid Dynamics<br>Aircraft Performance<br>Finite Element Methods | |

| | | | | |
|---|---|---|---|---|
| | | | Low Speed Aerodynamics | |
| **Total no. of hours:** | | | | 54 |

**C6: Academic Research**

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

| S.N. | Item | 2023-2024 | 2022-2023 | 2021-2022 |
|---|---|---|---|---|
| 1 | No. of peer reviewed journal papers published | 17 | 13 | 2 |
| 2 | No. of peer reviewed conference papers published | - | - | - |
| 3 | No. of books/book chapters published | 2 | 4 | 2 |

**C7: Sponsored Research Project**

**Table No. C7.1:** List of sponsored research projects received from external agencies.

| S.N. | 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) |
|---|---|---|---|---|---|---|---|
| **CAYm3-2023-24** | | | | | | | |
| 1 | Dr. Arivumani Ravanan | Dr. A. R. Saravanan | Mechanical Engineering | Commute Electric Vehicle | All India Council for Technical Education, (Scheme of Bharath Cycle Design Challenge) New Delhi. | May 2023 – Nov 2023 (7 Months) | 1.40 |
| 2 | Dr. Arivumani Ravanan | Dr. A.R. Saravanan | Mechanical Engineering | e-Cycle for disabled and autism people | Tamilnadu Skill Development Corporation (TNSDC), (Scheme of Naan Muthalvan), Government of Tamil Nadu | Feb 2023 - Sep 2024 (8 Months) | 1.00 |
| **Amount received (Rs.)** | | | | | | | 2.40 |
| **CAYm2-2022-23** | | | | | | | |
| 1 | Dr. Arivumani Ravanan | Dr. A. R Saravanan | Mechanical Engineering | Modern cleanser device for sanitising edibles | State Ministry of MSME, Scheme of EDII-TN-IEDP, Government of Tamil Nadu | Sep 2022-May 2023 | 1.00 |
| ... | | | | | | | |
| **Amount received (Rs.)** | | | | | | | 1.00 |
| **Total Amount (Lacs) Received for the Past 3 Years** | | | | | | | 3.40 |

**C8: Consultancy Work**

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

| S.N. | 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) |
|---|---|---|---|---|---|---|---|
| **CAYm1 (2023-2024)** | | | | | | | |
| 1 | B. Deepan | - | Aeronautical Engineering | Optimization and design changes of aerodynamic and fatigue of wind planar effects on the fore facing rotors of agriculturally applied drones | JET AEROSPACE AVIATION RESEARCH CENTER | 2 years | 1,00,000 |
| 2 | Mr. G.A Sivasankar | - | Aeronautical Engineering | Foldable arm analysis for drones | Avathar aviation | 9 months | 1,15,000 |
| | | | | | | **Amount received (Rs.)** | **2, 15,000** |
| **CAYm2 (2022-2023)** | | | | | | | |
| 1 | A. R. Saravanan | - | Aeronautical Engineering | Design spec design and modification of two co-flow nozzles used in passenger carrying aircrafts | AEROARC DEFENCE AEROSPACE | 1 Year | 75,000 |
| 2 | Dr. B. Deepan | - | Aeronautical Engineering | Twisted Rotor aerodynamic analysis of drones used for applications involving cross winds in lower altitudes | JET AEROSPACE AVIATION RESEARCH CENTER | 1 Year | 1,00,000 |
| | | | | | | **Amount received (Rs.)** | **1,75,000** |
| **CAYm3 (2021-2022)** | | | | | | | |
| 1 | Dr. B. Deepan | - | Aeronautical Engineering | Analysis of a rotatory turbine along with impeller stress | ROOTS INDUSTRIES INDIA LIMITED | 1 year | 60,000 |
| 2 | Mr. G. A. Sivashankar | - | Aeronautical Engineering | Engine key component fatigue analysis in contact with fuels | AVATHAR AVIATION AND AEROSACE PVT LIMITED | 2 years | 1,00,000 |
| 3 | Mr. Pradeep Kumar | - | Aeronautical Engineering | Die casting and moulding design enhancement for variable areas and volumes. | SHRI SHAKTHI INDUSTRIES | 9 months | 85,000 |
| | | | | | | **Amount received (Rs.)** | 2,45,000 |
| | | | | | | **Total amount (Lacs) received for the past 3 years** | 6,35,000 |

## 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.N. | Faculty name | Project title/ Support for Activity | Duration | Amount (Lacs) | Amount Utilized (Lacs) | Outcomes of the project |
|---|---|---|---|---|---|---|
| **CAYm1 (2023-2024)** | | | | | | |
| **1** | Dr.A.R.Saravanan | Jet Mixing Enhancements by using Passive Methods | 6 Months | Rs. 10000 | Rs.10000 | Prototype Model |
| **2** | Mr.S.L.Pradeep Kumar | Enchancing Plasma Actutaion through Foilage - Inspired Airfoil Design: An Experimental Investigation | 6 Months | Rs. 10000 | Rs. 10000 | Publication |
| **3** | Mr.G.A.Siva Sankar | Investigation of sustainable Nano Added Solid Propellants using Mesquite Powder and plastic Waste Oil | 6 Months | Rs. 10000 | Rs. 10000 | Fuel Developed |
| **4** | Mr.G.A.Siva Sankar | Hybrid Fuels and Its Properties | 1 Year | Rs. 89000 | Rs. 89000 | Publications |
| **5** | Mr. Sasi kumar M | Characterization of Properties of composites | 1 Year | Rs. 57500 | Rs. 57500 | Publications |
| **6** | Dr. M. Bharathi | Exploring the recycling potential of HDPe films | 1 Year | Rs. 80000 | Rs. 80000 | Publications |
| **7** | Ms. T. Vinitha | Characterization of Composites | 6 Months | Rs. 3000 | Rs. 3000 | Publications |
| **8** | Dr.A.R.Saravanan | High speed jet flows | 6 Months | Rs. 3000 | Rs. 3000 | Publications |
| | | | | | | **Amount received (Rs.) 2,62,500** |
| **CAYm2 (2022-2023)** | | | | | | |
| **1** | Ms.K.Niranjana | The construction and experimental investigation of a propeller test rig to assess propeller performance. | 6 Months | Rs. 10000 | Rs. 10000 | Working Model- propeller Test Rig |
| **2** | Ms.K.Niranjana | Life cycle assessment of 3D printed Quadcopter | 6 Months | Rs. 10000 | Rs. 10000 | Model- 3D printed Quadcopter |
| **3** | Dr.M.Bharathi | Fabrication of Natural-Fiber-Filler-Glass-Fiber Hybrid Composites for an industrial helmet. | 6 Months | Rs. 10000 | Rs. 10000 | Material Fabricated |
| **4** | Mr.G.A.Siva Sankar | Innovative AI Based Framework | 1 Year | Rs. 42000 | Rs. 42000 | Patents |
| **5** | Mr.A.R.Saravanan | High Speed Jet flows | 6 Months | Rs. 2000 | Rs. 2000 | Patent |
| **6** | Mr. B. Deeban | Composite Materials and Structures | 6 Months | Rs. 9500 | Rs. 9500 | Patent |
| **7** | Ms.K.Niranjana | Fibre reinforced composite materials | 6 Months | Rs. 7500 | Rs. 7500 | Publication |
| | | | | | | **Amount received (Rs.) 91,000** |
| **CAYm3 (2021-2022)** | | | | | | |
| **1** | Mr.S.L.Pradeep Kumar | Study of Shock wave Effects by Stimulating Seed Germination and | 6 Months | Rs. 10000 | Rs. 10000 | Publication |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | Altering Soil Behaviour | | | | |
| **2** | Mr.D.Santhosh Kumar | Autonomous Underwater Vehicle | 6 Months | Rs. 10000 | Rs. 10000 | Developed the vehicle |
| **3** | Mr.S.L.Pradeep Kumar | Fabrication of shock tunnel for emerging industrial application | 6 Months | Rs. 10000 | Rs. 10000 | Shock tunnel Fabricated |
| **4** | Mr.G.A.Siva Sankar | A Paradigm Shift in Marketing creating Value for a more sustainable future | 6 Months | Rs. 1000 | Rs. 1000 | Book Chapter |
| **Amount received (Rs.)** | | | | | 31,000 | |
| **Total amount (Lacs) received for the past 3 years** | | | | | **3,84,000** | |

**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.

| S.N. | Name of the Laboratory | No. of students per setup (Batch Size) | Name of the major equipment | Weekly utilization status (all the courses for which the lab is utilized) | Technical Manpower support | | |
|---|---|---|---|---|---|---|---|
| | | | | | Name of the technical staff | Designation | Qualification |
| 1. | Aerodynamics Laboratory | 30 | Subsonic Wind Tunnel, Multi tube Manometer, Pitot-Static Tubes, Cylinder Models, Smoke Generator, Water flow Channel. | 6 Hours | Mr. P. Mani Sekar | Lab Technician | DME |
| 2. | Computer Aided Simulation Laboratory | 60 | SolidWorks, Standalone PC with internet connection. | 6 Hours | Mr. M. Arun | Lab Technician | DME |
| 3. | Aircraft Structures Laboratory | 30 | 100kN Universal Testing Machine, Beams with weight hangers and dial gauges, Column set up with dial gauges, Photo elasticity set up, Vibration set up with accessories, Wagner beam, Unsymmetrical bending set up, Set up for combined bending and torsion. | 6 Hours | Mr. M. Arun | Lab Technician | DME |
| 4. | Propulsion Laboratory | 30 | Jet Engine, Piston engine, Wind tunnel, Ramjet Facility, Conical flame holder model, Hemispherical flame holder model, Water flow channel, Compressor blade set, Convergent nozzle, Convergent Divergent Nozzle. | 6 Hours | Mr. P. Mani Sekar | Lab Technician | DME |
| 5. | Aero-engine and Air-frame Structural Laboratory | 30 | Aircraft Piston engines, NDT equipment, Valve timing disc, Shear Cutter Pedestal Type, Radius Bend Bars, Welding Machine. | 6 Hours | Mr. S. Jaganathan | Lab Technician | B.E |
| 6. | Aircraft System Laboratory | 30 | Serviceable aircraft with all above system, Hydraulic Jacks, Spirit Level, Levelling Boards, Plumb Bob, Cable Tensiometer, Trestle adjustable, | 6 Hours | Mr. S. Jaganathan | Lab Technician | B.E |
| 7. | Flight Integration | 60 | Microprocessor 8085 Kit, Adder/Subtractor Binary | 6 Hours | Mr. P. Antony Andrews | Lab Technician | ITL |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | System and Control Laboratory | | bits kit, Encoder Kit, Decoder Kit, Multiplexer Kit, Demultiplexer Kit, Regulated Power Supply. | | | | |
| 8. | Strength of Materials Laboratory | 30 | Universal Tensile Testing machine, Torsion Testing, Impact Testing Machine, Brinell Hardness Testing Machine, Rockell Hardness Testing Machine, Spring Testing Machine, Metallurgical Microscopes, Muffle Furnace. | 6 Hours | Mr. P. Antony Andrews | Lab Technician | ITL |

**D2: `Safety Measures in Laboratories**

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

| S.N. | Name of the Laboratory | Safety measures |
|---|---|---|
| **1.** | Aerodynamics Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **2.** | Aircraft Component Drawing Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **3.** | Aircraft Structures Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **4.** | Propulsion Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **5.** | Aero-engine and Air-frame Structural Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **6.** | Aircraft System Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **7.** | Flight Integration System and Control Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |
| **8.** | Strength of Materials Laboratory | General rules, First aid kit, Fire extinguisher, Nearby hospital contact numbers are provided. |

**D3: Project Laboratory/Research Laboratory**

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

| S.N. | Name of the Laboratory |
|---|---|
| **1.** | Aero-Project laboratory |

## PART E: Fist 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))/RF4 |
|---|---|---|---|---|---|
| 2024-2025 | 990 | 50 | 36 | 16 | 64.65 |
| 2023-2024 | 720 | 36 | 35 | 14 | 85.56 |
| 2022-2023 | 660 | 33 | 36 | 16 | 96.97 |

### E2: Budget Allocation, Utilization, and Public Accounting at Institute Level

**Table No. E2.1:** Budget and actual expenditure incurred at Institute level.

| Items | Budgeted in 2024-2025 Rs. | Actual expenses in 2024-2025 Rs. | Budgeted in 2023-2024 Rs. | Actual expenses in 2023-2024 Rs. | Budgeted in 2022-2023 Rs. | Actual expenses in 2022-2023 Rs. | Budgeted in 2021-2022 Rs. | Actual expenses in 2021-2022 Rs. |
|---|---|---|---|---|---|---|---|---|
| Infrastructure Built-Up | 3,90,00,000 | 3,76,61,654 | 85,00,000 | 81,15,297 | 2,04,00,000 | 1,95,23,028.9 | 99,50,000 | 94,76,254 |
| Library | 44,00,000 | 42,56,271 | 43,00,000 | 41,46,600 | 23,00,000 | 21,77,360 | 14,00,000 | 13,14,743 |
| Laboratory equipment | 1,00,00,000 | 99,43,185 | 1,30,00,000 | 1,23,37,146 | 90,00,000 | 82,84,322 | 75,25,000 | 71,67,231 |
| Teaching and non-teaching staff salary | 17,50,00,000 | 16,49,25,114 | 16,00,00,000 | 15,45,75,446 | 14,00,00,000 | 13,05,24,000 | 12,35,05,000 | 11,76,24,721 |
| Outreach Programs | 21,00,000 | 20,12,136 | 20,00,000 | 19,47,650 | 20,60,000 | 19,65,000 | 11,00,000 | 10,43,000 |
| R&D | 60,46,000 | 58,82,143 | 59,50,000 | 57,51,115 | 57,55,000 | 55,71,156 | 15,25,000 | 13,70,392 |
| Training, Placement and Industry linkage | 1,00,00,000 | 1,02,45,313 | 69,00,000 | 65,71,674 | 11,60,000 | 10,97,698.5 | 5,50,000 | 5,22,968.45 |
| SDGs | 34,00,000 | 32,62,997.35 | 27,00,000 | 26,34,214 | 28,00,000 | 2,687,122 | 7,60,000 | 7,18,300 |
| Entrepreneurship | 5,10,000 | 4,89,772 | 2,20,000 | 2,11,500 | 7,40,000 | 7,04,000 | 1,25,000 | 1,18,500 |
| Others*,pl. specify | 29,28,45,000 | 27,67,97,797.7 | 27,63,74,000 | 26,87,16,952 | 14,37,48,400 | 13,77,27,413.6 | 16,29,92,000 | 15,50,90,927.5 |
| **Total amount** | 54,33,01,000 | 51,54,76,383 | 47,99,44,000 | 46,50,07,594 | 32,79,63,400 | 31,02,61,101 | 30,94,32,000 | 29,44,47,037 |

**E3: Budget Allocation, Utilization, and Public Accounting at Program Specific Level**

**Table No. E3.1:** Budget and actual expenditure incurred at program level.

| Items | Budget in 2024-25 | Actual expenses in 2024-25 | Budget in 2023-24 | Actual expenses in 2023-24 | Budget in 2022-23 | Actual expenses in 2022-23 | Budget in 2021-22 | Actual expenses in 2021-22 |
|---|---|---|---|---|---|---|---|---|
| Laboratory equipment | 80,000 | 14985.28 | 85,000 | 14940.61 | 90,000 | 13632.73 | 10,00,000 | 9,07,317 |
| Software | 3,00,000 | 3,85,806.66 | 1,00,000 | 34,958 | 75,000 | 25,718 | 50,000 | 21,750 |
| SDGs | 1,00,000 | 83,906.5 | 2,00,000 | 1,83,789.6 | 2,50,000 | 2,06,446 | 50,000 | 450 |
| Support for faculty development | 50,000 | 25,326.05 | 50,000 | 28,470 | 50,000 | 8,424 | 25,000 | 1100 |
| R & D | 5,00,000 | 3,64,189 | 2,00,000 | 1,63,718.94 | 1,50,000 | 99,760.66 | 50,000 | 19,833 |
| Industrial Training, Industry expert, Internship | 10,00,000 | 10,23,316.09 | 6,00,000 | 4,45,133.37 | 4,00,000 | 3,51,326.25 | 3,00,000 | 2,52,084.10 |
| Miscellaneous expenses * | 75,70,000 | 66,68,339.95 | 70,65,000 | 62,57,208.71 | 61,85,000 | 56,55,231.3 | 50,25,000 | 45,27,253.25 |
| **Total amount** | **96,00,000** | **85,65,869.53** | **83,00,000** | **71,28,219.23** | **72,00,000** | **6360538.94** | **65,00,000** | **57,29,787.35** |