

NATIONAL BOARD OF ACCREDITATION

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

| | |
|---|--|
| Program Name : Civil Engineering | Discipline : Engineering & Technology |
| Level : Under Graduate | Tier : 2 |
| Application No : 11451 | Date of Submission : 29-01-2026 |

PART A- Profile of the Institute

| | |
|--|--------------------------------------|
| A1. Name of the Institute: Vidya Pratishthan's Kamalnayan Bajaj Institute of Engineering & Technology, Baramati | |
| Year of Establishment : 2000 | Location of the Institute: Baramati |
| A2. Institute Address: Vidyanagari, Bhigwan Road, Baramati, Dist. Pune : 413 133, MAH, India | |
| City:Pune | State:Maharashtra |
| Pin Code:413133 | Website:http://www.vpkbiet.org |
| Email:principal.vpkbiet@vidyapratishthan.com | Phone No(with STD Code):02112-239500 |
| A3. Name and Address of the Affiliating University (if any): | |
| Name of the University : Savitribai Phule Pune University Pune | City: Pune |
| State : Maharashtra | Pin Code: 413133 |
| A4. Type of the Institution: Self-Supported Institute | |
| A5. Ownership Status: Self financing | |

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

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

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

| Sr.No. | Discipline | Level of program | Name of the program | Year of Start | Year of Closed | Name of The Department |
|--------|--------------------------|------------------|---|---------------|----------------|---|
| 1 | Engineering & Technology | UG | Artificial Intelligence and Data Science | 2020 | -- | Artificial Intelligence and Data Science |
| 2 | Engineering & Technology | PG | Artificial Intelligence and Data Science | 2020 | -- | Computer Engineering |
| 3 | Engineering & Technology | UG | Civil Engineering | 2006 | -- | Civil Engineering |
| 4 | Engineering & Technology | UG | Computer Engineering | 2000 | -- | Computer Engineering |
| 5 | Engineering & Technology | PG | Computer Engineering | 2010 | 2020 | Computer Engineering |
| 6 | Engineering & Technology | PG | Design Engineering | 2012 | 2020 | Mechanical Engineering |
| 7 | Engineering & Technology | PG | Digital Systems | 2010 | 2020 | Electronics and Telecommunication Engineering |
| 8 | Engineering & Technology | UG | Electrical Engineering | 2010 | -- | Electrical Engineering |
| 9 | Engineering & Technology | UG | Electronics and Telecommunication Engineering | 2000 | -- | Electronics and Telecommunication Engineering |
| 10 | Engineering & Technology | PG | Energy Engineering | 2011 | 2019 | Mechanical Engineering |
| 11 | Engineering & Technology | UG | Information Technology | 2000 | -- | Information Technology |
| 12 | Engineering & Technology | UG | Mechanical Engineering | 2002 | -- | Mechanical Engineering |
| 13 | Engineering & Technology | PG | Robotics & Automation | 2020 | -- | Mechanical Engineering |
| 14 | Engineering & Technology | PG | Structural Engineering | 2012 | -- | 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 |
|---|---------------------------|---|---------------|
| Electronics and Telecommunication Engineering | Yes | Electronics and Telecommunication 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 APPROVAL DETAILS |
|--------|-------------------|-----------------------|--------------------------------|-------------------|-----------------------------------|---------------------------|----------------|------------------------|---|
| 1 | Civil Engineering | UG | 2006 / -- | 60 | No | NA | 60 | 2006 | 740-89-037-(NDEG)/ET/2000 Dated:26/05/2006 |

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.Chittaranjan Birabar Nayak |
| B. Nature of appointment: | Regular |
| C. Qualification: | M.Tech and 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 | 60 | 56 | 47 | 49 | 32 | 43 | 55 |
| N2=Number of students admitted in 2nd year in the same batch via lateral entry including leftover seats | 0 | 13 | 20 | 22 | 37 | 25 | 19 |
| N3=Separate division if any | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| N4=Total no. of students admitted in the 1st year via all supernumerary quotas | 6 | 8 | 8 | 8 | 8 | 9 | 4 |

| | | | | | | | |
|---|----|----|----|----|----|----|----|
| Total number of students admitted in the program (N1 + N2 + N3 + N4) - excluding those admitted through multiple entry and exit points. | 66 | 77 | 75 | 79 | 77 | 77 | 78 |
|---|----|----|----|----|----|----|----|

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 | 60 | 6 | 110.00 |
| 2024-25 (CAYm1) | 60 | 56 | 8 | 106.67 |
| 2023-24 (CAYm2) | 60 | 47 | 8 | 91.67 |

$$\text{Average } [(ER1 + ER2 + ER3) / 3] = 102.78 \approx 100$$

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

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

| Item | (2021-22) LYG | (2020-21) LYGm1 | (2019-20) LYGm2 |
|--|------------------|--------------------|--------------------|
| A*=(No. of students admitted in the 1st year of that batch and those actually admitted in the 2nd year via lateral entry, plus the number of students admitted through multiple entry (if any) and separate division if applicable, minus the number of students who exited through multiple entry (if any). | 97.00 | 85.00 | 79.00 |
| B=No. of students who graduated from the program in the stipulated course duration | 57.00 | 62.00 | 69.00 |
| Success Rate (SR)= (B/A) * 100 | 58.76 | 72.94 | 87.34 |

$$\text{Average SR of three batches } ((SR_1 + SR_2 + SR_3)/3): 73.01$$

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) | 7.72 | 7.84 | 6.39 |
| Y=Total no. of successful students | 57.00 | 49.00 | 29.00 |
| Z=Total no. of students appeared in the examination | 64.00 | 55.00 | 57.00 |
| API [X*(Y/Z)] | 6.88 | 6.98 | 3.25 |

$$\text{Average API} [(AP1+AP2+AP3)/3] : 5.70$$

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

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

| Academic Performance | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) |
|--|-------------------|-------------------|-------------------|
| X=(Mean of 2nd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 2rd year/10) | 7.84 | 6.99 | 6.87 |
| Y=Total no. of successful students | 68.00 | 48.00 | 68.00 |
| Z=Total no. of students appeared in the examination | 69.00 | 51.00 | 76.00 |
| API [X * (Y/Z)] | 7.73 | 6.58 | 6.15 |

$$\text{Average API } [(AP1 + AP2 + AP3)/3] : 6.82$$

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

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

| Academic Performance | CAYm1 (2024-25) | CAYm2 (2023-24) | CAYm3 (2022-23) |
|--|-----------------|-----------------|-----------------|
| X=(Mean of 3rd year grade point average of all successful students on a 10-point scale) or (Mean of the percentage of marks of all successful students in 3rd year/10) | 7.37 | 7.59 | 7.37 |
| Y=Total no. of successful students | 37.00 | 66.00 | 70.00 |
| Z=Total no. of students appeared in the examination | 48.00 | 68.00 | 76.00 |
| API [X*(Y/Z)]: | 5.68 | 7.37 | 6.79 |

$$\text{Average API } [(AP1 + AP2 + AP3)/3] : 6.61$$

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 | 97.00 | 85.00 | 79.00 |
| X=No. of students placed | 28.00 | 21.00 | 27.00 |
| Y=No. of students admitted to higher studies | 8.00 | 12.00 | 5.00 |
| Z= No. of students taking up entrepreneurship | 0.00 | 9.00 | 4.00 |
| Placement Index(P) = $\frac{(X + Y + Z)}{FS} * 100$: | 37.11 | 49.41 | 45.57 |

Average Placement Index = $(P_1 + P_2 + P_3)/3$: 44.03 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) | Cur Ass (Y/N) |
|-------|--------------------------------|-------------|------------------|-----------------------------|---------------------------|-------------------------------------|--|---|---------------------|---|---|---------------|
| 1 | Dr.Chittaranjan Birabar Nayak | XXXXXXXX33P | M.Tech and Ph.D. | SPPU, Pune | Structural Engineering | 07/07/2009 | 16.6 | Assistant Professor | Associate Professor | 26/09/2019 | Regular | Yes |
| 2 | Dr. Giridhar Narayanrao Narule | XXXXXXXX39K | M.Tech and Ph.D. | Mumbai University | Structural Engineering | 17/08/2005 | 20.5 | Assistant Professor | Associate Professor | 26/09/2019 | Regular | Yes |
| 3 | Dr.Samadhan Ganpat Morkhade | XXXXXXXX31B | M.Tech and Ph.D. | VNIT, Nagpur | Structural Engineering | 13/12/2016 | 9.1 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 4 | Dr.Ravindra Jaysing Patil | XXXXXXXX82A | M.Tech and Ph.D. | IIT Guwahati | Environmental Engineering | 16/01/2017 | 9 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 5 | Dr. Nagesh Tatoba Suryawanshi | XXXXXXXX59G | M.Tech and Ph.D. | Shivaji univ.& SPPU | Construction Management | 17/08/2022 | 3.5 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 6 | Mr. Dilip Gulabrao Patil | XXXXXXXX33L | M.Tech | COEP, SPPU | Town & Country Planning | 03/08/2011 | 14.5 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 7 | Dr. Umesh Tukaram Jagdale | XXXXXXXX89J | M.Tech and Ph.D. | SPPU | Structural Engineering | 21/07/2014 | 11.6 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 8 | Ms. Jyoti Chhagan Bhong | XXXXXXXX17E | M.Tech | SPPU, Pune | Geotechnical Engineering | 14/01/2016 | 10 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 9 | Dr. Dhiraj Dipak Ahiwale | XXXXXXXX49D | M.Tech and Ph.D. | DYPU, Pune | Structural Engineering | 13/12/2016 | 9.1 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 10 | Mr. Rushikesh Ramesh Khartode | XXXXXXXX30C | M.Tech | Shivaji University Kolhapur | Structural Engineering | 16/12/2016 | 9.1 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 11 | Mr. Abhijeet Mohanlal Gaikwad | XXXXXXXX05G | M.Tech | Shivaji University Kolhapur | Structural Engineering | 04/01/2017 | 9 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 12 | Ms. Pallavi Arunoday Bokey | XXXXXXXX94P | M.Tech | GCOEA, SGBAU | Geotechnical Engineering | 01/01/2018 | 8 | Assistant Professor | Assistant Professor | | Regular | Yes |

| | | | | | | | | | | | | |
|----|-----------------------------|-------------|------------------|------------|------------------------|------------|------|---------------------|---------------------|--|----------------------|-----|
| 13 | Dr. Snehal Balkrishna Walke | XXXXXXXX05C | M.Tech and Ph.D. | DYPU, Pune | Structural Engineering | 03/01/2013 | 13 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 14 | Dr. Yogesh H Tambe | XXXXXXXX97P | M.Tech and Ph.D. | SPPU, Pune | Structural Engineering | 16/02/2023 | 2.11 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 15 | Dr. Paritosh Kumar Singh | XXXXXXXX38M | M.E. and Ph.D. | BIT Mesra | Structural Engineering | 11/08/2025 | 0.5 | Assistant Professor | Assistant Professor | | Regular | Yes |
| 16 | Ms. Priyanka Khade | XXXXXXXX37M | M.Tech | SPPU, Pune | Structural Engineering | 25/08/2025 | 0.5 | Assistant Professor | Assistant Professor | | Contractual Fulltime | Yes |

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

C2. Student-Faculty Ratio (SFR)

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

UG1=1st UG program

UGn=nth UG program

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

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

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

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

PG1=1st PG program.

PGm=mth PG program

A= No. of Students in PG 1st year

B= No. of Students in PG 2nd year

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

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

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

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

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

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

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

| Description | CAY(2025-26) | CAYm1 (2024-25) | CAYm2 (2023-24) |
|---|--------------------|--------------------|--------------------|
| UG1.B | 66 | 66 | 66 |
| UG1.C | 66 | 66 | 66 |
| UG1.D | 66 | 66 | 66 |
| UG1: Civil Engineering | 198 | 198 | 198 |
| PG1.A | 18 | 18 | 18 |
| PG1.B | 18 | 18 | 18 |
| PG1: Structural Engineering | 36 | 36 | 36 |
| DS=Total no. of students in all UG and PG programs in the Department | 234 | 234 | 234 |
| AS=Total no. of students of all UG and PG programs in allied departments | 0 | 0 | 0 |
| S=Total no. of students in the Department (DS) and allied departments (AS) | S1= 234 | S2= 234 | S3= 234 |
| DF=Total no. of faculty members in the Department | 16 | 14 | 14 |
| AF= Total no. of faculty members in the allied Departments | 0 | 0 | 0 |
| F=Total no. of faculty members in the Department (DF) and allied Departments (AF) | F1= 16 | F2= 14 | F3= 14 |
| FF=The faculty members in F who have a 100% teaching load in the first-year courses | 4 | 1 | 1 |
| Student Faculty Ratio (SFR)=S/(F-FF) | SFR1= 19.50 | SFR2= 18.00 | SFR3= 18.00 |
| Average SFR for 3 years | SFR= 18.50 | | |

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) | 9 | 7 | 11.00 | 26.82 |
| 2024-25(CAYm1) | 6 | 8 | 11.00 | 20.91 |
| 2023-24(CAYm2) | 6 | 8 | 11.00 | 20.91 |

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 | 0.00 | 2.00 | 2.00 | 7.00 | 13.00 |
| 2024-25 | 1.00 | 0.00 | 2.00 | 2.00 | 7.00 | 12.00 |
| 2023-24 | 1.00 | 0.00 | 2.00 | 2.00 | 7.00 | 12.00 |
| Average | RF1=1.00 | AF1=0.00 | RF2=2.00 | AF2=2.00 | RF2=7.00 | AF2=12.33 |

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 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Geotechnical Engineering | 6.00 |
| 2 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Time Management & Study Planning for MPSE Aspirants | 6.00 |
| 3 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Numerical Problem-Solving Techniques for GATE Civil | 10.00 |
| 4 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Fluid Mechanics | 6.00 |
| 5 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Techniques for Competitive Exams | 4.00 |
| 6 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Common Mistakes to Avoid in MPSC Preparation | 6.00 |
| 7 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Prelims Strategy: MCQ Solving Techniques & Accuracy Improvement | 6.00 |
| 8 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Common Mistakes to Avoid in GATE Preparation | 6.00 |

(CAYm2)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|--------------------|-----------------------------|--|---|----------------------|
| 1 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Geotechnical Engineering | 6.00 |
| 2 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Mock Test Analysis & Performance Improvement: MPSE | 6.00 |
| 3 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Subject-Wise Strategy for GATE Civil (Structures, Geotech, Environmental, Transportation) | 18.00 |
| 4 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Geotechnical Engineering | 6.00 |
| 5 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Foundation Engineering | 6.00 |
| 6 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Fluid Mechanics | 6.00 |
| 7 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division-Malshiras | Note-Making Techniques for Long-Term Retention | 2.00 |

(CAYm3)

| S.No | Name of the Person | Designation | Organization | Name of the Course | No. of hours handled |
|------|--------------------|-----------------------------|---|--|----------------------|
| 1 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Geotechnical Engineering | 6.00 |
| 2 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Fluid Mechanics | 6.00 |
| 3 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Foundation Engineering | 6.00 |
| 4 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | MPSE Strategy: Prelims + Mains + Interview Roadmap | 12.00 |
| 5 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Complete GATE Preparation Strategy for Civil Engineering | 6.00 |
| 6 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | How to Start MPSC Preparation Along with College | 4.00 |
| 7 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Approach to Core Subjects | 4.00 |
| 8 | Dr. Amol Maskar | Assistant Engineer, Grade 1 | Water Resources Department, Division- Malshiras | Concept Building vs Problem Practice: Right Balance | 4.00 |

C6. Academic Research

Table No. C6.1: Faculty publication details.

| S.No. | Item | 2024-25 (CAYm1) | 2023-24 (CAYm2) | 2022-23 (CAYm3) |
|-------|--|-----------------|-----------------|-----------------|
| 1 | No. of peer reviewed journal papers published | 27 | 18 | 7 |
| 2 | No. of peer reviewed conference papers published | 13 | 4 | 1 |
| 3 | No. of books/book chapters published | 2 | 2 | 4 |

C7. Sponsored Research Project

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

(CAYm1)

(CAYm2)

| PI Name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title* | Name of the Funding agency | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 |
|---------------------------|--------------------|--|--|-----------------------------------|-------------------------|-----------------------------------|
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Sustainable CRMB Binder for Pavement Construction: Rheology, Environmental Impact & Optimization | V H KHATRI CONSTRUCTION PVT. LTD. | 1Year | 12.00 |
| Ms. Pallavi A. Bokey | | Civil Engineering | Loading Frame: To determine the load settlement behaviour of soil | Extreme Engineers and Consultant | From 2023-2024 | 1.50 |
| | | | | | | Amount received (Rs.):13.50 |

(CAYm3)

| PI Name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title* | Name of the Funding agency | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 |
|---------------------------|--------------------|--|---|---|-------------------------|-----------------------------------|
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Optimization of Bitumen Content by CRMB Bituminous Pavement using PYTHON | M/s. V. H. Khatri Construction Pvt. Ltd | 1Year | 1.70 |
| Mr. Umesh.T. Jagadale | | Civil Engineering | Study on Cost Optimization for replacement of VG 30/40 in Bituminous Concrete by CRMB | M/s. V. H. Khatri Construction Pvt. Ltd | 1Year | 1.50 |
| Mrs Snehal B. Walke | | Civil Engineering | Effect of Water Quality on Concrete by Partial Replacement of cement with glass powder and egg shell powder | M/s. V. H. Khatri Construction Pvt. Ltd | 1Year | 1.50 |
| Ms. Jyoti C. Bhong | | Civil Engineering | Differential settlement simulator tank | Extreme Engineers and Consultant | From 2022-2023 | 1.50 |
| | | | | | | Amount received (Rs.):6.20 |

Total Amount (Lacs) Received for the Past 3 Years: 19.70

Note*:

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

C8. Consultancy Work

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

(CAYm1)

| PI Name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title* | Name of the Funding agency | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 |
|---------------------------|-----------------------|--|---|-----------------------------------|-------------------------|-----------------------------------|
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit of six buildings and Baramati water supply system | Baramati Nagar-Parishad | 8 Days | 0.44 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Structural Audit of Primary School buildings, Baramati | Baramati Nagar-Parishad | 10 Days | 0.70 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Structural Audit of Balwadi building, Baramati | Baramati Nagar-Parishad | 10 Days | 0.60 |
| Mr. Rushikesh R. Khartode | | Civil Engineering | Concrete Cube Testing | T&T Infra Pvt. Ltd., Pune | 1 Day | 0.02 |
| Dr. Giridhar N. Narule | Ms. Pallavi A. Bokey | Civil Engineering | Bearing capacity of soil | M/S. Kale Brothers & Con | 5 Day | 0.20 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Contouring | M/s. Kale Brothers & Con. | 5 Day | 0.06 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Cutting and filling quantity | M/S. Kale Brothers & Con | 5 Day | 0.15 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | Constro & Infra Pvt. Ltd | 1 Day | 0.03 |
| Mr. Dilip G. Patil | | Civil Engineering | Concrete Cube Testing | Constro & Infra Pvt. Ltd. | 1 Day | 0.03 |
| Dr. Giridhar N. Narule | | Civil Engineering | Concrete Cube Testing | Ujjwal Engineering, Phaltan | 1 Day | 0.02 |
| Dr. Giridhar N. Narule | Dr. Yogesh H. Tambe | Civil Engineering | NTD Testing | Devika V. Mehta | 5 Day | 0.09 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Core and Impact Testing | Prakrut Lab | 4 Day | 0.02 |
| Dr. Nagesh T. Suryawanshi | | Civil Engineering | Steel testing | Water Staywardship Org. Pvt, Ltd. | 2 Day | 0.05 |
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit of six buildings and Baramati water supply system | Baramati Nagar-Parishad | 8 Day | 0.44 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Structural Audit of Primary School buildings, Baramati | Baramati Nagar-Parishad | 10 Day | 0.70 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Structural Audit of Balwadi building, Baramati | Baramati Nagar-Parishad | 10 Day | 0.60 |
| Mr. Rushikesh R. Khartode | | Civil Engineering | Concrete Cube Testing | T&T Infra Pvt. Ltd., Pune | 1 Day | 0.02 |
| Dr. Giridhar N. Narule | Ms. Pallavi A. Bokey | Civil Engineering | Bearing capacity of soil | M/S. Kale Brothers & Con. | 5 Days | 0.20 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Contouring | M/S. Kale Brothers & Con. | 5 Days | 0.06 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Cutting and filling quantity | M/S. Kale Brothers & Con. | 5 Days | 0.15 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | Constro & Infra Pvt. Ltd. | 1 Day | 0.03 |
| Mr. Dilip G. Patil | | Civil Engineering | Concrete Cube Testing | Constro & Infra Pvt. Ltd. | 1 Day | 0.03 |
| Dr. Giridhar N. Narule | | Civil Engineering | Concrete Cube Testing | Ujjwal Engineering, Phaltan | 1 Day | 0.02 |
| Dr. Giridhar N. Narule | Dr. Y. H. Tambe | Civil Engineering | NTD Testing | Devika V. Mehta | 5 Days | 0.09 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Core and Impact Testing | Prakrut Lab | 4 Day | 0.02 |
| Dr. Nagesh T. Suryawanshi | | Civil Engineering | Steel testing | Water Staywardship Org. Pvt, Ltd. | 2 Days | 0.05 |
| | | | | | | Amount received (Rs.):4.82 |

(CAYm2)

| PI Name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title* | Name of the Funding agency | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 |
|---------------------------|---|--|---|---|-------------------------|--------------------------------------|
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit | Daund Nagar-Parishad | 5 Days | 0.43 |
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit | Baramati Nagar-Parishad | 5 Days | 0.25 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Requirement of Concrete Mould | M/S. Magnetic Electrical Line | 1 Days | 0.00 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | M/S. Biradar Govt. Con. Line Contractor | 1 Days | 0.02 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | M/S. Biradar Govt. Con. Line Contractor | 1 Days | 0.02 |
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Concrete Cube Testing | M/S. Biradar Govt. Con. Line Contractor | 1 Days | 0.05 |
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Concrete Cube Testing | M/S. Biradar Govt. Con. Line Contractor | 1 Days | 0.01 |
| Dr. Giridhar N. Narule | | Civil Engineering | Structural Audit | Baramati Nagar-Parishad | 10 Days | 0.30 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale | Civil Engineering | Contouring and bearing capacity of soil | S. T. Electricals Pvt. Ltd. | 8 Days | 0.30 |
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Concrete Cube Testing | M/S. V.H. Khatri Asso | 1 Days | 0.05 |
| Dr. Giridhar N. Narule | Dr. Dhiraj D. Ahiwale, Ms. Pallavi A. Bokey | Civil Engineering | Contouring and bearing capacity of soil | S. T. Electricals Pvt. Ltd. | 8 Days | 0.30 |
| Dr. Dhiraj D. Ahiwale | Dr. Giridhar N. Narule | Civil Engineering | Contouring and bearing capacity of soil | S. T. Electricals Pvt. Ltd. | 8 Days | 0.15 |
| Dr. Dhiraj D. Ahiwale | Dr. Giridhar N. Narule | Civil Engineering | Contouring and bearing capacity of soil | S. T. Electricals Pvt. Ltd. | 8 Days | 0.15 |
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Concrete Cube Testing | M/S. V.H. Khatri Asso | 1 Days | 0.03 |
| Dr. Giridhar N. Narule | | Civil Engineering | Structural Audit | Baramati Nagar-Parishad | 10 Days | 1.60 |
| | | | | | | Amount received (Rs.):3.66 |

(CAYm3)

| PI Name | Co-PI names if any | Name of the Dept., where project is sanctioned | Project Title* | Name of the Funding agency | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 |
|---------------------------|---------------------------|--|---|--|-------------------------|--------------------------------------|
| Mr. Umesh T. Jagadale | Dr. Chittaranjan B. Nayak | Civil Engineering | Concrete Cube Testing | Sujit Kishor-Assist. Engg. Irrigation Sub.Baramati | 1 Days | 0.20 |
| Dr. Chittaranjan B. Nayak | | Civil Engineering | Concrete Cube Testing | Jha Construction | 1 Days | 0.01 |
| Mr. Dilip G. Patil | | Civil Engineering | Concrete Cube Testing | Prathmesh Construction | 1 Days | 0.01 |
| Mr. Dilip G. Patil | | Civil Engineering | Concrete Cube Testing | Prathmesh Construction | 1 Days | 0.04 |
| Ms. Snehal B. Walke | | Civil Engineering | Concrete Cube Testing | Ambhuja Cement | 1 Days | 0.01 |
| Mr. Dhiraj D. Ahiwale | | Civil Engineering | Steel Testing | Yash Electro Lline Pvt. Ltd. | 2 Days | 0.02 |
| Dr. Nagesh T. Suryawanshi | | Civil Engineering | Concrete Cube Testing | Ambhuja Cement | 1 Days | 0.01 |
| Mr. Abhijit M. Gaikwad | | Civil Engineering | Concrete Cube Testing | Prathmesh Construction | 1 Days | 0.01 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | Vipul Vanjare (Ambuja Cement) | 1 Days | 0.01 |
| Dr. Nagesh T. Suryawanshi | Mr. Abhijit M. Gaikwad | Civil Engineering | Core Testing | Phaltan Nagarparishad | 10 Days | 0.05 |
| Dr. Giridhar N. Narule | Dr. Chittaranjan B. Nayak | Civil Engineering | Structural Audit of School building No.3,4 &6 | Baramati Nagar Parishad | 10 Days | 2.10 |
| Mr. Dilip G. Patil | | Civil Engineering | Concrete Cube & Steel Testing | Prathmesh Construction | 2 Days | 0.02 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube & Steel Testing | Gargate and son's, | 1 Days | 0.01 |
| Dr. Nagesh T. Suryawanshi | | Civil Engineering | Concrete Cube & Steel Testing | Prathmesh Construction | 1 Days | 0.03 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube & Steel Testing | Utkarsh Pvt Ltd | 1 Days | 0.03 |
| Dr. Giridhar N. Narule | | Civil Engineering | Soak CBR Test on soil samples | Infrastructure Developer | 5 Days | 0.14 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube & Steel Testing | Prathmesh Construction | 1 Days | 0.01 |
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit of buildings | Saswad Nagar Parishad | 10 Days | 0.24 |
| Mr. Umesh T. Jagadale | Mr. Rushikesh R. Khartode | Civil Engineering | Testing of cement, briks, sand,stone | Baramati Nagar Parishad | 2 Days | 0.07 |
| Dr. Giridhar N. Narule | Dr. Chittaranjan B. Nayak | Civil Engineering | Structural Stability Audit of three buildings | Baramati Nagar Parishad | 10 Days | 2.10 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | M/S. Vipul Vanzare Line Contractor | 1 Days | 0.01 |
| Dr. Giridhar N. Narule | Mr. Umesh T. Jagadale | Civil Engineering | Water Audit of buildings | Daund Nagar Parishad | 10 Days | 0.45 |
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit of buildings | Saswad Nagar Parishad | 10 Days | 0.13 |
| Dr. Giridhar N. Narule | | Civil Engineering | Water Audit of buildings | Baramati Nagar Parishad | 10 Days | 0.25 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | M/S. Deepak B. Kate Line Contractor | 1 Days | 0.01 |
| Mr. Umesh T. Jagadale | | Civil Engineering | Concrete Cube Testing | M/S. Deepak B. Kate Line Contractor | 1 Days | 0.01 |
| | | | | | | Amount received (Rs.):5.98 |

Total amount (Lacs) received for the past 3 years: 14.46

Note*:

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

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

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

(CAYm1)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|--|---|-------------------------|--------------------------------------|---|---|
| Dr. Samadhan .G.Morkhade | Workshop for PhD Guide | 1 Day | 0.02 | 0.02 | Guide 2 PhD students and also published research papers |
| Dr. Samadhan .G.Morkhade | Technical Event Kreate | 2 Day | 0.12 | 0.12 | Students participated in technical event KREATE at Jalna |
| Dr. Dhiraj D. Ahiwale, Mr. Rushikesh R. Khartode | ICTE QIP PG Certificate Programme at IIIT Surat | 15 Days | 0.20 | 0.20 | Taught Machine Learning Concept in Class |
| Ms. Pallavi A. Bokey | Institute level elocution compition | 1 Day | 0.02 | 0.02 | Institute level elocution compition on the occassion of Yuva day on 16th Jan 2025 |
| Dr. Chittaranjan B. Nayak along with other institute faculties | Infocomn India Mumbai 2024 | 1 Day | 0.14 | 0.14 | Expenses incurred on food & car bill during Infocomn India Mumbai 2024 |
| Dr. Chittaranjan B. Nayak | Attending Avishkar 2024 Institute level competition data submission to SPPU | 1 Day | 0.05 | 0.05 | Avishkar 2024 Institute level compition |
| Mr. Dilip G. Patil | 2 month FDPon "RS & GIS Applicationand Reg. planning studies at Dehradun | 2 Month | 0.10 | 0.10 | Learn "RS & GIS Applicationand Reg. planning studies" and taught to students |
| Mr. Rushikesh R. Khartode, Dr. Chitragar P. R. | 1 day workshop on NEP2020 at IIM Nagpur | 1 Day | 0.20 | 0.20 | Attend 1 day workshop on NEP2020 at IIM Nagpur on 23/10/2024 |
| | | | Amount received (Rs.): 0.85 | | |

(CAYm2)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|---------------------------|---|-------------------------|--------------------------------------|---|--|
| Dr. Chittaranjan B. Nayak | 1 Day Workshop on Advance in Civil Engineering" under Indian Geotechnical Society Student Chapter | 1 Day | 0.09 | 0.09 | 1 Day Workshop on Advance in Civil Engineering |
| Dr. Ravindra J. Patil | Youth Enangement & Water Source Training Programme of Green Club organised by UNICEF & DTE | 1 Day | 0.01 | 0.01 | Youth Enangement & Water Source Training Programme of Green Club organised by UNICEF & DTE |
| Mr. Rushikesh R. Khartode | TA/DA to attend 1 day FDP | 1 Day | 0.02 | 0.02 | Attend 1 Day FDP on Aple Prashna Aple Vidhan at Ghokale Institute Pune on 16/01/2024 |
| | | | Amount received (Rs.): 0.12 | | |

(CAYm3)

| Faculty name | Project title/ Support for Activity | Duration of the project | Amount(Lacs) i.e. 15,25,000=15.25 | Amount Utilized(Lacs) i.e. 15,25,000=15.25 | Outcomes of the project |
|--|--|-------------------------|-----------------------------------|--|--|
| Dr. Samadhan G. Morkhade, Mr. Dhiraj D. Ahiwale | technical visit to Milenium Technologies and Rodyne Systems, Bangalore | 3 Days | 0.10 | 0.10 | Site visits / interaction with industry experts to improve understanding |
| Dr. Nagesh T. Sueyawanshi, Mr. Umesh T. Jagadale, Mr. Abhijit M. Gaikwad | Attending seminar on Urban Infrastrcture | 1 Day | 0.02 | 0.02 | Know various Urban Infrastrcture facilities |
| Dr. Chittaranjan B. Nayak | Support for computational facility for AI/ML projects | 2022-2023 | 6.00 | 6.21 | AI/ML projects, DELL Precision 3660 Tower- Intel i9-01 machine, DELL Precision 3660 Tower- Intel i7-02 machine |
| | | | Amount received (Rs.): 6.12 | | |

Total amount (Lacs) received for the past 3 years : 7.09

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 | Environmental Engineering | 4 | 1. UV Spectrophotometer 2. Respirable dust Sampler 3. BOD incubator | 20/T. E and for | Ms. Sai Gadhre | Lab Assistant | B.E. Civil |
| 2 | Geotechnical Engineering | 4 | 1. Direct Shear Test 2. Triaxial Test 3. California Bearing Ratio Apparatus 4. Unconfined Compression Test 5. | 20/S. E and for | Ms. Sai Gadhre | Lab Assistant | B.E. Civil |
| 3 | Transportation Engineering | 4 | 1. Ductility Testing Machine 2. Los Angeles Abrasion Testing Machine 3. Universal Distortive Apparatus 4. | 20/B. E and for | Mr. S. B. Mark | Lab Technician | Diploma |
| 4 | Strength of Material | 4 | 1. Tile Abrasion Testing Machine 2. Flexural Strength Testing Machine 3. Charpy Impact Testing Machine 4. | 16/S. E and pr | Mr. S. B. Mark | Lab Technician | Diploma |
| 5 | Fluid Mechanics | 4 | 1. Mini Hydraulic Flume with Adjustable Channel Apparatus 2. Open Circuit Wind Tunnel Apparatus 3. | 16/S. E and pr | Ms. Sai Gadhre | Lab Assistant | B.E. Civil |
| 6 | Surveying | 4 | 1. 1" Micro Optic Theodolite 2. 20" Transit Theodolite 3. Total Station 4. Distomatic 5. Plane Table 6. | 16/S. E and for | Mr. Jeewan Soni | Lab Assistant | B.E. Civil |
| 7 | Engineering Geology | 4 | 1. Rock Specimens 2. Mineral Specimens | 16/S. E and pr | Mr. Jeewan Soni | Lab Assistant | B.E. Civil |
| 8 | Concrete Technology | 4 | 1. Compression Testing Machine 2. Flexural Strength Machine 3. Ultrasonic Pulse Velocity Test 4. | 24/S. E and for | Mr. S. B. Mark | Lab Technician | Diploma |
| 9 | Engineering Mechanics | 4 | 1. Reaction of simple beam 2. Belt Friction Apparatus 3. Polygon of Forces Apparatus 4. | 30/F. E | Ms. Sai Gadhre | Lab Assistant | B.E. Civil |
| 10 | CAD Lab | 1 | 1. STAAD.Pro Software 2. AutoCAD 3. MATLAB 4. Gram++ | 32/S. E, B.E ar | Mr. J. R. Sona | Lab Assistant | B.E. Civil |

D2. Safety Measures in Laboratories

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

| Sr. No | Laboratory Name | Safety Measures |
|--------|-----------------|-----------------|
| | | |

| | | |
|---|---|---|
| 1 | <div data-bbox="224 201 748 310" style="border: 1px solid black; padding: 5px;"> Environmental Engineering </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Appropriate storage area is available. • Always enter the lab with aprons, safety shoes, hand gloves and safety glasses. • Chemicals must be handled very carefully and not to be touched with bare hands. • Concentrated acids such as H₂SO₄, HCL are highly toxic and dangerous and inhaling of the same is to be avoided. • The user's manual should be read and safety precautions to be understood before using instruments such as spectrophotometer, turbidity meter etc. • Working area is kept clean and tidy. • Mandatory use of lab coats, gloves, and safety goggles while handling chemical reagents. • Fume hood usage for experiments involving volatile or hazardous gases. • Clearly marked hazardous waste disposal bins and emergency eyewash stations. |
| 2 | <div data-bbox="224 573 748 682" style="border: 1px solid black; padding: 5px;"> Geotechnical Engineering </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Appropriate storage area is available. • Always enter the lab with safety shoes. • Do not attempt to repair/operate anything that you are not qualified to repair/operate. • Any sharp tool or machine should be used carefully in supervision of Lab attendant or faculty. • Carefully inspect all protective equipment prior to use. • Do not use defective equipment. • Students are instructed to follow instructions given by the faculty precisely. If any part of the equipment fails while being used, they are informed to report it immediately to faculty. • The crowding around the equipment is to be avoided. • Use of safety shoes to prevent injury from heavy soil samples or metal equipment. • Proper anchoring of heavy machinery like Triaxial or Direct Shear apparatus. • Dust control measures during soil sieving and oven-drying processes. |
| 3 | <div data-bbox="224 972 748 1081" style="border: 1px solid black; padding: 5px;"> Transportation Engineering </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Appropriate storage area is available. • Students are instructed to wear shoes and to completely cover their foot while working in the laboratory. • Place all the belongings out of the work area. • Report faulty equipment to the teaching assistant immediately. • Do not operate electrical equipment that has frayed or damaged power cords or connectors. • Students are allowed to perform only those experiments authorized by the faculty. • Keep safe distance from hot surfaces, rotating components, and heater. • Avoid Lighting a Match or Lighter and use of cell phone. • The crowding around the equipment is to be avoided. • Heat-resistant gloves used when handling hot bitumen or using the aggregate drying oven. • Adequate ventilation to prevent the buildup of fumes during bitumen testing. • Guard rails or safety shields on Los Angeles Abrasion and Impact testing machines. |
| 4 | <div data-bbox="224 1381 748 1491" style="border: 1px solid black; padding: 5px;"> Strength of Material </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Perform only those experiments authorized by Faculty. • Any failure or break-down of equipment must be reported to the lab assistant or lab in-charge. • Power supply to your test table should be obtained only through the lab technician/ instructor. • Do not lean and do not be close to the rotating components. • Read the instructions mentioned in the manual carefully and then proceed for the experiment. • Please follow equipment or machine operating instructions. • Care must be taken while dealing with electrical connections. • Do not attempt to repair/operate anything that you are not qualified to repair/operate. • High-impact safety screens on the Universal Testing Machine (UTM) to protect against flying debris during specimen failure. • Strict "No Entry" zones during high-load hydraulic testing. • Emergency stop buttons clearly accessible on all motorized testing frames. |

| | | |
|---|---|--|
| 5 | <div data-bbox="224 226 748 338" style="border: 1px solid black; padding: 5px;"> Fluid Mechanics </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Do not touch anything with which you are not completely familiar. Carelessness may not only break the valuable equipment in the lab but may also cause serious injury to you and others in the lab. • Please follow instructions precisely as instructed by faculty. • Do not start the experiment unless your setup is verified and approved by faculty. • Do not leave the experiments unattended while in progress. • Do not crowd around the equipment and run inside the laboratory. • During experiments material may fail and disperse, please maintain at a safe distance from the experimental setup. • If any part of the equipment fails while being used, report it immediately to faculty. Never try to fix the problem yourself because you could further damage the equipment and harm yourself and others in the lab. • Always enter the lab with safety shoes. • Non-slip floor mats installed around hydraulic benches and flumes to prevent falls. • Regular electrical safety audits for water pumps and flow meters. • Waterproof casing for all nearby electrical sockets and switches. |
| 6 | <div data-bbox="224 583 748 695" style="border: 1px solid black; padding: 5px;"> Surveying </div> | <ul style="list-style-type: none"> General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Appropriate storage area is available. • Sharp tools should be used carefully in supervision of Lab attendant or faculty. • Do not play with instruments or chains. • Do not sit on instruments. • Handle the instruments carefully and follow the instructions while performing the practical on field. • Wear proper safety shoes. • Wear cap while performing the practical on field • Proper handling and leveling of instruments to prevent tipping. • Use of safety jackets and caps during outdoor field surveys. • Secure storage of high-cost equipment like Total Stations in moisture-free cases. |
| 7 | <div data-bbox="224 892 748 1003" style="border: 1px solid black; padding: 5px;"> Engineering Geology </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Know the correct handling procedures for every sample available in the laboratory. • Do not touch specimens and minerals without permission. • Count all specimens before leaving lab. • Do not use mobile phones during lab hours. • Do not use acids like HCL to identify the minerals. • Handle the specimens and minerals carefully. • Do not split and powder the minerals. • Do not displace or remove laboratory samples without proper prior permission. • Safe storage of rock and mineral specimens in sturdy, labeled racks to prevent falling. • Use of safety glasses when using hammers or tools for rock sample preparation. • Systematic organization of geological maps and glass-covered displays to avoid breakage. |
| 8 | <div data-bbox="224 1262 748 1373" style="border: 1px solid black; padding: 5px;"> Concrete Technology </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Periodical servicing of the lab equipment. • Students are instructed to wear shoes and to completely cover their feet while working in the laboratory. • Place all the belongings out of the work area. • Report faulty equipment to the teaching assistant immediately. • Do not operate electrical equipment that has frayed or damaged power cords or connectors. • Students are allowed to perform only those experiments authorized by the faculty. • Students are not allowed to touch the oven during operation and use hand gloves while removing heated objects from oven. • Wet cement is caustic and can cause severe chemical burns to exposed skin and eyes. Hence it should be dealt with care. • Cement comprises of particles less than 45 microns. Always wear mask while working with cement. • Non-slip floor mats installed around hydraulic benches and flumes to prevent falls. • Regular electrical safety audits for water pumps and flow meters. • Waterproof casing for all nearby electrical sockets and switches. |
| 9 | <div data-bbox="224 1583 748 1694" style="border: 1px solid black; padding: 5px;"> Engineering Mechanics </div> | <ul style="list-style-type: none"> • General rules of conduct in laboratories are displayed. • Specific safety rules for students are displayed. • Availability of first aid box is ensured. • Well-trained technical supporting staff. • Equipment or machine operating instructions are properly followed. • The crowding around the equipment is to be avoided. • Strict adherence to machine operation manuals for load-testing equipment. • Floor markings to ensure safe distance from moving parts of experimental setups. • Regular lubrication and maintenance check-ups of pulley and gear systems. |

| | | |
|----|---------|---|
| 10 | CAD Lab | <p>Students are insisted to read carefully and understand the laboratory discipline and safety regulations. • Working area is kept clean and tidy. • Do not use mobile phones during lab hours. • Food or beverage is not allowed in the laboratory. • Do not plug in external devices without scanning them for computer viruses. • Try not to touch any of the circuit boards and power sockets when a device is connected to them and switched on. • Students should not attempt to repair, open, tamper or interfere with any of the computers, cabling, or other equipment in the laboratory. • Ergonomic seating and adequate lighting to reduce eye and back strain. • Proper electrical earthing and use of UPS to prevent short circuits or data loss. • Systematic wire management and fire extinguishers (CO2 type) installed for electrical safety.</p> |
|----|---------|---|

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) | 540 | 27 | 15 | 13 | 54 |
| 2024-25(CAYm1) | 540 | 27 | 17 | 17 | 63 |
| 2025-26(CAY) | 900 | 45 | 21 | 25 | 48 |

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 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Library | 1900000 | 1634000 | 1700000 | 1499000 | 1550000 | 1578000 | 1500000 | 1430000 |
| Laboratory equipment | 5326000 | 2840000 | 3733000 | 1403000 | 2637000 | 1019000 | 1800000 | 1424000 |
| Teaching and non-teaching staff salary | 184573000 | 177250000 | 179402000 | 148860000 | 161505000 | 133452000 | 144914000 | 137214000 |
| Outreach Programs | 75000 | 19000 | 50000 | 20000 | 50000 | 10000 | 75000 | 19000 |
| R&D | 3500000 | 2396000 | 6575000 | 2107000 | 7735000 | 1679000 | 5100000 | 1658000 |
| Training, Placement and Industry linkage | 1000000 | 301000 | 1200000 | 640000 | 600000 | 1054000 | 575000 | 321000 |
| SDGs | 600000 | 535000 | 350000 | 535000 | 400000 | 308000 | 350000 | 274000 |
| Entrepreneurship | 200000 | 73000 | 100000 | 5000 | 400000 | 0 | 300000 | 71000 |
| Others, specify | 58626000 | 43556000 | 44421000 | 35091000 | 47573000 | 58148000 | 48380000 | 34468000 |
| Total | 255800000 | 228604000 | 237531000 | 190160000 | 222450000 | 197248000 | 202994000 | 176879000 |

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 | 345000 | 356028 | 350000 | 455898.9 | 430000 | 367922 | 340000 | 24190 |
| Software | 300000 | 0 | 0 | 0 | 125000 | 0 | 50000 | 0 |
| SDGs | 60000 | 54783 | 120000 | 46828.4 | 65000 | 49953 | 35000 | 78021 |
| Support for faculty development | 40000 | 28509 | 95000 | 23747.3 | 50000 | 85775 | 15000 | 15741 |
| R & D | 80000 | 248642 | 140000 | 198641.4 | 45000 | 190788 | 20000 | 176492 |
| Industrial Training, Industry expert, | 30000 | 4679 | 135000 | 24491 | 35000 | 17000 | 15000 | 16505 |
| Miscellaneous Expenses* | 45000 | 44052 | 60000 | 62143.1 | 50000 | 52338 | 25000 | 39653 |
| Total | 900000 | 736693 | 900000 | 811750.1 | 800000 | 763776 | 500000 | 350602 |