

**NATIONAL BOARD OF ACCREDITATION**

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

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| <b>Program Name</b> : Civil Engineering | <b>Discipline</b> : Engineering & Technology |
| <b>Level</b> : Under Graduate           | <b>Tier</b> : 2                              |
| <b>Application No</b> : 12022           | <b>Date of Submission</b> : 17-07-2026       |

**PART A- Profile of the Institute**

|                                                                                                      |                                      |
|------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>A1.Name of the Institute</b> : DR. SUDHIR CHANDRA SUR INSTITUTE OF TECHNOLOGY AND SPORTS COMPLEX  |                                      |
| Year of Establishment : 2009                                                                         | Location of the Institute: Kolkata   |
| <b>A2. Institute Address</b> :540, DUM DUM ROAD, SURERMATH, NEAR DUM DUM JN. STATION, KOLKATA-700074 |                                      |
| City:North 24 Parganas                                                                               | State:West Bengal                    |
| Pin Code:700074                                                                                      | Website:www.surtech.edu.in           |
| Email:info@dsec.ac.in                                                                                | Phone No(with STD Code):033-25603898 |
| <b>A3. Name and Address of the Affiliating University (if any)</b> :                                 |                                      |
| Name of the University : MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY W                          | City: Nadia                          |
| State : West Bengal                                                                                  | Pin Code: 741249                     |
| <b>A4. Type of the Institution</b> : Autonomous CAY(2029-30)                                         |                                      |
| <b>A5. Ownership Status</b> : Self financing                                                         |                                      |

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

- No. of UG programs: **10**
- No. of PG programs: **3**

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

| Sr.No. | Discipline               | Level of program | Name of the program                                                           | Year of Start | Year of Closed | Name of The Department                                                          |
|--------|--------------------------|------------------|-------------------------------------------------------------------------------|---------------|----------------|---------------------------------------------------------------------------------|
| 1      | Engineering & Technology | UG               | Automobile Engineering                                                        | 2009          | --             | Automobile Engineering                                                          |
| 2      | Engineering & Technology | UG               | Civil Engineering                                                             | 2012          | --             | Civil Engineering                                                               |
| 3      | Engineering & Technology | UG               | Computer Science and Engineering                                              | 2009          | --             | Computer Science and Engineering                                                |
| 4      | Engineering & Technology | UG               | Computer Science and Engineering (Artificial Intelligence & Machine Learning) | 2022          | --             | Computer Science and Engineering (Artificial Intelligence and Machine Learning) |
| 5      | Engineering & Technology | UG               | Computer Science and Engineering (Cyber Security)                             | 2024          | --             | Computer Science and Engineering (Cyber Security)                               |
| 6      | Engineering & Technology | UG               | Computer Science and Engineering (Data Science)                               | 2024          | --             | Computer Science and Engineering (Data Science)                                 |
| 7      | Engineering & Technology | UG               | Electrical Engineering                                                        | 2011          | --             | Electrical Engineering                                                          |
| 8      | Engineering & Technology | UG               | Electronics & Communication Engineering                                       | 2009          | --             | Electronics and Communication Engineering                                       |

|    |                          |    |                                         |      |    |                                           |
|----|--------------------------|----|-----------------------------------------|------|----|-------------------------------------------|
| 9  | Engineering & Technology | PG | Electronics & Communication Engineering | 2013 | -- | Electronics and Communication Engineering |
| 10 | Engineering & Technology | UG | Electronics and Computer Science        | 2024 | -- | Electronics and Computer Science          |
| 11 | Engineering & Technology | PG | Mechanical Engineering                  | 2012 | -- | Mechanical Engineering                    |
| 12 | Engineering & Technology | UG | Mechanical Engineering                  | 2009 | -- | Mechanical Engineering                    |
| 13 | Engineering & Technology | PG | Structural Engineering                  | 2024 | -- | Civil Engineering                         |

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

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

| Name of the Department                    | Having Allied Departments | Name of the Program                     | Program Level |
|-------------------------------------------|---------------------------|-----------------------------------------|---------------|
| Computer Science and Engineering          | Yes                       | Computer Science and Engineering        | UG            |
| Electronics and Communication Engineering | No                        | Electronics & Communication Engineering | UG            |
| Automobile Engineering                    | Yes                       | Automobile Engineering                  | UG            |
| Civil Engineering                         | No                        | Civil Engineering                       | UG            |

Table No. A7.2: Allied Department(s) to the Department of the program considered for accreditation as above.  
Cluster ID. Name of the Department (in table no. A7.1) Name of allied Departments/Cluster (for table no. A7.1)

|           |
|-----------|
| No Record |
|-----------|

PART-B: Program information

B1. Provide the Required Information for the Program Applied For:

Table No. B1: Program details.

A. List of the Programs Offered by the Department:

| SR.NO. | PROGRAM NAME      | PROGRAM APPLIED LEVEL | YEAR OF START / YEAR OF CLOSED | SANCTIONED INTAKE | INCREASE/DECREASE INTAKE (if any) | YEAR OF INCREASE/DECREASE | CURRENT INTAKE | YEAR OF AICTE APPROVAL | AICTE/COMPETENT AUTHORITY ARROVAL DETAILS | ACCREDITATION STATUS                                              | FROM | TO   | NO. OF TIMES PROGRAM ACCREDITED | PROGRAM DURATION |
|--------|-------------------|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|-------------------------------------------|-------------------------------------------------------------------|------|------|---------------------------------|------------------|
| 1      | Civil Engineering | UG                    | 2012 / --                      | 60                | No                                | NA                        | 60             | 2012                   | F.No. Eastern/1-707685612/2012/EOA        | Granted accreditation for 3 years for the period (specify period) | 2023 | 2026 | 1                               | 4                |

List of the Allied Departments/Cluster and Programs:

B2. Detail of Head of the Department for the program under consideration:

|                           |                            |
|---------------------------|----------------------------|
| A. Name of the HoD :      | Dr. Biswajit Mukhopadhayay |
| B. Nature of appointment: | Regular                    |
| C. Qualification:         | Ph.D                       |

B3. Program Details

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

| Item (Information to be provided cumulatively for all the shifts with explicit headings, wherever applicable)                                                                | 2025-26 (CAY) | 2024-25 (CAYm1) | 2023-24 (CAYm2) | 2022-23 (CAYm3) | 2021-22 (CAYm4) | 2020-21 (CAYm5) | 2019-20 (CAYm6) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| N=Sanctioned intake of the program (as per AICTE /Competent authority)                                                                                                       | 60            | 60              | 60              | 60              | 60              | 60              | 60              |
| N1=Total no. of students admitted in the 1st year minus the no. of students, who migrated to other programs/ institutions plus no. of students, who migrated to this program | 57            | 57              | 56              | 56              | 55              | 45              | 45              |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats                                                                      | 0             | 4               | 4               | 4               | 4               | 4               | 12              |
| 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.                                      | 57            | 61              | 60              | 60              | 59              | 49              | 57              |

CAY= Current Academic Year. CAYm1= Current Academic Year Minus 1 CAYm2= Current Academic Year Minus 2. LYG= Last Year Graduate. LYGm1= Last Year Graduate Minus 1. LYGm2= Last Year Graduate Minus 2.

B4. Enrolment Ratio in the First Year

Table No. B4.1: Student enrolment ratio in the 1st year.

| Year of entry   | N (From Table 4.1) | N1 (From Table 4.1) | N4 (From Table 4.1) | Enrollment Ratio [(N1/N)*100] |
|-----------------|--------------------|---------------------|---------------------|-------------------------------|
| 2025-26 (CAY)   | 60                 | 57                  | 0                   | 95.00                         |
| 2024-25 (CAYm1) | 60                 | 57                  | 0                   | 95.00                         |
| 2023-24 (CAYm2) | 60                 | 56                  | 0                   | 93.33                         |

Average [ (ER1 + ER2 + ER3) / 3 ] = 94.44≡ 20.00

B5. Success Rate of the Students in the Stipulated Period of the Program

Table No.B5.1: The success rate in the stipulated period of a program.

| Item                                                                                                                                            | (2021-22) LYG | (2020-21) LYGm1 | (2019-20) LYGm2 |
|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|-----------------|
| X<br>Number of students admitted in the corresponding First year + admitted in 2nd year via lateral entry and seperated division, if applicable | 64.00         | 64.00           | 66.00           |
| Y<br>Number of students who have graduated in the stipulated period                                                                             | 59.00         | 49.00           | 57.00           |
| Success Rate (SR)= (B/A) * 100                                                                                                                  | 92.19         | 76.56           | 86.36           |

Average SR of three batches ((SR\_1+ SR\_2+ SR\_3)/3): 85.04

B6. Academic Performance of the First-Year Students of the Program

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

| Academic Performance                                                                                                                                                   | CAYm1( 2024-25 ) | CAYm2( 2023-24 ) | CAYm3 ( 2022-23 ) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|-------------------|
| X=(Mean of 1st year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 1st year/10) | 7.98             | 7.94             | 7.91              |
| Y=Total no. of successful students                                                                                                                                     | 57.00            | 56.00            | 56.00             |

|                                                     |       |       |       |
|-----------------------------------------------------|-------|-------|-------|
| Z=Total no. of students appeared in the examination | 57.00 | 56.00 | 56.00 |
| API [X*(Y/Z)]                                       | 7.98  | 7.94  | 7.91  |

Average API[ (AP1+AP2+AP3)/3 ] : 7.94

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

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

| Academic Performance                                                                                                                                                   | CAYm1 ( 2024-25 ) | CAYm2 ( 2023-24 ) | CAYm3 ( 2022-23 ) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------------|-------------------|
| X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2nd year/10) | 8.17              | 8.14              | 8.13              |
| Y=Total no. of successful students                                                                                                                                     | 60.00             | 60.00             | 59.00             |
| Z=Total no. of students appeared in the examination                                                                                                                    | 60.00             | 60.00             | 59.00             |
| API [ X * (Y/Z) ]                                                                                                                                                      | 8.17              | 8.14              | 8.13              |

Average API [ (AP1 + AP2 + AP3)/3 ] : 8.15

**B8. Academic Performance of the Third Year Students of the Program**

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

| Academic Performance                                                                                                                                                   | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|
| X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10) | 8.31            | 8.29            | 8.24            |
| Y=Total no. of successful students                                                                                                                                     | 60.00           | 59.00           | 49.00           |
| Z=Total no. of students appeared in the examination                                                                                                                    | 60.00           | 59.00           | 49.00           |
| API [ X*(Y/Z) ]:                                                                                                                                                       | 8.31            | 8.29            | 8.24            |

Average API [ (AP1 + AP2 + AP3)/3 ] : 8.28

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

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

| Item                                           | LYG (2021-22) | LYGm1(2020-21) | LYGm2(2019-20) |
|------------------------------------------------|---------------|----------------|----------------|
| FS*=Total no. of final year students           | 64.00         | 64.00          | 66.00          |
| X=No. of students placed                       | 42.00         | 34.00          | 38.00          |
| Y=No. of students admitted to higher studies   | 13.00         | 10.00          | 13.00          |
| Z= No. of students taking up entrepreneurship  | 0.00          | 1.00           | 1.00           |
| Placement Index(P) = (((X + Y + Z)/FS) * 100): | 85.94         | 70.31          | 78.79          |

Average Placement Index = (P\_1 + P\_2 + P\_3)/3: 78.35 Placement Index Points:

## PART C: Faculty Details in Department and Allied Departments

(Data to be filled in for the Department and Allied Departments)

**C1. Faculty details of Department and Allied Departments**

Table No.C1: Faculty details in the Department for the past 3 years including CAY

| Sr.No | Name of the Faculty         | PAN No.     | Highest degree | University                                                                                   | Area of Specialization       | Date of Joining in this Institution | Experience in years in current institute | Designation at Time Joining in this Institution | Present Designation | The date on which Designated as Professor/ Associate Professor if any | Nature of Association (Regular/ Contract/ Ad hoc) | Currently Associated (Y/N) | In case of NO, Date of Leaving | IS HOD? |
|-------|-----------------------------|-------------|----------------|----------------------------------------------------------------------------------------------|------------------------------|-------------------------------------|------------------------------------------|-------------------------------------------------|---------------------|-----------------------------------------------------------------------|---------------------------------------------------|----------------------------|--------------------------------|---------|
| 1     | Dr. Biswajit Mukhopadhyay   | XXXXXXXX96L | Ph.D           | Jadavpur University                                                                          | Public Health Engineering    | 07/09/2022                          | 3.9                                      | Professor                                       | Professor           | 07/09/2022                                                            | Regular                                           | Yes                        |                                | Yes     |
| 2     | Dr. Buddhadeb Bhattacharjee | XXXXXXXX21F | Ph.D           | Jadavpur University                                                                          | Public Health Engineering    | 09/02/2022                          | 4.4                                      | Professor                                       | Professor           | 09/02/2022                                                            | Regular                                           | Yes                        |                                | No      |
| 3     | Dr. Arpita Mandal           | XXXXXXXX66B | Ph.D           | IIST Shibpur                                                                                 | Structural Engineering       | 01/04/2024                          | 2.3                                      | Professor                                       | Professor           | 01/04/2024                                                            | Regular                                           | Yes                        |                                | No      |
| 4     | Dr. Abhijit Kundu           | XXXXXXXX32R | Ph.D           | IIT Kanpur                                                                                   | Geotechnical Engineering     | 31/07/2015                          | 10.11                                    | Assistant Professor                             | Associate Professor | 02/12/2020                                                            | Regular                                           | Yes                        |                                | No      |
| 5     | Dr. Biswabandhu Chatterjee  | XXXXXXXX39H | Ph.D           | IIST Shibpur                                                                                 | Environmental Engineering    | 01/06/2015                          | 11.1                                     | Assistant Professor                             | Associate Professor | 08/06/2021                                                            | Regular                                           | Yes                        |                                | No      |
| 6     | Souradeep Roy               | XXXXXXXX25B | M.Tech         | Maulana Abul Kalam Azad University of Technology, West Bengal                                | Renewable Energy Engineering | 18/11/2024                          | 1.7                                      | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 7     | Malobika Bardhan            | XXXXXXXX46L | M.Tech         | Institute of Technical Education and Research, Siksha 'O' Anusandhan University, Bhubaneswar | Geotechnical Engineering     | 13/04/2024                          | 2.2                                      | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 8     | Nilanjana Banik             | XXXXXXXX69F | M.Tech         | National Institute of Technology, Agartala                                                   | Geotechnical Engineering     | 15/01/2020                          | 6.5                                      | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 9     | Debashish Roy               | XXXXXXXX18L | M.E.           | Jadavpur University                                                                          | Environmental Engineering    | 07/02/2019                          | 7.4                                      | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 10    | Souvik Chakraborty          | XXXXXXXX82A | M.E.           | Jadavpur University                                                                          | Water Resource Engineering   | 28/08/2017                          | 8.10                                     | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 11    | Sourav Kumar Singha         | XXXXXXXX61H | M.Tech         | Maulana Abul Kalam Azad University of Technology, West Bengal                                | Geo-Informatics              | 12/07/2021                          | 4.11                                     | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |
| 12    | Krishnendu Kundu            | XXXXXXXX65R | M.Tech         | National Institute of Technology, Agartala                                                   | Transportation Engineering   | 06/04/2020                          | 6.3                                      | Assistant Professor                             | Assistant Professor |                                                                       | Regular                                           | Yes                        |                                | No      |

|    |                 |             |        |                                                               |                        |            |      |                     |                     |  |         |     |  |    |
|----|-----------------|-------------|--------|---------------------------------------------------------------|------------------------|------------|------|---------------------|---------------------|--|---------|-----|--|----|
| 13 | Arijit Achariya | XXXXXXXX60P | M.Tech | Indian Institute of Technology, Bhubaneswar                   | Structural Engineering | 22/10/2024 | 1.8  | Assistant Professor | Assistant Professor |  | Regular | Yes |  | No |
| 14 | Baibaswata Das  | XXXXXXXX11J | M.Tech | Maulana Abul Kalam Azad University of Technology, West Bengal | Structural Engineering | 02/08/2017 | 8.11 | Assistant Professor | Assistant Professor |  | Regular | Yes |  | No |

Table No.C2: Faculty details of Allied Departments for the past 3 years including CAY.

**C2. Student-Faculty Ratio (SFR)**

No. of UG(Engineering) programs in Department including allied departments/ clusters (UGn):

UG1=1st UG program

UGn=nth UG program

**B**= No. of Students in UG 2nd year (ST)

**C**= No. of Students in UG 3rd year (ST)

**D**= No. of Students in UG 4th year (ST)

No. of PG (Engineering) programs in Department including allied departments/ clusters (PGm):

PG1=1st PG program.

PGm=mth PG program

**A**= No. of Students in PG 1st year

**B**= No. of Students in PG 2nd year

Student Faculty Ratio (**SFR**) = S/F

S= No. of students of all programs in the Department including all students of allied departments/clusters.

**No. of students (ST)**=Sanctioned Intake (SA)+ Actual admitted students via lateral entry including leftover seats (L) if any (limited to 10 % of SA)

Students who admitted under supernumerary quotas (SNQ, EWS, etc) will not be considered in calculating SFR value. Those students are exempted.

**F**=Total no. of regular or contractual faculty members (Full Time) in the Department, including allied departments/clusters (excluding first year faculty (The faculty members who have a 100% teaching load in the first-year courses)).

No. of UG Programs in the Department1 No. of PG Programs in the Department1

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

| Description                                                                | CAY(2025-26)   | CAYm1 (2024-25) | CAYm2 (2023-24) |
|----------------------------------------------------------------------------|----------------|-----------------|-----------------|
| UG1.B                                                                      | 61             | 60              | 60              |
| UG1.C                                                                      | 60             | 60              | 60              |
| UG1.D                                                                      | 60             | 60              | 60              |
| <b>UG1: Civil Engineering</b>                                              | <b>181</b>     | <b>180</b>      | <b>180</b>      |
| PG1.A                                                                      | 18             | 18              | 0               |
| PG1.B                                                                      | 18             | 0               | 0               |
| <b>PG1: Structural Engineering</b>                                         | <b>36</b>      | <b>18</b>       | <b>0</b>        |
| DS=Total no. of students in all UG and PG programs in the Department       | 217            | 198             | 180             |
| AS=Total no. of students of all UG and PG programs in allied departments   | 0              | 0               | 0               |
| S=Total no. of students in the Department (DS) and allied departments (AS) | <b>S1= 217</b> | <b>S2= 198</b>  | <b>S3= 180</b>  |
| DF=Total no. of faculty members in the Department                          | 14             | 12              | 10              |
| AF= Total no. of faculty members in the allied Departments                 | 0              | 0               | 0               |

| Description                                                                         | CAY(2025-26) | CAYm1 (2024-25) | CAYm2 (2023-24) |
|-------------------------------------------------------------------------------------|--------------|-----------------|-----------------|
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF)   | F1= 14       | F2= 12          | F3= 10          |
| FF=The faculty members in F who have a 100% teaching load in the first-year courses | 0            | 0               | 0               |
| Student Faculty Ratio (SFR)=S/(F-FF)                                                | SFR1= 15.50  | SFR2= 16.50     | SFR3= 18.00     |
| Average SFR for 3 years                                                             | SFR= 16.67   |                 |                 |

C3. Faculty Qualification

- Faculty qualification index (FQI) = 2.5 \* [(10X +4Y)/RF] where
- X=No. of faculty members with Ph.D. degree or equivalent as per AICTE/UGC norms.
- Y=No. of faculty members with M. Tech. or ME degree or equivalent as per AICTE/ UGC norms.
- RF=No. of required faculty in the Department including allied Departments to adhere to the 20:1 Student-Faculty ratio, with calculations based on both student numbers and faculty requirements as per section C2 of this documents: (RF=S/20).

Table No.C3.1: Faculty qualification.

| Year           | X | Y | RF    | FQ = 2.5 x [(10X + 4Y) / RF ] |
|----------------|---|---|-------|-------------------------------|
| 2025-26(CAY)   | 5 | 9 | 10.00 | 21.50                         |
| 2024-25(CAYm1) | 5 | 7 | 9.00  | 21.67                         |
| 2023-24(CAYm2) | 4 | 6 | 9.00  | 17.78                         |

C4. Faculty Cadre Proportion

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

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

| Year    | Professors   |               | Associate Professors |               | Assistant Professors |               |
|---------|--------------|---------------|----------------------|---------------|----------------------|---------------|
|         | Required RF1 | Available AF1 | Required RF2         | Available AF1 | Required RF3         | Available AF3 |
| 2025-26 | 1.00         | 3.00          | 2.00                 | 2.00          | 7.00                 | 9.00          |
| 2024-25 | 1.00         | 3.00          | 2.00                 | 2.00          | 7.00                 | 7.00          |
| 2023-24 | 1.00         | 2.00          | 2.00                 | 2.00          | 6.00                 | 6.00          |
| Average | RF1=1.00     | AF1=2.67      | RF2=2.00             | AF2=2.00      | RF2=6.67             | AF2=7.33      |

C5. Visiting/Adjunct Faculty/Professor of Practice

Table No. C5.1: List of visiting/adjunct faculty/professor of practice and their teaching and practical loads.

(CAYm1)

| S.No | Name of the Person | Designation        | Organization                | Name of the Course                   | No. of hours handled |
|------|--------------------|--------------------|-----------------------------|--------------------------------------|----------------------|
| 1    | Sumit Mukherjee    | Director           | B.S.GeoTech Private Limited | Soil Mechanics – II, [CE(PC)504]     | 30.00                |
| 2    | Chiranjib Sarkar   | Principal Engineer | GEOCONSULT India            | Foundation Engineering, [CE(PE)601B] | 24.00                |

**(CAYm2)**

| S.No | Name of the Person | Designation                                          | Organization             | Name of the Course                          | No. of hours handled |
|------|--------------------|------------------------------------------------------|--------------------------|---------------------------------------------|----------------------|
| 1    | Avinash Singh      | Director                                             | GENESIS FINTEC PVT. LTD. | Environmental Engineering – II, [CE(PC)505] | 30.00                |
| 2    | Sandip Banerjee    | Regional Head of Customer Service/Technical Services | ACC Limited              | Concrete Technology, [CE(PC)404]            | 30.00                |

**(CAYm3)**

| S.No | Name of the Person | Designation        | Organization             | Name of the Course                          | No. of hours handled |
|------|--------------------|--------------------|--------------------------|---------------------------------------------|----------------------|
| 1    | Avinash Singh      | Director           | GENESIS FINTEC PVT. LTD. | Environmental Engineering – II, [CE(PC)505] | 28.00                |
| 2    | Chiranjib Sarkar   | Principal Engineer | GEOCONSULT India         | Foundation Engineering, [CE(PE)601B]        | 28.00                |

**C6. Academic Research**

Table No. C6.1: Faculty publication details.

| S.No. | Item                                             | 2024-25<br>(CAYm1) | 2023-24<br>(CAYm2) | 2022-23<br>(CAYm3) |
|-------|--------------------------------------------------|--------------------|--------------------|--------------------|
| 1     | No. of peer reviewed journal papers published    | 0                  | 4                  | 0                  |
| 2     | No. of peer reviewed conference papers published | 0                  | 0                  | 5                  |
| 3     | No. of books/book chapters published             | 10                 | 5                  | 5                  |

**C7. Sponsored Research Project**

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

**(CAYm1)**

| PI Name            | Co-PI names if any  | Name of the Dept., where project is sanctioned | Project Title*                                                                                                                             | Name of the Funding agency | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|--------------------|---------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------------------------|
| Souvik Chakraborty | Sourav Kumar Singha | Department of Civil Engineering                | Integrated Groundwater Potential Assessment and MODFLOW-Based Prediction in Coastal Contai, Purba Medinipur district of West Bengal, India | Aquatech Engineers         | 1 Year                  | 2.15                                 |
|                    |                     |                                                |                                                                                                                                            |                            |                         | Amount received (Rs.):2.15           |

(CAYm2)

| PI Name            | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                                                           | Name of the Funding agency   | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|--------------------|--------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------|--------------------------------------|
| Souvik Chakraborty | Krishnendu Kundu   | Department of Civil Engineering                | Integrated Groundwater Potential Assessment and MODFLOW-Based Prediction in Coastal Egra, Purba Medinipur district of West Bengal, India | Natural Resources Consortium | 1 Year                  | 1.84                                 |
|                    |                    |                                                |                                                                                                                                          |                              |                         | Amount received (Rs.):1.84           |

(CAYm3)

| PI Name            | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                                                           | Name of the Funding agency | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|--------------------|--------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------|--------------------------------------|
| Souvik Chakraborty | Baibaswata Das     | Department of Civil Engineering                | Integrated Groundwater Potential Assessment and MODFLOW-Based Prediction in Coastal Egra, Purba Medinipur district of West Bengal, India | Aquatech Engineers         | 1 Year                  | 1.77                                 |
|                    |                    |                                                |                                                                                                                                          |                            |                         | Amount received (Rs.):1.77           |

**Total Amount (Lacs) Received for the Past 3 Years: 5.76****Note\*:**

- Only sponsored research projects will be considered. Infrastructure-based projects will not be considered here.

**C8. Consultancy Work**

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

(CAYm1)

| PI Name                   | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                                                  | Name of the Funding agency                 | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|---------------------------|--------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------|--------------------------------------|
| Dr. Abhijit Kundu         | Baibaswata Das     | Sircon Engg Services                           | Rate analysis and Mix Design of M30 concrete with PPC and PSC for construction of overhead water tank at Saltlake, Sector II    | Sircon Engg Services                       | 3.5 months              | 1.50                                 |
| Dr. Biswajit Mukhopadhyay | Krishnendu Kundu   | B.S Geotech Pvt. Ltd                           | Mix Design of M25 concrete with SBR polymer for Renovation and rehabilitation work of elevated RCC tank at New Colony, Durgapur | B.S Geotech Pvt. Ltd                       | 1.5 months              | 1.50                                 |
| Dr. Arpita Mandal         | Baibaswata Das     | PRM Begraj Group, PRM Real Estate Pvt. Ltd     | UPV-Based Quality Assessment of Foundation Concrete beneath Steel Column Base Plates of a Warehouse located at Bagnan, Howrah   | PRM Begraj Group, PRM Real Estate Pvt. Ltd | 1 month                 | 1.10                                 |
|                           |                    |                                                |                                                                                                                                 |                                            |                         | Amount received (Rs.):4.10           |

(CAYm2)

| PI Name                     | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                                           | Name of the Funding agency                 | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|-----------------------------|--------------------|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------------------|--------------------------------------|
| Dr. Abhijit Kundu           | Debasish Roy       | B.S Geotech Pvt. Ltd                           | Site Investigation and Geotechnical Characterization of 3.5 km of road                                                   | B.S Geotech Pvt. Ltd                       | 4 months                | 2.65                                 |
| Dr. Buddhadeb Bhattacharjee | Souvik Chakraborty | PRM Begraj Group, PRM Real Estate Pvt. Ltd     | Soil Investigation and associated works for the proposed construction of G+20 building at Rajarhat Newtown Area, Kolkata | PRM Begraj Group, PRM Real Estate Pvt. Ltd | 3.5 months              | 2.20                                 |
|                             |                    |                                                |                                                                                                                          |                                            |                         | Amount received (Rs.):4.85           |

(CAYm3)

| PI Name                     | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title*                                                                                                      | Name of the Funding agency                  | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 |
|-----------------------------|--------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------|--------------------------------------|
| Dr. Buddhadeb Bhattacharjee | Krishnendu Kundu   | PRM Begraj Group, PRM Real Estate Pvt. Ltd     | Soil Investigation and associated Consultancy Works for the Proposed Construction of a 750-cu m Over Head Reservoir | PRM Begraj Group, PRM Real Estate Pvt. Ltd. | 4 months                | 2.30                                 |
|                             |                    |                                                |                                                                                                                     |                                             |                         | Amount received (Rs.):2.30           |

**Total amount (Lacs) received for the past 3 years: 11.25**

**Note\*:**

- Only consultancy projects will be considered. Infrastructure-based projects will not be considered here.

#### C9. Institution Seed Money or Internal Research Grant to its Faculty for Research Work

Table No. C9.1: List of faculty members received seed money or internal research grant from the Institution.

(CAYm1)

| Faculty name        | Project title/ Support for Activity                               | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                  |
|---------------------|-------------------------------------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|----------------------------------------------------------|
| Baibaswata Das      | Research on "Experimental Investigation on Eco-Friendly Concrete" | 1 Year                  | 0.30                                 | 0.25                                          | Paper is under review for publication in Springer Nature |
| Krishnendu Kundu    | Research on "Performance Evaluation of Paver Blocks"              | 1 Year                  | 0.26                                 | 0.24                                          | Paper is under review for publication in Springer Nature |
| Sourav Kumar Singha | Research on "Sustainable Pavement Subgrade Stabilization"         | 1 Year                  | 0.22                                 | 0.18                                          | Paper is under review for publication in Springer Nature |
| Baibaswata Das      | Research on "Design of an Electrostatic Fog Harvesting System"    | 10 months               | 0.27                                 | 0.24                                          | Paper is under review for publication in Springer Nature |
| Souvik Chakraborty  | Research on "Spatial Analysis of Groundwater Recharge Zones"      | 1 year                  | 0.32                                 | 0.31                                          | Paper is under review for publication in Springer Nature |
|                     |                                                                   |                         | Amount received (Rs.): 1.37          |                                               |                                                          |

| Faculty name               | Project title/ Support for Activity              | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                                                    |
|----------------------------|--------------------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|--------------------------------------------------------------------------------------------|
| Dr. Biswabandhu Chatterjee | Research on the topic titled " Biogas Plant "    | 10 Months               | 0.75                                 | 0.66                                          | The Bio-Gas plant has been established and is currently being operated.                    |
| Sourav Kumar Singha        | Research on "Sustainable Freshwater Generation." | 1 year                  | 0.15                                 | 0.14                                          | Book chapter published in book INNOVATIVE PATHWAYS: INTERDISCIPLINARY ENGINEERING INSIGHTS |
| Baibaswata Das             | Research on "Sustainable Construction Materials" | 1 year                  | 0.45                                 | 0.40                                          | Published patent with application no. 202431086955                                         |
| Souvik Chakraborty         | Research on "Rainwater Harvesting"               | 1 year                  | 1.75                                 | 1.61                                          | The Rainwater Harvesting plant has been established and is currently being operated.       |
|                            |                                                  |                         | Amount received (Rs.): 3.10          |                                               |                                                                                            |

(CAYm3)

| Faculty name                     | Project title/ Support for Activity   | Duration of the project | Amount(Lacs)<br>i.e. 15,25,000=15.25 | Amount Utilized(Lacs)<br>i.e. 15,25,000=15.25 | Outcomes of the project                                    |
|----------------------------------|---------------------------------------|-------------------------|--------------------------------------|-----------------------------------------------|------------------------------------------------------------|
| Biswabandhu Chatterjee           | Research on "Organic Waste to Energy" | 1 Year                  | 0.85                                 | 0.77                                          | Publication of Article in Biochemical Engineering Journal, |
| Baibaswata Das, Krishnendu Kundu | Research on "Green Concrete"          | 1 Year                  | 0.70                                 | 0.68                                          | Publication of Article in Materials Today: Proceedings     |
|                                  |                                       |                         | Amount received (Rs.): 1.55          |                                               |                                                            |

Total amount (Lacs) received for the past 3 years : 6.02

PART D: Laboratory Infrastructure in the Department  
(Data to be filled in for the Department)

D1. Adequate and Well-Equipped Laboratories, and Technical Manpower

Table No.D1.1: List of laboratories and technical manpower.

| Sr. No | Name of the Laboratory                | Number of students per set up(Batch Size) | Name of the Important Equipment                                                                                    | Weekly utilization status(all the courses for which the lab is utilized) | Technical Manpower Support  |                     |                              |
|--------|---------------------------------------|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------|---------------------|------------------------------|
|        |                                       |                                           |                                                                                                                    |                                                                          | Name of the Technical staff | Designation         | Qualification                |
|        |                                       |                                           |                                                                                                                    |                                                                          |                             |                     |                              |
| 1      | Concrete Technology Laboratory        | 30                                        | Vicat Apparatus, Compression Testing Machine, Ultrasonic Pulse Velocity Testing Machine, Rebound Hammer, etc.      | 4 Hours Average                                                          | Ms. Madhumita Dinda         | Technical Assistant | Diploma in Civil Engineering |
| 2      | Soil Mechanics Laboratory             | 30                                        | Direct Shear Stress Apparatus, Consolidation Test Apparatus, Compaction test Apparatus, Vane Shear Apparatus, etc. | 4 Hours Average                                                          | Mrs. Papiya Nayek           | Technical Assistant | Diploma in Civil Engineering |
| 3      | Transportation Engineering Laboratory | 30                                        | California Bearing Test Apparatus, Los-Angeles Abrasion Test Apparatus, Crushing Strength Test Apparatus, etc.     | 4 Hours Average                                                          | Mr. Soham Chatterjee        | Technical Assistant | Diploma in Civil Engineering |

|   |                                       |    |                                                                                                          |                 |                      |                     |                            |
|---|---------------------------------------|----|----------------------------------------------------------------------------------------------------------|-----------------|----------------------|---------------------|----------------------------|
| 4 | Environment Engineering Laboratory    | 30 | BOD Incubator, COD Digester, Spectro Photometer, Hot-Air Oven, Alum JAR Test Apparatus, Nephelo          | 4 Hours Averag  | Mr. Sandeepan De     | Technical Assistant | Diploma in Civil Engineeri |
| 5 | Water Resource Engineering Laboratory | 30 | Symons Rain gauge Apparatus, Evaporimeter Apparatus, Double Ring Infiltrometer, Apparatus,               | 4 Hours Averag  | Ms. Soumita Banerjee | Technical Assistant | Diploma in Civil Engineeri |
| 6 | Surveying Laboratory                  | 30 | Total Station (Trimble), Digital Theodolite, Vernier Theodolite (20"), Auto Level Apparatus, Dumpy Level | 4 Hours Averag  | Mr. Rajat Saha       | Technical Assistant | Diploma in Civil Engineeri |
| 7 | Engineering Geology Laboratory        | 30 | Petrographic, Microscope, Minerals and Rocks from Various Sources                                        | 4 Hours Averag  | Ms. Soumita Banerjee | Technical Assistant | Diploma in Civil Engineeri |
| 8 | Auto CAD Laboratory                   | 30 | 40 Number of PCs with UPS, Latest Software related to the field of Civil Engineering such as – REVIT     | 10 Hours Averag | Ms. Papiya Nayek     | Technical Assistant | Diploma in Civil Engineeri |

## D2. Safety Measures in Laboratories

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

| Sr. No | Laboratory Name                | Safety Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1      | Concrete Technology Laboratory | <p>Personal Protective Equipment (PPE): Lab workers should wear appropriate PPE, including lab coats, safety goggles, gloves, and closed-toe shoes to protect against chemical splashes, dust, and other potential hazards. Chemical Handling: Follow proper procedures for handling chemicals used in concrete testing, such as cement, admixtures, and acids. Dust Control: Use dust control measures like local exhaust ventilation systems and wear respiratory protection when handling dusty materials like cement and aggregate. Machine Safety: Ensure that all testing equipment is well-maintained and properly calibrated to prevent accidents. Follow operating procedures for testing machines and never bypass safety interlocks. Emergency Equipment: Maintain and know the location of emergency equipment such as eyewash stations, safety showers, fire extinguishers, and first-aid kits. Fire Safety: Be aware of fire hazards in the lab, and know the location and proper use of fire extinguishers. Do not smoke or use open flames in the lab. Electrical Safety: Inspect electrical equipment for damage or exposed wires regularly. Avoid overloading electrical circuits and use proper extension cords and outlets. Handling Heavy Materials: Use proper lifting techniques and equipment (e.g., hoists, forklifts) when handling heavy bags of cement or other materials to prevent back injuries. Chemical Spills: Know the spill response procedures and the location of spill kits. Promptly clean up any chemical spills. Waste Disposal: Dispose of waste materials (e.g., used concrete samples, contaminated materials) in accordance with local regulations and guidelines. Emergency Contacts: Post emergency contact information, including contact numbers for local emergency services and lab supervisors. Safety Culture: Promote a culture of safety in the lab where all team members prioritise safety and report potential hazards or incidents. Regular Inspections: Conduct regular safety inspections to identify and address potential hazards. Documentation: Maintain records of safety procedures, incidents, and training</p> |

|   |                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2 | <div data-bbox="250 240 790 357">Soil Mechanics Laboratory</div>             | <p>Personal Protective Equipment (PPE): Lab workers should wear appropriate PPE, including lab coats, safety goggles or face shields, gloves, and closed-toe shoes to protect against potential hazards. Chemical Safety: If chemicals are used for tests, handle them with care and follow proper procedures for storage, use, and disposal. Dust and Airborne Particle Control: Use dust control measures, such as local exhaust ventilation systems, fume hoods, or dust masks, when handling soil samples or conducting tests that generate dust or particles. Minimise the generation of airborne particles by using proper sieving techniques and equipment. Handling of Heavy Equipment: Follow safe lifting techniques when handling heavy soil samples, equipment, or containers to prevent back injuries. Use equipment like trolleys or forklifts when moving heavy loads. Machine and Equipment Safety: Maintain and inspect testing equipment regularly to ensure it's in good working condition. Follow operating procedures for testing machines and ensure safety interlocks are in place and functional. Emergency Equipment: Maintain and know the location of emergency equipment such as eyewash stations, safety showers, fire extinguishers, and first-aid kits. Conduct regular checks of emergency equipment to ensure they are in working order. Fire Safety: Be aware of fire hazards in the lab, and know the location and proper use of fire extinguishers. Do not smoke or use open flames in the laboratory. Electrical Safety: Inspect electrical equipment for damage or exposed wires regularly. Avoid overloading electrical circuits and use proper extension cords and outlets. Chemical Spills: Know the spill response procedures and the location of spill kits. Promptly clean up any chemical spills following established protocols. Waste Disposal: Dispose of waste materials (e.g., used soil samples, contaminated materials) in accordance with local regulations and guidelines. Restricted Access: Limit access to the lab to authorised personnel only. Keep unauthorised individuals out of the lab. Regular Inspections: Conduct regular safety inspections to identify and address potential hazards. Safety Culture: Promote a culture of safety in the lab where all team members prioritise safety and report potential hazards or incidents.</p> |
| 3 | <div data-bbox="250 635 790 751">Transportation Engineering Laboratory</div> | <p>Personal Protective Equipment (PPE): Lab personnel should wear appropriate PPE, including safety helmets, high-visibility vests, safety goggles, gloves, and steel-toed boots when working in the laboratory or on construction sites. Equipment &amp; Material Safety: Regularly inspect and maintain all equipment, machinery &amp; materials to ensure proper functionality. Calibrate and certify equipment for accuracy as needed. Chemical Safety: Handle chemicals used in testing or experiments with care and follow proper procedures for storage, use, and disposal. Dust and Airborne Particle Control: Implement dust control measures, such as local exhaust ventilation systems, dust masks, or respirators, when handling materials or conducting tests that generate dust or airborne particles. Emergency Response: Know the location of emergency equipment, including eyewash stations, safety showers, fire extinguishers, and first-aid kits. Regularly inspect and maintain emergency equipment to ensure functionality. Fire Safety: Be aware of fire hazards in the laboratory and construction areas. Know the location and proper use of fire extinguishers. Smoking and open flames should be strictly prohibited in the laboratory and on construction sites. Electrical Safety: Regularly inspect electrical equipment for damage or exposed wires. Avoid overloading electrical circuits and use proper extension cords and outlets. Waste Disposal: Dispose of waste materials (e.g., used samples, contaminated materials) in accordance with local regulations and guidelines. Safety Culture: Foster a safety-conscious culture in the laboratory and construction areas, where all team members prioritise safety and report potential hazards or incidents.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4 | <div data-bbox="250 1011 790 1128">Environment Engineering Laboratory</div>  | <p>Personal Protective Equipment (PPE): Lab personnel should wear appropriate PPE, including lab coats, safety goggles, gloves, and closed-toe shoes, to protect against chemical exposure and other potential hazards. Chemical Safety: Handle chemicals with care, and follow proper procedures for storage, use, and disposal. Biological Safety: If the lab deals with biological materials, follow lab manual protocols and use appropriate containment measures. Dispose of biological waste properly, following established guidelines. Dust and Airborne Particle Control: Implement dust control measures, such as local exhaust ventilation systems and dust masks, when handling materials or conducting tests that generate dust or airborne particles. Equipment Safety: Regularly inspect and maintain all laboratory equipment to ensure proper functionality. Calibrate and certify equipment as needed to maintain accuracy. Emergency Equipment: Know the location of emergency equipment, including eyewash stations, safety showers, fire extinguishers, and first-aid kits. Fire Safety: Be aware of fire hazards in the laboratory. Know the location and proper use of fire extinguishers. Follow safe storage and handling procedures for flammable chemicals and materials. Electrical Safety: Inspect electrical equipment for damage or exposed wires regularly. Avoid overloading electrical circuits and use proper extension cords and outlets. Chemical Spills: Be familiar with spill response procedures and the location of spill kits. Clean up chemical spills promptly according to established protocols. Waste Disposal: Dispose of hazardous waste materials (e.g., chemical waste, contaminated materials) in accordance with local regulations and guidelines. Biological Waste Disposal: Dispose of biological waste materials in biohazard waste containers and follow biohazard waste disposal protocols. Sample Handling: Follow safe procedures for handling and storing environmental samples to prevent contamination and ensure sample integrity.</p>                                                                                                                                                                                                                                                                                                   |

|   |                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | Water Resource Engineering Laboratory | <p>Personal Protective Equipment (PPE): Lab personnel should wear appropriate PPE, including lab coats, safety goggles, gloves, and closed-toe shoes, to protect against chemical exposure and other hazards. Chemical Safety: Handle chemicals with care and follow proper procedures for storage, use, and disposal. Use fume hoods or ventilation systems when working with volatile or toxic chemicals. Biological Safety (if applicable): If the lab handles biological materials, follow biosafety protocols and containment measures. Dispose of biological waste properly according to established guidelines. Equipment Safety: Regularly inspect and maintain all laboratory equipment to ensure proper functionality. Calibrate and certify equipment as needed to maintain accuracy. Electrical Safety: Inspect electrical equipment for damage or exposed wires regularly. Avoid overloading electrical circuits and use proper extension cords and outlets. Emergency Equipment: Know the location of emergency equipment, including eyewash stations, safety showers, fire extinguishers, and first-aid kits. Regularly inspect and maintain emergency equipment to ensure functionality. Fire Safety: Be aware of fire hazards in the laboratory. Know the location and proper use of fire extinguishers. Follow safe storage and handling procedures for flammable chemicals and materials. Chemical Spills: Be familiar with spill response procedures and the location of spill kits. Clean up chemical spills promptly according to established protocols. Waste Disposal: Dispose of hazardous waste materials (e.g., chemical waste, contaminated samples) following local regulations and guidelines. Sample Handling: Follow safe procedures for handling and storing water and sediment samples to prevent contamination and ensure sample integrity. Hydraulic and Mechanical Equipment: Use caution and follow safety protocols when operating hydraulic and mechanical equipment, such as pumps, turbines, and flow meters. Ensure that operators are properly trained and certified for equipment use. Environmental Impact Considerations: Be mindful of potential environmental impacts, and follow protocols for safe disposal of water, sediment, and other materials that may affect local ecosystems.</p> |
| 6 | Surveying Laboratory                  | <p>Personal Protective Equipment (PPE): Lab personnel should wear appropriate PPE, including hard hats, safety goggles, high-visibility vests, gloves, and steel-toed boots when working with surveying equipment in the field. Tool and Equipment Safety: Regularly inspect and maintain all surveying equipment to ensure proper functionality and accuracy. Calibrate equipment as needed to maintain accuracy. Ensure that all equipment is used in accordance with manufacturer guidelines and safety recommendations. Trip Hazards: Keep the laboratory area free of trip hazards by securing cables and wires and ensuring that equipment and tools are stored properly when not in use. Environmental Considerations: Be mindful of environmental conditions when conducting field surveys. Extreme weather, such as heat, cold, rain, or snow, can pose safety risks. Take necessary precautions to protect against weather-related hazards. Traffic Safety (if working near roads): If surveys are conducted near roadways, use traffic control measures, such as traffic cones and signage, to protect personnel and ensure safe traffic flow. Fall Protection (for elevated surveys): When working on elevated platforms or structures, use fall protection equipment such as harnesses and safety lines to prevent falls. Transportation Safety: If travelling to surveying sites by vehicle, ensure that vehicles are in good working condition and follow safe driving practices. Secure equipment and materials during transportation to prevent accidents. Communication: Maintain effective communication between team members, especially when working in remote or hazardous locations. Emergency Response: Be prepared for emergencies by knowing the location of emergency equipment, first-aid kits, and communication devices. Develop and communicate emergency response plans to all team members. Chemical Safety (if applicable): If chemicals are used for surveying or fieldwork, handle them with care and follow proper procedures for storage, use, and disposal.</p>                                                                                                                                                                                                                                       |
| 7 | Engineering Geology Laboratory        | <p>Personal Protective Equipment (PPE): Lab personnel should wear appropriate PPE, including lab coats, safety goggles, gloves, and steel-toed boots, when working with geological materials and equipment. Geological Material Handling: Follow proper procedures for handling and transporting geological samples to prevent injuries and maintain sample integrity. Use appropriate lifting techniques when handling heavy materials. Equipment Safety: Regularly inspect and maintain all laboratory equipment to ensure proper functionality and accuracy. Calibrate equipment as needed to maintain accuracy. Ensure that all equipment is used in accordance with manufacturer guidelines and safety recommendations. Chemical Safety: Handle chemicals used in geological testing with care and follow proper procedures for storage, use, and disposal. Dust and Airborne Particle Control: Implement dust control measures, such as local exhaust ventilation systems and dust masks, when handling materials or conducting tests that generate dust or airborne particles. Sample Identification: Properly label geological samples and maintain a record of sample information to avoid confusion and misidentification. Trip Hazards: Keep the laboratory area free of trip hazards by securing cables and wires and ensuring that equipment and tools are stored properly when not in use. Environmental Considerations: Be mindful of environmental conditions when conducting field surveys or working with geological materials. Extreme weather or terrain can pose safety risks. Take necessary precautions to protect against environmental hazards. Transportation Safety: If travelling to field sites for geological studies, ensure that vehicles are in good working condition and follow safe driving practices. Secure equipment and materials during transportation to prevent accidents. Emergency Response: Know the location of emergency equipment, including eyewash stations, safety showers, fire extinguishers, and first-aid kits. Develop and communicate emergency response plans to all team members.</p>                                                                                                                                                                                            |

|   |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8 |                | <p>Ergonomics and Workspace Design: Ensure that workstations are ergonomically designed to promote comfortable and safe computer use. Provide adjustable chairs, monitor stands, and keyboard trays to minimise strain and discomfort. Electrical Safety: Regularly inspect electrical outlets, power strips, and cords to ensure they are in good condition. Avoid overloading electrical circuits and use surge protectors where necessary. Fire Safety: Keep aisles and walkways clear to allow for safe evacuation in case of a fire. Know the location and proper use of fire extinguishers and fire exits. Emergency Procedures: Develop and communicate emergency procedures, including evacuation plans, to all laboratory users. Conduct regular fire drills and ensure that everyone is familiar with exit routes. Ventilation and Temperature Control: Maintain proper ventilation to ensure a comfortable working environment and prevent overheating of computer equipment. Maintain a comfortable room temperature to prevent discomfort and overheating of computer components. Computer Equipment Safety: Ensure that computer systems are well-maintained and free of dust to prevent overheating and malfunctions. Regularly back up important design files to prevent data loss. Storage and Personal Belongings: Provide storage areas for bags, backpacks, and personal belongings to keep walkways clear and prevent clutter. Food and Drink: Prohibit food and drink consumption in the laboratory to prevent spills and damage to equipment. Encourage users to take breaks outside the laboratory for meals and snacks. Security Measures: Implement security measures to prevent unauthorised access to computer systems and design files. Password-protect computers and AutoCAD software as needed. Software Updates and Antivirus Protection: Regularly update AutoCAD software and operating systems to ensure security and functionality. Install and regularly update antivirus software to protect against malware and viruses.</p> |
|   | CAD Laboratory |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

D3. Project Laboratory/Research Laboratory

PART E: First Year faculty and financial Resources  
(Data to be filled in for the first year course faculty and budget allocation and utilization)

E1. First Year Student-Faculty Ratio (FYSFR)

Table No. E1.1: FYSFR details.

| Year           | Sanctioned intake of all UG programs (S4) | No. of required faculty (RF4= S4/20) | No. of faculty members in Basic Science Courses & Humanities and Social Sciences including Management courses (NS1) | No. of faculty members in Engineering Science Courses (NS2) | Percentage= No. of faculty members ((NS1*0.8) + (NS2*0.2))/(No. of required faculty (RF4)); Percentage= ((NS1*0.8) +(NS2*0.2))/RF |
|----------------|-------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| 2023-24(CAYm2) | 480                                       | 24                                   | 19                                                                                                                  | 9                                                           | 71                                                                                                                                |
| 2024-25(CAYm1) | 720                                       | 36                                   | 28                                                                                                                  | 14                                                          | 70                                                                                                                                |
| 2025-26(CAY)   | 720                                       | 36                                   | 28                                                                                                                  | 14                                                          | 70                                                                                                                                |

E2. Budget Allocation, Utilization, and Public Accounting at Institute Level

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

| Items                                  | Budgeted in 2025-26 | Actual Expenses in 2025-26 till | Budgeted in 2024-25 | Actual Expenses in 2024-25 till | Budgeted in 2023-24 | Actual Expenses in 2023-24 till | Budgeted in 2022-23 | Actual Expenses in 2022-23 till |
|----------------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|
| Infrastructure Built-Up                | 28030000            | 27869573                        | 13988000            | 13903379                        | 13305000            | 13484908                        | 5018000             | 4966489                         |
| Library                                | 2997000             | 2955134                         | 2723000             | 2632751                         | 2410000             | 2385498                         | 2183000             | 2127202                         |
| Laboratory equipment                   | 19426000            | 19152856                        | 11295000            | 10971270                        | 11364000            | 11342795                        | 8576000             | 8443361                         |
| Teaching and non-teaching staff salary | 157156000           | 155519229                       | 143248000           | 139348804                       | 122340000           | 119170198                       | 109192000           | 105195655                       |

|                                          |                  |                  |                  |                  |                  |                  |                  |                  |
|------------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Outreach Programs                        | 2165000          | 2125076          | 1976000          | 1952625          | 1824000          | 1812253          | 1737000          | 1719498          |
| R&D                                      | 17729000         | 17455796         | 11903000         | 11475703         | 9847000          | 9602279          | 7836000          | 7617830          |
| Training, Placement and Industry linkage | 10677000         | 10430580         | 9230000          | 8923486          | 7528000          | 7315764          | 6298000          | 6096470          |
| SDGs                                     | 28959000         | 28552041         | 27084000         | 26427741         | 22929000         | 22620402         | 20329000         | 20141010         |
| Entrepreneurship                         | 2487000          | 2453878          | 2013000          | 1953334          | 1563000          | 1524956          | 1227000          | 1204560          |
| Others, specify                          | 33018000         | 32461270         | 31490000         | 30315096         | 28688000         | 28138689         | 26304000         | 25795006         |
| <b>Total</b>                             | <b>302644000</b> | <b>298975433</b> | <b>254950000</b> | <b>247904189</b> | <b>221798000</b> | <b>217397742</b> | <b>188700000</b> | <b>183307081</b> |

### E3. Budget Allocation, Utilization, and Public Accounting at Program Specific Level

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

| Items                                            | Budgeted in 2025-26 | Actual Expenses in 2025-26 till | Budgeted in 2024-25 | Actual Expenses in 2024-25 till | Budgeted in 2023-24 | Actual Expenses in 2023-24 till | Budgeted in 2022-23 | Actual Expenses in 2022-23 till |
|--------------------------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|---------------------|---------------------------------|
| Laboratory equipment                             | 1761000             | 1735580                         | 532000              | 520219                          | 299000              | 298654                          | 229000              | 225643                          |
| Software                                         | 0                   | 0                               | 0                   | 0                               | 0                   | 0                               | 0                   | 0                               |
| SDGs                                             | 3995000             | 3994375                         | 3942000             | 3860569                         | 3662000             | 3605683                         | 3418000             | 3347336                         |
| Support for faculty development                  | 456000              | 448740                          | 372000              | 369032                          | 354000              | 345260                          | 287000              | 279138                          |
| R & D                                            | 937000              | 922457                          | 856000              | 855646                          | 839000              | 818036                          | 639000              | 632760                          |
| Industrial Training, Industry expert, Internship | 346000              | 337933                          | 328000              | 317212                          | 315000              | 310315                          | 267000              | 258596                          |
| Miscellaneous Expenses*                          | 670000              | 662892                          | 591000              | 568745                          | 533000              | 522754                          | 528000              | 517471                          |
| <b>Total</b>                                     | <b>8165000</b>      | <b>8101977</b>                  | <b>6621000</b>      | <b>6491423</b>                  | <b>6002000</b>      | <b>5900702</b>                  | <b>5368000</b>      | <b>5260944</b>                  |