

# FOR 2<sup>nd</sup> CYCLE OF ACCREDITATION

# **BUILDERS ENGINEERING COLLEGE**

MULLIPURAM POST, NATHAKADAAIYUR, ERODE ROAD, KANGEYAM TALUK, TIRUPPUR DISTRICT, TAMIL NADU - 638 108 638108 www.builderscollege.edu.in

### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

May 2022

### 1. EXECUTIVE SUMMARY

### 1.1 INTRODUCTION

Erode Builder Educational Trust (EBET), has been founded by a group of like-minded visionaries who felt the need for an apex academic and professional educational institution, committed to delivering through a number of institutes, schools, and colleges, high standards of academic excellence for enriching lives through value-based education. The campus, a sprawling one of nearly 24.72 acres, is located in EBET Knowledge Park about 12 km from the town of Kangeyam on Erode – Palani state highway. In the year 2017, NAAC awarded our institution with a B++ rating. In the same year, our college was renamed Builders Engineering College (BEC) from Erode Builder Educational Trust's Group of Institutions.

BEC offers 6 U.G. Programmes (BE – CIVIL, CSE, EEE, ECE & Mechanical, and B. Tech – AI&DS) with an intake of 330 students as well as four P.G. Programmes (ME – CEM, STR, CSE, and MBA) with an intake of 54 & 60 students respectively. The institute is also privileged to be vested with the MHRD's Institution Innovation Council (IIC).

The fees and other payments are to be enabled completely on the digital platform for the students. To make our institution a paperless campus we would like to rely on Campus Management Software (CMS) effectively in the future. We have planned to enable GPS tracking systems in our college buses in order to make the students track the conveyance and to ensure the safety and security of female students. The establishment of the latest technology for rainwater harvesting has been planned to save water inside the campus and we concentrated to avoid Pollution of Air, Water, and Soil.

Our management has made strong decisions in approaching the problems related to preserving the resources available. They have decided on and implemented the Solid Waste Management system (Bio Gas, Paper), Water Conservation system, Water Recycling plant, Electrical Energy Conservation system (Solar). Our institution is a member of NDLI (National Digital Library of India) which gives access to faculty members and students to view the e-books to improve their teaching and learning processes.

### Vision

To be the most preferred knowledge provider.

#### Mission

Builders Engineering College endeavors to prepare rural students for successful career through academic and applied research.

### 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

**Institutional Strength** 

- 1. **IMAGE-BEC** has acquired complete dominance in the field of providing high-quality technical education in Tirupur region. This distinguishes the institution as the first option of students and parents. This is demonstrated by our track record of consistently filling all available seats and placing students in prestigious corporate organizations.
- 2. **INFRASTRUCTURE** The Institution's major strengths include a well-developed world-class infrastructure with a built-up area of 53,649 square meters that encompasses instructional space, circulation space, amenities, equipment, and a library, as well as Innovation and Incubation centres.
- 3. **FACULTY-** Faculty who are qualified, informed, and experienced across all cadres and with a range of specialisations form the academic backbone of the institution. Among the 98 faculty members, 20 hold a Ph.D and 18 faculty members are pursuing doctoral degrees. The college exemplifies an ideal environment for higher education.
- 4. **STUDENTS** The institution's students come from a variety of different backgrounds and locations. We have students from all over the state and neighboring states. The Institution prioritizes equal opportunities for physically challenged students.
- 5. **A BALANCED PORTFOLIO OF PROGRAMMES OFFERED** Finally, the Institution's well-balanced portfolio of undergraduate and postgraduate programmes in core engineering places it as the pinnacle of engineering in the Tiruppur region.
- 6. **STUDENT CENTRIC APPROACH** The institution's teaching and non-teaching faculty members are highly qualified academicians who work tirelessly to empower students through their curricular and extracurricular activities.
- 7. **PLACEMENT RECORD** The institution is fortunate enough to boast about its excellent placement record. It constantly places its students in prestigious companies with competitive packages.
- 8. Expansive lush green campus set in a natural setting.
- 9. A conducive environment and cutting-edge infrastructure.
- 10. CCTV surveillance of the campus
- 11. Solar energy provides uninterrupted power and water to the entire campus.
- 12. The teaching-learning process is facilitated by ICT.
- 13. Skill development programmes are available to students beginning in their first year.
- 14. Utilization of renewable energy sources such as biogas and solar energy
- 15. Water recycling via sewage treatment plants

### **Institutional Weakness**

- Students come from rural areas and are striving to achieve global standards in Technical Education. They find communicating in English to be a mammoth task, which becomes a hamartia for placement that must be meticulously addressed.
- Funding sponsored research.
- Students' communication skills are average.
- Research involvement and thought processes are low: 70% of parents from illiterate backgrounds are unconcerned about their children's growth. The socioeconomic status of the parents is below average.
- Geographically situated in a rural area and the industrial connectivity is limited.
- Departments must be recognised by Anna University as Research Centers

### **Institutional Opportunity**

- The economic, industrial, and academic environments provide numerous opportunities for the Institution to develop into a centre of excellence.
- Establishment of Centers of Excellence in critical areas such as research and consulting
- Through the Entrepreneurship Development Cell, students have the opportunity to pursue entrepreneurial endeavors.
- Offering courses via NPTEL has an effect on students' self-learning initiative.
- Value-added courses allow for the exploration of new areas of interest.
- Maintaining a continuous dialogue with industry in order to foster mutual growth.
- Facilitating the extension of facilities to society through extension activities.

### **Institutional Challenge**

- COVID caused upheaval in all spheres of life, particularly socioeconomic and academic activities, but with the able guidance of our captain of the ship, Our Chairman, we weathered the storm in all our endeavours.
- Adapting to rapid changes in technology and industrial requirements in order to enhance students' employability skills.
- Changing admissions landscape in the engineering discipline as a result of the proliferation of other professional programmes.
- Students' reading habits have deteriorated as a result of media influence.

### 1.3 CRITERIA WISE SUMMARY

### **Curricular Aspects**

Builders Engineering College is an affiliated Institution under Anna University, Chennai, Tamilnadu. The College offers six Undergraduate programmes, BE - Civil Engineering, Computer Science Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering & Mechanical Engineering and B.Tech - Artificial Intelligence & Data Science as well as four Postgraduate programmes, ME - Construction Engineering Management, Structural Engineering, Computer Science Engineering and MBA as per the regulations and curriculum & syllabi of Anna University, Chennai. The Programmes follow the Choice Based Credit System where the students are offered Elective courses framed by Anna University, Chennai. The Institution involves actively in implementing the prescribed syllabus given by University. The Faculty members

are committed to enriching the lives of budding rural aspirants through academic and research activities. Based on the academic schedule given by University, academic activities are perfectly carried out for preparing students to face the examination. To add to curricular activities, various certificate courses, Guest lectures, Inplant training, Internship and value-added courses are given to make the students industry-ready as well as to face the technical interviews boldly. Faculty members are involved in the design and development of certificate courses offered. The institution offers opportunities to students to improve their skills by undergoing fieldwork, internship, project work and experiential learning. Students and Faculty members are motivated to undergo self-learning courses offered by NPTEL - SWAYAM chapter and COURSERA to cater for the needs of academia and industry. To enhance their social skills with learning skills, students are prompted to attend conferences, symposiums, and competitions. The management with all their heart and soul helps the students to develop their knowledge and skills through various activities. Feedback from stakeholders like students, faculty members, alumni and employers gives ample opportunity to enhance the institutional activities thereby critically analyzing the present situation. The inferences are discussed leading to take an action plan and implement the desired activities for the betterment of students.

### **Teaching-learning and Evaluation**

Teaching learning process is the key factor determining the progress of any institute's academic growth. Tamil Nadu Government Reservation norms are adopted in the admission policy of the college. Students from different walks of life have diverse needs. The prime task lies in leveling up all the students to the same benchmark before the start of a course. The Bridge course serves this purpose. The induction programme conducted at the beginning of the course helps the students to familiarize with the institutional atmosphere, courses, objectives, infrastructure, teaching strategies, curriculum, syllabus, evaluation systems, and practices of the college.

Before the commencement of the course, an academic calendar is prepared based on the academic schedule received from University and the same is uploaded in the college website. Delivering the contents is facilitated with the ICT tools. Orientation for the freshers, remedial classes for weak students, attention for advanced learners by involving them in seminars and mentor mentee system for nurturing students' minds ensure an effective learning sphere within the institution.

Every year Management calculates sanctioned posts and allows the institute to fill the vacancy. The quality of the institute is also enhanced by appointing distinguished professor. Further to bridge the academics and industry, persons from industries are invited for guest lectures, workshops and conferences. Once the course gets started, attainment of course objectives is monitored regularly. The class committee is conducted four times a semester to hear students' grievances.

Program Specific outcomes (PSOs), attainment levels of COs, POs and PSOs are mapped and evaluated periodically through direct and indirect methods. The student feedback mechanism received at the end of every semester facilitates the identification of the strength and areas for continuous improvement in teaching learning process.

#### Research, Innovations and Extension

The college has a well-defined policy for the promotion of research activities. Institution has received research grant amount of 30 lakhs in last four years form government and non-government organisations. To meet the emerging academic and research needs,62 Workshops and Seminars were arranged in various topics related to Research methodology, IPR and Entrepreneurship development. The institute also provides money to the faculty for the promotion of research culture. The library provides a host of books, journals, magazines and other publications.

The College has 14 functional MOUs with institutions of national and international importance. The students have benefitted from the linkages with the industry and various collaborative activities like Industrial Projects, Internship trainings, Site visits and training programs were organised. In the last five years 104 research papers were published in indexed journals. Conference papers was also published as an outcome of improving research culture of the Institution.

The Institute believes in sensitizing its students towards social and environmental issues. The Institute has conducted extension and outreach programs in collaboration with various stakeholders of the society. Awareness programs and camps are organised by NSS, YRC, RRC and Women development cell, Student volunteers are actively participated in the camps and spread awareness to the public. More than 500 units of blood was donated by our student volunteers in blood donation camps and it was highly appreciated. Student volunteers actively participated and involved in cleanliness drives through Swachh Bharat Abhiyan scheme in adapted villages. In order to crate a clean and green environment, more than 5000 trees are planted at various locations. In association with Police department of Kangayam, Road safety awareness programs, Helmet awareness rally, Drug awareness programs are conducted to spread awareness about safe riding.

### **Infrastructure and Learning Resources**

Builders Engineering College (BEC) has most significant infrastructure to provide all-inclusive learning platform for students and faculty. BEC spreads over an area of 200 acres comprising of 39 Classrooms, 3 Seminar Halls, 44 Laboratories, Workshops, Library, Computer Centre, Innovation Centre, Incubation Centre, Play grounds and Gymnasium. The Institution has a Central Library with an area of 714 Sqm. The Central Library has various Text books, Reference Books, e-Books, Journals, Magazines, e-Journals, Project Reports, Question Banks and NPTEL Videos. The Library uses ILMS (Integrated Library Management System) with facilities like accessing, circulation of books, and OPAC. The library has subscribed to the e-resources of e-Shodh Sindhu. The digitalized library serves as the knowledge centre for students in our campus. BEC has 1034 computers with student computer ratio of 1:1 and well equipped internet facility of 115 Mbps, leased line from Jio and BSNL Wi-Fi. Video conferencing facility is also available to interact with experts from remote locations. The Institution has the facility of IIT, Bombay remote centre. The College provides facilities for the students to participate in sports and games in College, University, District, State and National levels competitions. Indoor and outdoor games facilities are available in the campus and effectively used by the students during and after the college hours. Basket ball court is available with floor flood lights. Auditorium is used for conducting cultural events/activities, co-curricular activities and Yoga classes. The institute has dedicated maintenance department to monitor the maintenance. BEC lights up with Solar Power plant of 200kW worth of 1.25 crores. Healthy and Hygienic food is provided in BEC Cafeteria. Transport facility is provided with the help of 18 buses. In addition, the institution has Staff quarters, Separate hostel for both boys

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and girls, ATM facility, Dispensary, Bio Gas plant, Sewage Treatment Plant, Ambulance. The Institute ensures optimal allocation and utilization of the available financial resources for physical & academic maintenance and upkeep by holding regular meetings with maintenance team.

### **Student Support and Progression**

Our Builders Engineering College is committed to the goal of transforming every student into a responsible global citizen with excellent academic freedom. Most of the students are from Tamil Nadu, neighboring states and some non-resident Indians. Students are given the opportunity to express their views. Financial assistance in the form of scholarships is provided by government, non-government and institutional institutions, and study loans from nationalized banks are also arranged. The institution have employed placement officer and special trainers to support the students in the way of soft skill, communication skill, mental ability, stress management and computing to success in various drives. Free training and coaching for interested students is arranged to appear for competitive examinations. Career Guidance programmes are conducted for the students to appear for competitive examinations. College library provides books to prepare for these exams. The higher education cell of the institute provides support for students to pursue their higher education. The institution also provides support to participate in various events such as basketball, volleyball, yoga, kabaddi and several cultural activities, etc. During regular mentoring sessions by the faculty student gets good counsel in academic and personal wise. The institution has a Psychiatrist for personal counseling the students to overcome the personal issues. Grievance Redressal Cell, anti-ragging committee and womens development cell has been functioning in the college for the past many years. The institution has a well defined online/offline mechanism for student complaints and is resolved by the appropriate committee immediately. The college has an Alumni Association; alumni are invited to share their expertise, ideas and experience to motivate the students. Social media is also used to coordinate the activities of the association. The institution is also very glad to conduct 'Tricarnival 'the day of tri function -Annual day, Sports day, Alumini day, 'SPROUT' the day for new students who enters the institution every year.

### Governance, Leadership and Management

Builders Engineering College (Formerly EBET Group of Institutions) is founded by a group of visionaries who are committed to enriching the lives of rural youth through value-based education. BEC is governed by two important bodies of repute Governing Council and Internal Quality Assurance Cell (IQAC) which are taking care of all governance of the institute in various functional levels. The institute has well structured organizational hierarchy accountable for the various assigned roles and responsibilities assisted with egovernance in Administration, Finance, Accounts, Admission and other supports. Various committees have been framed in a democratic way under the guidelines of senior faculty members which results in effective, transparent and participative management.

Both upward and downward approaches are used to frame and implement the policies of the institute. The framed policies and other academic and administrative related decisions are communicated through HODs meeting by the Principal and subsequently it reaches to the staff members through their respective department HODs. The institute is following a service rule for recruitment, code of conduct, and other benefits to staff members. BEC is providing various welfare facilities to the staff members like group insurance schemes, Individual desktops with Internet facilities, Transportation with concession, financial assistance for attending seminar, conferences, workshop, FDP etc. The institute is regularly collecting feedback from the students and parents through class committee meeting and parents meeting respectively.

BEC is marching with a strategic plan and each and every activity are properly implemented and documented to ensure the development of the institute. BEC is following a transparent performance appraisal system for faculty and staff members for further promotion. The institute has an external auditor to check and verify the effective use of funds. Internal Quality Assurance cell is organizing two meetings per year to ensure the continuous improvement of quality in teaching learning process.

### **Institutional Values and Best Practices**

The Institution is devoted to its accountabilities to the environment and consciously monitors the greenery in the campus by planting good number of trees and other plants. Our institution is conscious of the environment and strives to keep the campus clean and green. Planting of saplings is our regular activity. As a part of energy conservation methods our BEC campus has been installed 200Kwp Solar Plant to reduce the dependency of EB power. As an energy conservation measure we adopted solar based street lights, Motion sensor based street lights. Usage of LED bulbs consumes less quantity of electricity. To ensure the clean drinking water RO facility is available in our campus. Steam based cooking processes which minimize the environment pollutions are effectively used in our campus. Sewage treatment Plant (STP) is established to recycle the waste water. Our college has installed bio gas plant with the capacity of 45m3 to process food waste and other biodegradable waste. Women Development Cell promotes women empowerment and gender equality. Career Oriented Skill Development Training Modules given to students. Water conservation facilities are accessible in our campus. Essentials facilities are available for divyangjan students. We are celebrating national and international days such as Independence Day, Women's Day etc.

# 2. PROFILE

# 2.1 BASIC INFORMATION

| Name and Address of the College |  |  |  |
|---------------------------------|--|--|--|
| Name                            | BUILDERS ENGINEERING COLLEGE   |  |  |
| Address                         | MULLIPURAM POST, NATHAKADAAIYUR,<br>ERODE ROAD, KANGEYAM TALUK,<br>TIRUPPUR DISTRICT, TAMIL NADU - 638 108 |  |  |
| City                            | Naathakadaiyur Kangeyam  |  |  |
| State                           | Tamil Nadu   |  |  |
| Pin                             | 638108   |  |  |
| Website                         | www.builderscollege.edu.in   |  |  |

| Contacts for Communication |                      |                         |            |                  |                                      |
|----------------------------|----------------------|-------------------------|------------|------------------|--------------------------------------|
| Designation                | Name                 | Telephone with STD Code | Mobile     | Fax              | Email                                |
| Principal                  | S Gopalakris<br>hnan | 04257-241935            | 9487811008 | 04257-24188<br>5 | principal@builders<br>college.edu.in |
| IQAC / CIQA<br>coordinator | M S Senthil<br>Kumar | 04257-241545            | 8012184454 | 04257-24188<br>5 | iqac@builderscolle<br>ge.edu.in      |

| Status of the Institution |                |  |
|---------------------------|----------------|--|
| Institution Status        | Self Financing |  |

| Type of Institution |              |  |
|---------------------|--------------|--|
| By Gender           | Co-education |  |
| By Shift            | Regular      |  |

| Recognized Minority institution            |    |
|--|----|
| If it is a recognized minroity institution | No |

| <b>Establishment Details</b>         |            |
|--------------------------------------|------------|
| Date of establishment of the college | 01-01-2009 |

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# University to which the college is affiliated/ or which governs the college (if it is a constituent college)

| State      | University name | Document      |
|------------|-----------------|---------------|
| Tamil Nadu | Anna University | View Document |

| Details of UGC recognition |      |               |  |  |
|----------------------------|------|---------------|--|--|
| <b>Under Section</b>       | Date | View Document |  |  |
| 2f of UGC                  |      |               |  |  |
| 12B of UGC                 |      |               |  |  |

|                                      | gnition/approval by sta<br>MCI,DCI,PCI,RCI etc |            | bodies like |                          |
|--------------------------------------|--|------------|-------------|--------------------------|
| Statutory<br>Regulatory<br>Authority | Remarks  |            |             |                          |
| AICTE                                | View Document                                  | 30-06-2021 | 12          | Extension of<br>Approval |

| Details of autonomy  |    |
|--|----|
| Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges? | No |

| Recognitions  |    |
|---|----|
| Is the College recognized by UGC as a College with Potential for Excellence(CPE)? | No |
| Is the College recognized for its performance by any other governmental agency?   | No |

| Location and Area of Campus |   |           |                      |                          |
|-----------------------------|---|-----------|----------------------|--------------------------|
| Campus Type                 | Address   | Location* | Campus Area in Acres | Built up Area in sq.mts. |
| Main campus<br>area         | MULLIPURAM POST,<br>NATHAKADAAIYUR,<br>ERODE ROAD,<br>KANGEYAM TALUK,<br>TIRUPPUR DISTRICT,<br>TAMIL NADU - 638 108 | Urban     | 31.27                | 37591.3                  |

### 2.2 ACADEMIC INFORMATION

| <b>Details of Pro</b> | ogrammes Offe   | red by the Col        | lege (Give Data            | a for Current A          | Academic year          | )                             |
|-----------------------|---|-----------------------|----------------------------|--------------------------|------------------------|-------------------------------|
| Programme<br>Level    | Name of Pr<br>ogramme/C<br>ourse                            | Duration in<br>Months | Entry<br>Qualificatio<br>n | Medium of<br>Instruction | Sanctioned<br>Strength | No.of<br>Students<br>Admitted |
| UG                    | BE,Civil<br>Engineering                                     | 48                    | HSC OR EQ<br>UIVALENT      | English                  | 60                     | 57                            |
| UG                    | BE,Compute<br>r Science<br>And<br>Engineering               | 48                    | HSC OR EQ<br>UIVALENT      | English                  | 60                     | 60                            |
| UG                    | BE,Electroni<br>cs And Com<br>munication<br>Engineering     | 48                    | HSC OR EQ<br>UIVALENT      | English,Hind i           | 60                     | 60                            |
| UG                    | BE,Electrical<br>And<br>Electronics<br>Engineering          | 48                    | HSC OR EQ<br>UIVALENT      | English                  | 60                     | 60                            |
| UG                    | BE,Mechani<br>cal<br>Engineering                            | 48                    | HSC OR EQ<br>UIVALENT      | English                  | 60                     | 60                            |
| UG                    | BTech,Artifi<br>cial<br>Intelligence<br>And Data<br>Science | 48                    | HSC OR EQ<br>UIVALENT      | English                  | 30                     | 30                            |
| PG                    | ME,Civil<br>Engineering                                     | 24                    | BE OR<br>BTECH OR          | English                  | 24                     | 0                             |

|    |   |    | EQUIVALE<br>NT                      |         |    |   |
|----|---|----|-------------------------------------|---------|----|---|
| PG | ME,Civil<br>Engineering                         | 24 | BE OR<br>BTECH OR<br>EQUIVALE<br>NT | English | 24 | 0 |
| PG | ME,Comput<br>er Science<br>And<br>Engineering   | 24 | BE OR<br>BTECH OR<br>EQUIVALE<br>NT | English | 24 | 0 |
| PG | MBA,Master<br>Of Business<br>Administrati<br>on | 24 | UG                                  | English | 60 | 0 |

# Position Details of Faculty & Staff in the College

|  | Teaching Faculty |           |        |       |      |                     |        |       |                            |        |        |       |
|--|------------------|-----------|--------|-------|------|---------------------|--------|-------|----------------------------|--------|--------|-------|
|  | Profe            | Professor |        |       | Asso | Associate Professor |        |       | <b>Assistant Professor</b> |        |        |       |
|  | Male             | Female    | Others | Total | Male | Female              | Others | Total | Male                       | Female | Others | Total |
| Sanctioned by the UGC /University State Government                           |                  | 9         |        | 11    | V    |                     |        | 23    |                            |        |        | 60    |
| Recruited  | 6                | 0         | 0      | 6     | 14   | 5                   | 0      | 19    | 47                         | 13     | 0      | 60    |
| Yet to Recruit   |                  |           |        | 5     |      |                     |        | 4     |                            |        |        | 0     |
| Sanctioned by the<br>Management/Soci<br>ety or Other<br>Authorized<br>Bodies |                  |           |        | 0     |      |                     |        | 0     |                            |        |        | 13    |
| Recruited  | 0                | 0         | 0      | 0     | 0    | 0                   | 0      | 0     | 0                          | 13     | 0      | 13    |
| Yet to Recruit   |                  |           |        | 0     |      |                     |        | 0     |                            |        |        | 0     |

|  |      | Non-Teaching | Staff  |       |
|--|------|--------------|--------|-------|
|  | Male | Female       | Others | Total |
| Sanctioned by the UGC /University State Government                       |      |              |        | 36    |
| Recruited  | 30   | 6            | 0      | 36    |
| Yet to Recruit   |      |              |        | 0     |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |      |              |        | 0     |
| Recruited  | 0    | 0            | 0      | 0     |
| Yet to Recruit   |      |              |        | 0     |

|  | Technical Staff |        |        |       |  |  |  |  |  |
|--|-----------------|--------|--------|-------|--|--|--|--|--|
|  | Male            | Female | Others | Total |  |  |  |  |  |
| Sanctioned by the UGC /University State Government                       |                 |        |        | 0     |  |  |  |  |  |
| Recruited  | 0               | 0      | 0      | 0     |  |  |  |  |  |
| Yet to Recruit   |                 |        |        | 0     |  |  |  |  |  |
| Sanctioned by the<br>Management/Society<br>or Other Authorized<br>Bodies |                 |        |        | 0     |  |  |  |  |  |
| Recruited  | 0               | 0      | 0      | 0     |  |  |  |  |  |
| Yet to Recruit   |                 |        |        | 0     |  |  |  |  |  |

### Qualification Details of the Teaching Staff

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|                                | Permanent Teachers |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 6                  | 0      | 0                   | 9    | 1      | 0                   | 0    | 0      | 0      | 16    |
| M.Phil.                        | 0                  | 0      | 0                   | 1    | 2      | 0                   | 1    | 7      | 0      | 11    |
| PG                             | 0                  | 0      | 0                   | 4    | 2      | 0                   | 46   | 19     | 0      | 71    |
| UG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

|                                | Temporary Teachers |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| M.Phil.                        | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| PG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| UG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

|                                | Part Time Teachers |        |                     |      |        |                     |      |        |        |       |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| Ph.D.                          | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| M.Phil.                        | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| PG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |
| UG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |

| <b>Details of Visting/Guest Faculties</b> |      | V      |        |       |
|---|------|--------|--------|-------|
| Number of Visiting/Guest Faculty          | Male | Female | Others | Total |
| engaged with the college?                 | 0    | 0      | 0      | 0     |

# Provide the Following Details of Students Enrolled in the College During the Current Academic Year

| Programme |        | From the State<br>Where College<br>is Located | From Other<br>States of India | NRI Students | Foreign<br>Students | Total |
|-----------|--------|---|-------------------------------|--------------|---------------------|-------|
| UG        | Male   | 509   | 1                             | 0            | 3                   | 513   |
|           | Female | 283   | 0                             | 0            | 0                   | 283   |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |
| PG        | Male   | 48  | 0                             | 0            | 0                   | 48    |
|           | Female | 53  | 1                             | 0            | 0                   | 54    |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |

# Provide the Following Details of Students admitted to the College During the last four Academic Years

| Programme |        | Year 1 | Year 2 | Year 3 | Year 4 |
|-----------|--------|--------|--------|--------|--------|
| SC        | Male   | 17     | 10     | 12     | 4      |
|           | Female | 12     | 1      | 5      | 5      |
|           | Others | 0      | 0      | 0      | 0      |
| ST        | Male   | 1      | 0      | 0      | 1      |
|           | Female | 0      | 0      | 0      | 0      |
|           | Others | 0      | 0      | 0      | 0      |
| OBC       | Male   | 217    | 120    | 95     | 71     |
|           | Female | 176    | 35     | 74     | 26     |
|           | Others | 0      | 0      | 0      | 0      |
| General   | Male   | 5      | 6      | 3      | 0      |
|           | Female | 1      | 0      | 0      | 1      |
|           | Others | 0      | 0      | 0      | 0      |
| Others    | Male   | 0      | 0      | 0      | 0      |
|           | Female | 0      | 0      | 0      | 0      |
|           | Others | 0      | 0      | 0      | 0      |
| Total     |        | 429    | 172    | 189    | 108    |

### **Institutional preparedness for NEP**

1. Multidisciplinary/interdisciplinary:

Builders Engineering College is an Engineering College offering various programmes in Engineering stream. The programmes offered in various streams gain a multidisciplinary status to the institution. The programmes offered fall under CBCS (Choice Based Credit System) pattern in which the courses prescribed have specific credits. The courses are named as Core, Elective, Skill based, and Value Based with specific number of credits to each course. Almost all the UG Programmes and PG programmes have experiential learning in the form of Projects, Field visits, Study Tours, and Internships. To sensitise the students to environmental issues and to make them eco conscious a course on Environmental

Studies is included in the curriculum for all UG students. A course on Value Education with a special focus on the essential human and life values is also included in the curriculum. The scope of various programmes and the specific objectives of various courses ensure holistic development of the students. Being an affiliated college of Anna University, it follows the procedures framed by the affiliated University. The institution is limited in enabling multiple entry and exits as the norms are decided by the university which approves each programme offered in the college. Students registering for research programmes will be encouraged to carry out multidisciplinary research that would help in finding out appropriate solutions for the current issues and challenges. All the programmes have a non-major elective course in which the students of a particular programme are exposed to multidisciplinary education by choosing a course in a different domain.

2. Academic bank of credits (ABC):

Being an affiliated institution, the college has less scope in taking initiatives to implement ABC system. However, the institution will follow the procedures as framed and prescribed the affiliating university then and there. Regarding pedagogy, the teachers are always encouraged to try out new strategies that are learner centric. In teaching learning, besides, the prescribed text books and reference books, the teachers have the liberty to access any other book or material with content related to the topics prescribed in the syllabi. The teachers are also encouraged to provide additional resources / reading materials. Regarding assessments, both internal and external, the assessment criteria prescribed by the affiliating university is strictly adhered.

3. Skill development:

Most of the programmes have courses which will enable the students to enhance their skills for placement and entrepreneurship. Soft Skill enhancement is achieved by conducting special programmes on Soft Skill Development with experts in the field. Besides teaching the curriculum, the institution takes various initiatives to offer value based education. Life Skill Programmes are conducted to promote life values. Important days like Republic Day, Independence Day, Voter's Day, Untouchability Abolition Day, Environment Day, National Integration Day, and many other important days / events of national importance are celebrated to

promote national integration. Competitions are conducted on such occasions to motivate the students and to inculcate positivity in the young minds. A course on Value Education is also a part of the curriculum that helps in enhancing the humanistic, ethical, and universal values. Every student admitted in the college at the Under Graduate level is supposed to enroll in any of the cell or club like NCC, NSS, YRC,RRC, Eco Club, etc, which is mandatory for graduating. Life skill programmes like Yoga, Mediation, Women Safety, Health and Hygiene, etc, are organized with the services of industry experts who offer hands on training.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Since its inception the college has been promoting the culture and heritage of our nation. Being a higher learning institution, the college adopts English language as the medium of instruction as per the University norms. The institution has also observed the difficulties faced by students with the use of English for class room instruction. Taking the socioeconomic, cultural, and linguistic backgrounds of the students into consideration the teachers are also encouraged to go with bilingual method of teaching. It is also found that the students' receptive skills has enhanced with bilingual mode of delivery. As most of our students hail from rural backgrounds and for a better understanding of the subjects taught bilingual method of delivery is encouraged in almost all programmes.

5. Focus on Outcome based education (OBE):

Outcome-based education is a system where all the parts and aspects of education are focused on the outcomes of the course. The students take up some elective courses with a certain goal of developing skills or gaining knowledge and they have to complete the goal by end of the course. There is no specific style or time limit of learning. The student can learn as per their choice. The faculty members, moderators, and instructors guide the students based on the target outcomes. The programmes and courses prescribed in the syllabi have specific programme and course outcomes. In curriculum design and development sufficient representation is made to the affiliating university. Skill based courses, Job seeking courses, Internships and Project works are a part of our syllabi to make our education outcome based. The teaching learning process is also more learner centric. Students' assessment is made through

|   | continuous internal assessments like assignments, seminars, peer team teaching, group discussions, and quizzes.   |
|---|---|
| 6. Distance education/online education: | Being an affiliated institution, the college offers only regular programmes. No programme is offered through online or distance mode. Earlier, the most popular method used for teaching was chalk and talk method. In the recent times, the education industry has been completely digitalized with the advancements in Science and technology. Our college promotes the use of ICT in teaching learning process. The infrastructure and ICT facilities of the college are continuously augmented by our management to meet out the existing demands. The post Covid scenario has increased the use of many virtual platforms in teaching learning. Both the teacher and student community are now comfortable with many online tools for teaching. During the pandemic the institution has made the best use of blended learning. Online exams, online quizzes, webinars, online assignments along with regular |
|   | physical classes have been tried by the institution as a part of blended learning.  |

# **Extended Profile**

### 1 Program

### 1.1

### Number of courses offered by the Institution across all programs during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 246     | 259     | 276     | 285     | 275     |

| File Description                     | Document             |
|--------------------------------------|----------------------|
| Institutional data prescribed format | <u>View Document</u> |

### 1.2

### Number of programs offered year-wise for last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 9       | 9       | 10      | 10      | 10      |

### 2 Students

### 2.1

### Number of students year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 655     | 916     | 1147    | 1395    | 1572    |

| File Description                        | Document      |
|---|---------------|
| Institutional data in prescribed format | View Document |

### 2.2

# Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 306     | 339     | 505     | 505     | 505     |

| File Description                        | Document             |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

### 2.3

### Number of outgoing / final year students year-wise during last five years

| 276     | 330     | 477     | 405     | 511     |
|---------|---------|---------|---------|---------|
| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |

| File Description                        | Document      |
|---|---------------|
| Institutional data in prescribed format | View Document |

# 3 Teachers

### 3.1

### Number of full time teachers year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 109     | 117     | 139     | 176     | 176     |

| File Description                        | Document             |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

### 3.2

### Number of sanctioned posts year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 109     | 117     | 135     | 176     | 176     |

| File Description |   | Document |        |                 |  |  |
|------------------|---|----------|--------|-----------------|--|--|
|                  | Institutional data in prescribed format |          | View 1 | <u>Document</u> |  |  |

### **4 Institution**

### 4.1

### Total number of classrooms and seminar halls

### Response: 42

### 4.2

### Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 266.47  | 352.86  | 529.94  | 647.18  | 739     |

### 4.3

### **Number of Computers**

Response: 772

## 4. Quality Indicator Framework(QIF)

### **Criterion 1 - Curricular Aspects**

### 1.1 Curricular Planning and Implementation

# 1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

### **Response:**

Builders Engineering College is affiliated with Anna University, Chennai, Tamilnadu, and follows the curriculum and syllabus framed for affiliated colleges. In order to ensure effective curriculum delivery, BEC adopts its unique innovative methods and systematic strategies. The three phases of our systematic strategy comprise Planning, Development & Implementation, and Evaluation.

Systematic Strategy for effective curriculum delivery During the Planning phase, all departments submit the faculty requirement request, if any, to Internal Quality Assurance Cell (IQAC). IQAC collects the request and also verifies the infrastructure available for the smooth functioning of the forthcoming semester. Based on University academic schedule, the College academic calendar of events comprising the reopening date, Internal Assessments date, and the syllabus coverage of Internal assessments and completion date for each unit is framed before the commencement of the semester. During the development phase, elective subjects are finalized and the subject willingness of the faculty members is collected. Based on the competence level of the faculty, subject allocation is done. The curriculum delivery includes traditional teaching, collaborative learning, competition based learning, and supportive learning methods.

- 1. Traditional teaching methods: It includes preparation of detailed lesson plans, a question bank, lab manuals, lecture notes, tutorials and assignments, and content beyond the syllabus based on the feedback from industry, alumni, and previous year's academic performance of the students.
- 2. Collaborative Learning: Our Institution arranges industrial visits and Guest Lectures every semester per class to bridge the gap between industry expectations and Institution. Internship and industrial projects are arranged for the students to avail practical exposure. Value-added courses are arranged for the students to enrich their knowledge. Industry resource persons are utilized to deliver the partial curriculum and content beyond curriculum.
- 3. Competition Based Learning: Students are motivated to participate in national and international competitions conducted in various institutions.
- 4. Before the beginning of the semester the faculties are asked to submit course plan, course material, attendance and assessment record. Faculty will upload course plan and relevant teaching materials in the online platform Moodle/Google Classroom. Time table is prepared considering credit requirement of the subject. Continuous Assessment Tests are conducted after completing one unit. Curriculum delivery, Student performance and progress are periodically monitored by the Head of the Department and Principal.
- 5. The faculty members use various innovative teaching methodology to make teaching learning process more effective. Every department organizes industrial visit, field visits, workshops, seminars, guest lectures, hands on training and internship for enhancing their fundamental concepts

and knowledge of the subjects.

The students are motivated to register for NPTEL online courses. Laboratory Manual is prepared for practical courses with additional/ Design based experiments in addition to list of experiments prescribed by University. Teaching faculty update themselves by attending refresher courses, workshops, Faculty development programs, conferences and seminars .Curricular,C0-curricular and Extra curicular activities are inegrated with Outcome based education..

6. To bridge the curricular gaps in the past five years, Guest lectures and value added courses on topics covering recent trends were arranged with experts drawn from academia and industries.

| File Description              | Document      |  |
|-------------------------------|---------------|--|
| Upload Additional information | View Document |  |

### 1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

### **Response:**

At the beginning of the academic year to academic schedule is published by the University for UG and PG programmes. The Institution confirms effective time management and strictly follows timeliness given by the affiliating university (Anna University). The Institute carries out effective planning to adhere the academic calendar, This permits the faculty members and the students to space out their teaching and learning and regular assessment. Following the affiliated university academic schedule,

Department academic calendar is prepared based on college academic calendar and the university academic schedule. The same is approved by the Principal and then subject allocation and other responsibilities are allotted based on the faculty specialization in the department meeting. As per the department academic calendar, activities are planned and conducted to improve the quality of teaching and learning processevery department expresses internal department calendars to ensure timely delivery of the syllabus includes the department co-curricular activities, tests, and common celebrations of the college.

The Institution conducts value added courses like Add and certificate courses for the interested students. This helps the students to attain knowledge beyond the syllabus as these topics are not covered by the exams conducted by the university. To fill the curriculum gap, these types of courses are conducted every semester in the academic year. The academic calendar is displayed on the College website and in all Department notice boards. The academic calendar includes all working days, holidays, seminars, workshops, sports days, Guest lectures, Assessment dates, celebrations.

To monitor the progress of the students, the Exam cell plays a vital role in the conduction of internal tests and model examinations. The exam schedule is pre-planned and the test were conducted like University Exam to create the same environment and atmosphere for the students. Exam cell announces the dates for submission of Question papers and entry of marks. Also, the Exam cell reminds the last date for portal entry. Question paper setting was taken based upon the question bank and previous university questions with answer keys and the evaluation process was done within two days from the completion of the test.

All faculty and the students are instructed to adhere the Department's calendar which is prepared before the starting of each semester. This adherence of the calendar ensures all the activities planned in the starting of semester are completed as per the date or not. If the department activities are not conducted as per the academic plan, the proper reason will be mentioned and followed that the alternative date of the programme to be conducted will also be mentioned..

| File Description              | Document             |
|-------------------------------|----------------------|
| Upload Additional information | <u>View Document</u> |

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
  - 1. Academic council/BoS of Affiliating university
  - 2. Setting of question papers for UG/PG programs
  - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
  - 4. Assessment /evaluation process of the affiliating University

**Response:** D. Any 1 of the above

| File Description   | Document      |
|--|---------------|
| Institutional data in prescribed format  | View Document |
| Details of participation of teachers in various bodies/activities provided as a response to the metric | View Document |

### 1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 9

| File Description                                   | Document      |
|--|---------------|
| Minutes of relevant Academic Council/ BOS meetings | View Document |
| Institutional data in prescribed format            | View Document |
| Any additional information                         | View Document |

### 1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 82

### 1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 18      | 18      | 17      | 15      | 14      |

| File Description  | Document      |
|---|---------------|
| List of Add on /Certificate programs                                    | View Document |
| Brochure or any other document relating to Add on /Certificate programs | View Document |
| Any additional information  | View Document |

# 1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

**Response:** 46.51

# 1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 408     | 443     | 507     | 570     | 579     |

| File Description  | Document             |
|---|----------------------|
| Details of the students enrolled in Subjects related to certificate/Add-on programs | View Document        |
| Any additional information  | <u>View Document</u> |

#### 1.3 Curriculum Enrichment

# 1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum

### **Response:**

Our Institute integrates the Cross Cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics for the overall development of students.

### 1. Women's Development Cell (Gender Equality):

Institution provides equal opportunities for both boys and girls in terms of admission, co-curricular, extra-curricular and placement opportunities. Both students as well as staff are the representatives of SC/ST committee, Grievance Redressal Cell, Academic Council, Internal Quality Assurance Cell and class committee. Female faculty members are appointed as members of Anti-Ragging committee and Anti-ragging squad as the evidence of empowerment. Equal participation of girl students could be seen in the committees formed for the various functions held in our college especially the organizing committee for college annual day functions, Symposium, cultural programmes in Pongal festival. Women's day celebration is organized every year with the main focus of women empowerment to create awareness and motivation to girl students about their rights and human values of women towards the development of nation.

### 2. Environment and Sustainability:

University has included different types of courses in the curriculum to bring awareness among students for environment and sustainability. All programs have a compulsory course of Environmental Science and Engineering in first and second year curriculum. In this subject, students study the basic components of environment and its application to tackle issues such as pollution control, green gases, rain water harvesting, projects on environmental issues, projects on sustainability, energy conservation and Design of building with the use of sunlight. In Civil Engineering programme, students learn Environmental Engineering Laboratory, Waste Water Engineering and Irrigation Engineering as core subjects. Renewable energy utilization is achieved in our campus through the installation of solar plant and Bio-gas plant. Information of students and faculty members are stored in CMS (College Management Systems) in order to reduce paper utilization.

### 3. Human Rights:

In order to integrate human rights into curriculum Anna University offers Human Computer Interaction, Human Resources Management and Strategic Human Resource Management course as an elective and the same is taught for our students. Further our institute follows a transparent system of administration. Committees like SC/ST and Anti-Ragging deal issues regarding to any related misconduct. The SC/ST committee conducts the meeting with respective students and informs their rights and the available benefits in the society.

### 4. Professional Ethics and Human Values:

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Students are educated about Professional Ethics through Anna University curriculum course "Professional Ethics in Engineering". Professional ethics are principles that govern the behavior of a person or group in their profession. In our institution we educate and motivate the students to follow the key ethical Programme.

| File Description  | Document             |
|---|----------------------|
| Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum. | View Document        |
| Any additional information  | <u>View Document</u> |

# 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

**Response:** 47.83

# 1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 132     | 113     | 139     | 125     | 131     |

| File Description  | Document      |
|---|---------------|
| Programme / Curriculum/ Syllabus of the courses   | View Document |
| MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship | View Document |
| Minutes of the Boards of Studies/ Academic<br>Council meetings with approvals for these courses   | View Document |

# 1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

**Response:** 45.19

### 1.3.3.1 Number of students undertaking project work/field work / internships

| Response: 296   |               |
|---|---------------|
| File Description  | Document      |
| List of programmes and number of students undertaking project work/field work/ /internships | View Document |
| Any additional information  | View Document |

### 1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni

**Response:** A. All of the above

| File Description   | Document             |
|--|----------------------|
| Any additional information (Upload)  | <u>View Document</u> |
| Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload) | View Document        |
| URL for stakeholder feedback report  | View Document        |

### 1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website
- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

**Response:** A. Feedback collected, analysed and action taken and feedback available on website

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |
| URL for feedback report           | View Document |

# **Criterion 2 - Teaching-learning and Evaluation**

### 2.1 Student Enrollment and Profile

### 2.1.1 Average Enrolment percentage (Average of last five years)

Response: 35.53

### 2.1.1.1 Number of students admitted year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 81      | 262     | 144     | 310     | 323     |

### 2.1.1.2 Number of sanctioned seats year wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 444     | 492     | 732     | 732     | 732     |

| File Description                        | Document             |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |
| Any additional information              | View Document        |

# 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 50.66

2.1.2.1 Number of actual students admitted from the reserved categories year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 79      | 257     | 143     | 307     | 316     |

| File Description  | Document      |
|---|---------------|
| Average percentage of seats filled against seats reserved | View Document |
| Any additional information                                | View Document |

### 2.2 Catering to Student Diversity

# 2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

### **Response:**

Once the student admission process is completed, students are invited to attend the bridge course. Bridge course curriculum is well prepared accordingly to improve the various basic skills of the budding students like Mathematical skill, language skill, and computing skills.

Once the First-year admission process is over, one day orientation program is organized for the newly entered students. During this program, university regulations are explained to them. They are instructed about the credit points and calculations for each subject. After the program the students will have campus tour to all departments and laboratories.

Bridge course for the fundamentals of English, Mathematics, Physics, Engineering Graphics and Python subjects are conducted by the faculty of Science and Humanities and Engineering department before the commencement of the class work.

The students belonging to Tamil medium, English medium are identified to improve their communication skills, an additional attention has been given to Tamil medium students to speak confidently, write and interact.

Consequently, students are classified as advanced learners and slow learners at the academic year commencement. Then the institution is implemented different techniques for advanced learners and slow learners.

#### Assessment of slow and advanced learners:

- XII marks/Diploma marks.
- Performance in the internal marks evaluation.
- Arrear history of the students in previous semester/year

#### **Guidelines to advanced learners:**

They are advised to undergo NPTEL courses to enrich their technical knowledge.

They are encouraged to learn value-added and add on courses to acquire skills for employability. Additional German Language classes are also arranged which gives the advantage of studying in general and for career prospects abroad. In addition, acquiring a foreign language enables students to develop various mental abilities.

They are given special training by experts to improve their aptitude and soft skills. This would aid in fetching job opportunities in reputed companies. Mock interviews are also conducted by experts to improve their confidence level to face the interviews.

They are encouraged to participate in symposia, seminars, workshops, national and international conferences organized by reputed institutions.

#### Guide lines to Slow learners:

Coaching classes are conducted for slow learners (students securing less than 60% in internal assessment examinations and end semester examinations). During coaching classes, the students are given individual attention and the Course Instructor/faculty member clarifies their doubts.

Tutorial classes for problematic courses are conducted to improve the problem-solving ability of the students. This will also promote peer learning among the students.

Simplified teaching materials are given to the slow learners to help them score high marks. Important topics in each course, based on previous end semester examination question papers are also discussed during the special classes. This would help them to secure high marks in the forthcoming examinations.

Improvement Tests are conducted to improve the academic performance of the students in internal assessment examinations.

Individual mentoring by Proctors is done at periodic intervals to improve the academic performance of the students.

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

### 2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

Response: 6:1

| File Description           | Document      |
|----------------------------|---------------|
| Any additional information | View Document |

### **2.3 Teaching- Learning Process**

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

#### **Response:**

### 1. Experiential Learning

### (i) Internships

The institution encourages the final year placed students to get training in that company and allow them to

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work as an internship in the final semester so that they could understand the real company environment.

### (ii) Field Trips and Industrial Visits

Students are taken to nearby substations and Industries to observe the concepts in real-time. This will help them to enrich their knowledge in a practical manner. An industrial visit is arranged for the students every semester to get practical knowledge.

### (iii) In-Plant Training

The institution encourages students from all the years to go for in-plant training every semester. In plant, training gives industry exposure. This training adds credits to the students during their placements. It provides hands-on and real time exposure to Engineering graduates.

#### (iv) Laboratory Resources

The institution is furnished with highly equipped laboratory resources. We provide the needed resources for our students to do their innovative projects in all possible ways. Outsourcing is also done for many consultancies based works.

### 2. Participative Learning

### (i) Guest Lectures

Guest lecturers have become an important part of the educational experience for students. One important benefit is derived from having a guest speaker is the enhancement of the student's educational experience.

### (ii) Association Function

Every year Intra department association function is organized under each department for identifying and improving various talents of the students. This is a department level function and students from all the years are encouraged to do mini projects and also focus on their extracurricular skills.

#### (iii) Club activities

The Institution encourages the students to participate in any of the clubs headed by our faculty members. It helps students to develop their personal skills and leadership qualities. Few Clubs are listed below

- 1. National Service Scheme
- 2. Green Energy Club
- 3. Women Development Cell

### (iv) Seminars/ Workshop/Conference

Students are allowed to participate in workshops, Seminars to acquire the knowledge and skills demanded by the industries. Students will get exposure to the selection of their project titles.

### (v) Alumni Interaction Program

In order to motivate current students to upgrade their knowledge based on their interested areas and to improve their ability to the current trends, we organize an alumni meeting. During the interaction, alumni students share their work nature and motivate our current students.

### (vi) Online Certification Courses:

A certification Course helps an individual to showcase his competency, commitment to the profession, build expertise in his professional subject. Hence we encourage our students to do online certification courses like SWAYAM/NPTEL, Coursera, Udemy etc, to enrich their knowledge beyond the academic syllabus.

### 3. Problem solving methodologies

### i) Outbound Training:

Students are send to industries to solve the problems faced by industries, they will apply the knowledge acquire from various activities and arrive the solution for the issues.

### (ii) Project/Mini projects:

Final year students are asked to obtain ideas for the Mini project and Final semester projects from the industries and encouraged to do projects in association with the industries.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

### 2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

#### **Response:**

Builders Engineering College encourages both faculty members and students to utilize the Information Communication Technology (ICT) tools as much as possible in the teaching learning process. The use of ICT tools will make the teaching learning process in a harmonic way for students to understand their subject concepts.

The implementation of ICT enabled tools for effective teaching-learning process includes:

MOOC - Swayam lectures

Video lectures, Animations, online FDP, GL, Seminars, Symposium and Workshop.

LCD Projectors and Smart Boards with smart class room facilty

Digitalized Library.

Theoretical concepts explain through video lessons, PPTs, e-lessons and Lab experiments.

Innovative and creativity methods have been adapted in the teaching-learning process to the students to enhance the learning capabilities and also increasing the knowledge. The innovative teaching is done by

using the ICT tools in the class room teaching, conducting webinars, and NPTEL videos etc.

The learning materials for every course are available in the content server of the college which can be accessed by the students through the intranet facilities. Course materials, question banks, PPTs and lab manuals are periodically uploaded in the Intranet portal/website.

Each department is provided with LCD projector, computer with LAN and internet connection in the seminar hall. Faculty can use the seminar hall for teaching and they can also use black board. One can access the database of digital library, NPTEL videos and other internet facilities which consist of course material, recorded video lectures and animations. Faculty and Students can access the journal resources.

#### **ICT Tools**

Faculty members are provided with an individual desktop computer with sufficient internet connection facilities for preparing their class notes, PPT presentations, etc. All our classrooms are equipped with LCD projector, computer, LAN facilities with sufficient internet facilities. Further, management is provided various ICT tools for conducting online classes like graphical tab, camera, speakers, mic, headsets, etc., Students are completing their assignments and exercises at their home by using their own computers.

#### E-Platform

Builders Engineering College is provided with College Management System (CMS) for the automation of the teaching learning process. The CMS can be accessed in both ways either internet or intranet by faculty members and students. In CMS, faculty members can post their lesson plan, student attendance, internal marks, model exam marks, university results, and course materials. Students can view their attendance and marks, and also they can post their feedback on subject handling faculty members.

#### E-Resources

Faculty members can access Del Net, National Digital Library (NDL), E-Shothsinthu either by internet or intranet for utilising online resources such as e-journals, eBooks, thesis, etc through college user login credentials. Similarly, students can also access e-journals, eBooks, thesis, etc within library premises. Further, BEC students can access the lecture notes either from college website or CMS.

### **Online Teaching Platforms**

Faculty and students are provided with individual login for Microsoft Teams (MS Teams), graphical tab, camera, speakers, mic, headsets, etc., to conduct online classes, examinations, assignment, quiz, etc.,

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

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Response: 11:1

### 2.3.3.1 Number of mentors

Response: 60

| File Description  | Document      |  |  |  |
|---|---------------|--|--|--|
| Upload year wise, number of students enrolled and full time teachers on roll. | View Document |  |  |  |
| mentor/mentee ratio   | View Document |  |  |  |
| Circulars pertaining to assigning mentors to mentees                          | View Document |  |  |  |

### 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 100.59

| File Description  | Document      |
|---|---------------|
| Year wise full time teachers and sanctioned posts for 5years(Data Template) | View Document |
| List of the faculty members authenticated by the Head of HEI                | View Document |
| Any additional information  | View Document |

# 2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

**Response:** 17.93

# 2.4.2.1 Number of full time teachers with $Ph.\ D.\ /\ D.M.\ /\ M.Ch.\ /\ D.N.B$ Superspeciality $/\ D.Sc.\ /\ D.Litt.$ year wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 31      | 27      | 23      | 21      | 17      |

| File Description   | Document      |
|--|---------------|
| List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template) | View Document |
| Any additional information   | View Document |

# 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 6.99

#### 2.4.3.1 Total experience of full-time teachers

Response: 762

| File Description  | Document      |
|---|---------------|
| List of Teachers including their PAN, designation, dept and experience details(Data Template) | View Document |
| Any additional information  | View Document |

#### 2.5 Evaluation Process and Reforms

#### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

#### **Response:**

- The college has an Examination Cell for overseeing the conduct of all the internal and end semester examinations. The Examination Cell Coordinator is assisted by a team consisting of Assistant Examination cell Coordinators, Office Assistants, Computer Programmers, Data Entry Operators and attenders.
- The University circulates the Academic Schedule to the affiliated colleges. Based on the schedule, the Examination Cell of the Institution prepares the Internal Assessment Schedule for all the departments. The same is circulated to all the classes and it is displayed in the Department and Common Notice Board. The Examination pattern is communicated to the students well in advance by the Examination Cell Members of each department.

A detailed academic calendar is available on the website and notice-board of each department. Thus, students would be aware of examinations well in advance and they can plan their study accordingly. Students are informed about various parameters of Internal Evaluation system. The periodic instructions issued by the university are timely communicated to the students. Such instructions are read in the classrooms and the copy of the same is displayed on the department

notice board.

- The institute is affiliated with Anna University, Chennai. University prescribes 80% weightage for university examination and 20% weightage for internal assessment.
- Internal examinations are planned based on the academic schedule received from the university.
- University evaluation pattern is communicated to the students during class committee meetings.
- The university pattern is followed for the preparation of the internal exam question paper. This helps the students in managing time during university examinations.
- Internal examination question paper along with scheme of valuation is approved by the head of the department.
- Three internal exams are conducted for each semester. The syllabus for the internal examination is considered as below.

Internal assessment marks and attendance are uploaded periodically in the Anna university web portal.

| Internal Exam     | Syllabus                                  |  |
|-------------------|---|--|
| Internal Exam I   | Unit 1 (Full unit) and Unit 2 (Half unit) |  |
| Internal Exam II  | Unit 2 (Half unit) and Unit 3 (Full unit) |  |
| Internal Exam III | Unit 4 and Unit 5                         |  |

The centralised internal exam cell conducts the internal exam as planned. A team of the squad is framed by an internal exam cell to monitor the mode of conduct of the examination. The faculty evaluates the internal exam answer sheets within three days from the commencement of examination and the same is verified by the head of the department.

Subject handling faculty members will distribute the answer scripts to the students inside the classroom and the mistakes will be addressed in person. Performance of the students is communicated to the parents through WhatsApp/personal call or SMS letter sent to parents and also displayed in the notice board . The poor performing students should bring their parents to college and be asked to meet their concerned mentor/class advisor / HoD. Internal exam result is analysed by comparing student wise, subject wise, faculty wise, day scholar, and hosteller wise. HoD will give some suggestions to improve the student's performance.

| File Description           | Document             |
|----------------------------|----------------------|
| Any additional information | <u>View Document</u> |

#### 2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

#### **Response:**

• Internal exams are conducted as per the academic schedule and also aligned with the web portal

entry period.

- Class committee meetings are conducted before every internal to get grievances from students for every subject.
- Internal exams schedule is informed to the students through circular, notice board and also informed in a class committee meeting. Also, mentors communicate the schedule to the parents through phone calls.
- Department test-co-coordinator monitors the student's attendance. Mentors of students will discuss with the parents and reasons are recorded in the student's database.
- Within three days, answer sheets are evaluated, verified by the academic co-coordinator/ HoD, and distributed to the students.
- Class advisors consolidate all subject marks and their attendance percentage. After getting approval from respective department heads and Principal, data will be entered in the Anna university web portal. Students may also view it through their login.
- The performance of the students in each internal examination is updated to the parents through letters. If the performance of the students is not up to the mark, parents are given an appointment to discuss with the class advisor/HoD.
- After the evaluation of the answer script, faculty members will be circulating the answer script to the students. They can view the internal test paper and express their discrepancies about the valuation with the concerned faculty members. Finally, they have to sign on the test paper.
- Students can represent the issues that they face in internal exams through a class committee meeting, which was conducted before all internal exams as per Anna university's regulation. Selection of class committee members is based on the data in a Hosteller Day scholar, Lateral entry, English and Tamil medium, and Gender and may vary depending upon the availability. Since all categories of students are members, Since the students come from different categories, all types of issues will be sorted and rectified.
- During External Examination, the hall tickets are issued to the students for University Examinations well in advance. Any grievance related to the hall ticket such as change in Register number, name, subject of examination and loss of Hall ticket are informed to Exam Cell. They forward the issue to the university and necessary actions will be taken.
- After the results has been declared by the University, if the student finds that the given grade is not appropriate then, he/she can apply for photocopies of the answer script through the Examination Cell. Examination Cell Co-ordinator addresses their issues. The photocopy of the assessed answersheets from the University is issued to students within a particular time frame. After receiving photocopies, if students are not satisfied with their grade, he/she may apply for revaluation. The application is forwarded to university for further action.

Even after the revaluation, if the student is not satisfied with the result, he can apply for challenge valuation. The Institution supports in all means for applying for the same.

| File Description |                            | Document             |  |  |
|------------------|----------------------------|----------------------|--|--|
|                  | Any additional information | <u>View Document</u> |  |  |

### 2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

#### **Response:**

Our institute is affiliated to Anna University Chennai and given guidelines to frame coure outcomes for each course. The program outcomes (POs) are well defined and published by the Accreditation body which internationally accepted by all proffesional colleges, program specific outcomes (PSOs) are framed by thre department HoD and senior faculty members. COs are framed by the Heads of the department with a Team of senior Faculty members, after the brain storming sessions with the subject handling faculty members aligning with course content unitwise and Blooms Taxonomy.

Outcome-based education is the need of the hour. Our institute follows outcome based education. The institution being affiliated to the university follows the programme and course outcome framed by the University. It is communicated to the institute through the controller of the examiner. Soft Copy of Curriculum and Learning Outcomes of Programmes and Courses are uploaded on the Institution website for reference.

#### Vision, Mission and PEO/PO/PSO are published among stakeholders as follows:

| S.No. | LOCATION                | INSTITU' | ГE      | DEPAR  | <b>IMENT</b> |
|-------|-------------------------|----------|---------|--------|--------------|
|       |                         | Vision   | Mission | Vision | Mission      |
| 1     | Departmental Newsletter | •        | •       | •      | •            |
| 2     | Course files            | •        | •       | •      | •            |
| 3     | Faculty diary           | •        | •       | •      | •            |
| 4     | HR manual               | •        | •       |        |              |
| 5     | Curricula Book          | •        | •       |        |              |
| 6     | Admission Brochures     | •        | •       |        |              |
| 7     | Semester Plan           | •        | •       |        |              |
|       |                         |          |         |        |              |

### Locations where the Vision, Mission and PEO/PO/PSO are disseminated:

| S.No. | LOCATION                                    | INSTITUT | E       | DEPARTMENT |         |  |
|-------|---|----------|---------|------------|---------|--|
|       |   | Vision   | Mission | Vision     | Mission |  |
| 1     | College Website                             | •        | •       | •          | •       |  |
| 2     | School of Electrical and Computing Sciences | •        | •       |            |         |  |
| 3     | Principal's Office & Lounge                 | •        |         |            |         |  |
| 4     | HOD chamber                                 | •        | •       | •          | •       |  |
| 5     | Faculty rooms                               |          |         | •          | •       |  |
| 5     | Classrooms                                  |          |         | •          | •       |  |
| 7     | Laboratories                                | 7).      | •       | •          | •       |  |
| 3     | Main Library                                | •        | •       |            |         |  |
| 9     | Department Library                          | •        | •       | •          | •       |  |
| 10    | Department Notice Board                     | •        | •       | •          | •       |  |

In addition to this, Vision, Mission and PEOs are disseminated to all the stakeholders of the program through faculty meetings, student awareness workshops, student induction programs, placement programs and parent meetings at regular intervals.

| File Description  | Document      |
|---|---------------|
| Upload COs for all Programmes (exemplars from Glossary) | View Document |

| 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the ins | stitution. |
|---|------------|
|---|------------|

**Response:** 

#### **Attainment of Course Outcomes:**

In the Outcome Based Education (OBE), assessment is done through more than one processes and assessed by the course coordinator at the end of the semester.

#### **CO** Assessment Processes

Assessment tools are categorized into two methods to assess the course outcomes as:

- (i) Direct methods
- (ii) Indirect methods

**Indirect Assessment Methods** 

**Indirect Assessment** 

Students Exit Survey

S.No.

- Direct methods display the student's knowledge and skills from their performance in the continuous internal assessment examinations, end semester examinations etc. These methods provide a sampling of what students know and/or can do and provide strong evidence of student learning.
- Indirect methods such as students exit feedback, Alumni are reflecting on student's learning. They assess opinions or thoughts about the graduate's knowledge or skills and their valued by different stakeholders.

| S.No. | Direct Assessment                             | Method Description  |
|-------|---|---|
| 1     | Internal Assessment for The Examinations      | eory Two internal assessment examinations and one model examination continuous assessment of the students performance   |
| 4     | Internal Assessment Laboratory Examinations   | for In laboratory course, the internal assessment marks shall be based and one model practical examination.  Mini projects are introduced in the laboratory courses to improskills and practical exposure |
| 6     | End Semester Examinat (Theory and Laboratory) | cions Once in a semester examinations are conducted by the college at the   |

Method Description

Information is collected from the students about their satisfaction w

activities and co-curricular and extracurricular activities.

| 2 | Alumni Survey | Collect  | variety | of | information | about | program | Satisfaction | and |
|---|---------------|----------|---------|----|-------------|-------|---------|--------------|-----|
|   |               | college. |         |    |             |       |         |              |     |

#### **Internal Assessment Examinations and Evaluation Process**

#### Measurement of Course attainment levels for End Semester Examinations:

For Regulations R-2017, 50% of marks are considered as pass marks,. The attainment level is same for all the students considered for the evaluation of course outcome.

The various attainment levels are given below:

Attainment Level1 (Low) : 60% to 69 % of students scoring pass marks.

Attainment Level2 (Moderate): 70% to 79% of students scoring pass marks.

Attainment Level3 (High) : 80% to 100% of students scoring pass marks.

#### Measurement of Course attainment levelsfor Internal Assessment Examinations:

For Regulations R-2017, 50% of marks are considered as pass marks,. The attainment level is same for all the students considered for the evaluation of course outcome.

The various attainment levels are given below:

Attainment Level1 (Low) : 60% to 69 % of students scoring pass marks.

Attainment Level2 (Moderate): 70% to 79% of students scoring pass marks.

Attainment Level3 (High) :80% to 100% of studentsscoring pass marks.

#### **Attainment of Program Outcomes and Program Specific Outcomes**

| Assessment Tool | Assessment Tool Assessment Methods V |     | Weightage2 | in % |
|-----------------|--------------------------------------|-----|------------|------|
|                 |                                      |     |            |      |
| Direct Method   | Internal Assessment                  | 20% | 80%        |      |
|                 | Examinations                         |     |            |      |
|                 | End Semester Examinations            | 80% |            |      |
| Indirect Method | Student Exit Survey                  | 10% | 20%        |      |
|                 | Alumni Survey                        | 10% |            |      |

### **Program Outcome Assessment Weight age**

#### Overall POs & PSOs attainment calculation

Overall attainment = 80% of Direct attainment + 20% of Indirect attainment

= (0.8 x Direct attainment) + (0.2 x Indirect attainment)

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

### 2.6.3 Average pass percentage of Students during last five years

Response: 88.08

# 2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 273     | 327     | 370     | 318     | 441     |

# 2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 276     | 330     | 477     | 405     | 511     |

| File Description   | Document      |
|--|---------------|
| Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template) | View Document |
| Upload any additional information  | View Document |
| Paste link for the annual report   | View Document |

### 2.7 Student Satisfaction Survey

| 2.7.1 Online student satisfaction survey regarding teaching learning process |               |  |
|--|---------------|--|
| Response: 3.97   |               |  |
| File Description Document  |               |  |
| Upload database of all currently enrolled students (Data Template)           | View Document |  |

### Criterion 3 - Research, Innovations and Extension

#### 3.1 Resource Mobilization for Research

3.1.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 30.33

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6.6     | 4.5     | 8.725   | 10.5    | 0       |

| File Description   | Document      |
|--|---------------|
| List of endowments / projects with details of grants                             | View Document |
| e-copies of the grant award letters for sponsored research projects / endowments | View Document |

#### 3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 0.92

#### 3.1.2.1 Number of teachers recognized as research guides

Response: 1

| File Description                        | Document      |
|---|---------------|
| Institutional data in prescribed format | View Document |
| Any additional information              | View Document |

# 3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 63.33

3.1.3.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 5       | 6       | 6       | 2       | 0       |

#### 3.1.3.2 Number of departments offering academic programes

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6       | 6       | 6       | 6       | 6       |

| File Description                              | Document             |
|---|----------------------|
| Supporting document from Funding Agency       | <u>View Document</u> |
| List of research projects and funding details | View Document        |

#### 3.2 Innovation Ecosystem

# 3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

#### **Response:**

#### **Incubation Center and Initiatives for Creation and transfer of Knowledge**

Institute is a member of Institutions Innovation council (IIC) and conducted lot of programs to promote innovations and Entrepreneurship in the institution. An ample opportunity has been provided by the Institute to the students and encouraged them to shape their thoughts into realism.

Incubation centre was established in collaboration with Enthu technologies, Coimbatore. This collaboration provides opportunity to the students and faculties for training, internship, academic projects, Development of products with the support of the company, Human Resources for Technical and Non-Technical Activities, providing infrastructure facilities for the development of product assigned by the company, Providing Consultancy through Subject Experts for Required Project Needs from Company.

MoUs with Industry helps the students in better exposure to the real time industrial needs by attending Internships and Industrial visits.

Innovation center is established to provide facilities for interdisciplinary projects. ICT academy and Red hat academy is functioning in the college and organizes Skill development and faculty development Programs.

Availability of ample resources at well-established library, E-resources and NPTEL local chapter opens the arena for the wholesome academic development of students. Students are motivated to participate in

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National level design contests, and our Mechanical department students won cash Prices in E-kart design. BMW skill next Program is a major highlight of the department.

Institute is well connected with societies like Institute of Valuers, Indian Concrete Institute, IETE, Indian Geotechnical Society, SAE India and provides opportunities for students to interact with Industry experts. College provides financial support for Student and faculty for research publications and patents filing.

104 papers were published in indexed journals in last five years. 62 Workshops and seminars in the areas of Research methodology, IPR and entrepreneurship were conducted.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 62

# 3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 22      | 19      | 4       | 7       | 10      |

| File Description                               | Document      |
|--|---------------|
| Report of the event                            | View Document |
| List of workshops/seminars during last 5 years | View Document |

#### 3.3 Research Publications and Awards

| 3             | .3 | .1  | N | Jumb    | er ( | of Ph          | .Ds | registere   | d ner | elig | rible | teacher  | dın | ring | the | last | five | vears |
|---------------|----|-----|---|---------|------|----------------|-----|-------------|-------|------|-------|----------|-----|------|-----|------|------|-------|
| $\overline{}$ | •• | • • |   | 1 CHILL | ,,,  | <i>,</i> , , , |     | I CEIDUCI C | u pci | CILC |       | ccuciici | uu  |      |     | IUDL | 1110 | , car |

**Response:** 0

#### 3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

#### 3.3.1.2 Number of teachers recognized as guides during the last five years

Response: 1

| File Description  | Document      |
|---|---------------|
| List of PhD scholars and their details like name of the guide, title of thesis, year of award etc | View Document |
| Any additional information  | View Document |

# 3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 0.14

# 3.3.2.1 Number of research papers in the Journals notified on UGC website during the last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 12      | 4       | 3       | 1       | 0       |

| File Description   | Document      |
|--|---------------|
| List of research papers by title, author, department, name and year of publication | View Document |
| Any additional information   | View Document |

# 3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

**Response:** 0.03

# 3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 5       | 0       | 0       | 0       | 0       |

| File Description  | Document             |
|---|----------------------|
| List books and chapters edited volumes/ books published | View Document        |
| Any additional information                              | <u>View Document</u> |

#### 3.4 Extension Activities

## 3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

#### **Response:**

With an intention to inculcate a sense of involvement in Nation building activities, the students are motivated to give their hands in different social activities. The extension and outreach activities for the last five years (2016-2021) targeted clean and green environment through different functional groups like NSS, YRC, RRC and several societal development activities with the collaboration with non-Governmental organizations and industries. The key aspects of the programme conducted includes Tree Plantation, Awareness programme to attain Swachh Bharat vision, and street cleaning drives.

### 1. Sustainable development in adopted Villages: Nathakadaiyur, Mullipuram and Palayakottai

Conforming to the institution vision, the administration motivates the students of our institute to carry out extension activities in the neighbourhood villages by adopting the village for regular and special camp activity. As an outcome our NSS volunteers joined with Government machinery executed several sensitization programmes to make a healthy environment and improved livelihood option to strengthen the community participation for the holistic development of the rural India.

#### 2. Healthy India: Awareness Programs

Number of health awareness programme like Dengue awareness program, Diabetic and dental camps, Medical check-up camps and TB, AIDS awareness programs are arranged for the benefit of Public. In view of creating a healthy citizen, several programs were conducted in creating awareness about Importance of breast feeding, National Nutrition week and Work life balance was conducted. For school students, Awareness about Child sexual abuse, Personal hygiene for adolescent children was conducted. In Covid pandemic time, Our Management has provided funds to help the Village administration.

#### 3. Youth Awareness Programs:

In order to create awareness about various social and cultural issues in the society, programs were organised for the public, targeting youngsters of future India. In association with Police department of Kangayam, several awareness programs were conducted. Drug awareness programs, Road safety program, Helmet awareness rally, Awareness about Kavalan SOS app were conducted.

Voter awareness rally and EPIC card online entry camps were conducted, to sensitize the students and public about importance of voting. Programs like Stress management course, Data entry training for Police department staffs, Training programs for election officers are conducted by joining hands with district administration.

Technical Training in Adopted villages:

#### We are adopting Technical training for adopted villages in the following:

Electrical house Wiring training

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| $\sim$ 11 | . 1   | •    |
|-----------|-------|------|
| -011      | wind  | ınα  |
| COH       | willu | 1112 |
|           |       |      |

Repairing Mixie/grinder/radio/TV

Servicing mobiles

Energy coservation methods etc...

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 3.4.2 Number of awards and recognitions received for extension activities from government/government recognised bodies during the last five years

**Response:** 7

3.4.2.1 Total number of awards and recognition received for extension activities from Government/Government recognised bodies year-wise during the last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 0       | 1       | 3       | 1       | 2       |

| File Description   | Document             |
|--|----------------------|
| Number of awards for extension activities in last 5 year | View Document        |
| e-copy of the award letters                              | <u>View Document</u> |

# 3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years

Response: 24

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 3       | 8       | 3       | 6       | 4       |

| File Description   | Document      |
|--|---------------|
| Reports of the event organized   | View Document |
| Number of extension and outreach Programmes conducted with industry, community etc for the last five years | View Document |

### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 59.36

### 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 160     | 916     | 356     | 1217    | 850     |

| File Description  | Document      |
|---|---------------|
| Report of the event   | View Document |
| Average percentage of students participating in extension activities with Govt or NGO etc | View Document |

#### 3.5 Collaboration

### 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

**Response:** 74

### 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2       | 1       | 25      | 31      | 15      |

| File Description  | Document             |
|---|----------------------|
| e-copies of related Document  | <u>View Document</u> |
| Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship | View Document        |

# 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 14

# 3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 8       | 1       | 5       | 0       | 0       |

| File Description  | Document      |
|---|---------------|
| e-Copies of the MoUs with institution/<br>industry/corporate houses   | View Document |
| Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years | View Document |
| Any additional information  | View Document |

### **Criterion 4 - Infrastructure and Learning Resources**

### 4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

#### **Response:**

The institution has a well-defined policy of augmenting infrastructural facilities for ensuring academic excellence. When the Institution commenced its operations in 2009, all necessary infrastructures was in place to run the programmes approved by AICTE. Over the years, the infrastructure was created to cater to new courses introduced as well increase in intake implemented. Now, the Institution boasts of excellent and sophisticated infrastructure in this region on par with any other well established Institutions in the State.

#### Class rooms

The Classrooms are equipped with proper ventilation facilities, green coloured chalk boards, LCD projection and Internet facility.

### Laboratories

The Laboratories are well equipped to cater to the students and research scholars.

- There are state-of-the-art computer centers in the campus with more than 1,000 computers, connected to higher-end servers, running Windows 7, Windows 10 Operating Systems with structured cabling.
- Electrical DC/AC Machines lab, Power Electronics lab, Measurements and Instrumentation lab, Control Systems lab, Renewable energy systems Lab, Power System Simulation Lab are equipped in the Department of Electrical and Electronics Engineering.
- DSP and VLSI Laboratory, Electronic Devices and Circuits Laboratory, IC and Communication Laboratory, Microprocessor Laboratory, Microwave and Optical Laboratory, Networks Lab are equipped in the Department of Electronics and Communication Engineering.
- Similar facilties are available for all the Departments like Computer Center, Remote Center, Innovation Center, Incubation Center and Workshops

### **Language Laboratory**

A fully furnished language lab with 60 terminals is functioning to improve the communication skills of the students. The lab is having the facility of voice recording, playback etc.,

#### Internet

The institution is having internet facility with 115 Mbps bandwidth supporting all the computers. Boys and girls hostel with internet wifi facility functions round the clock.

### **Digital Library**

The salient features of our Digital Library are Scanning Facility, Internet access, e-book access, e-Journal access, NDLI access, CD ROM Facility, Reprography, Photo- copier Facility, Web OPAC, Library e-Notice Board, User interactive Information Browser: Providing access to Digital Copies of Books and References, Interactive Audio Information System, Link with Academic Network-DELNET.

### **Seminar Hall**

There are 3 seminar halls to conduct seminars, symposiums, conferences, meetings etc. The conference halls are equipped with Public Addressing System and Video Conferencing facility.

### Physical facilities

The institution has required number of fields for conducting sports and games events. In addition to hostels, our Institution is plying a fleet of buses to nearby cities and also from the suburbs for the smooth transit of both students and staff members.

#### Other facilities

- Separate hostel for Boys and Girls with a canteen
- Cafeteria
- Training and Placement Cell
- Clubs for co-curricular and extracurricular activities
- Photo copying facility for students
- Wi-Fi facility
- Gymnasium
- ATM facility
- Dispensary
- Ambulance
- Solar Plant
- Sewage Treatment Plant
- Biogas Plant
- Flood Light

| File Description                  | Document      |  |
|-----------------------------------|---------------|--|
| Upload any additional information | View Document |  |

4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

#### **Response:**

#### **Sports:**

Every year our institution encourages in organizing various sports events for the sports day. Institution provides free tuition fees, transport facility, hostel facility and food facility to participants and office bearers.

Our students participate in sports & games conducted in different colleges, districts, states, Nationals and open tournaments. Students and Physical Director are encouraged by providing TA and DA.

Our college has provided a ground for track and field events of about 400m, unique court for Volley Ball, Basket Ball, Ball Badminton, Tennis, Kho-Kho, Kabaddi, Badminton, Throw ball, Table Tennis, Hand Ball, Cricket and Football field. A 16-station fitness center for both boys and girls are also available in our college. Our management planned to provide and implement an indoor badminton court for both boys and girls.

#### Games:

Institution has adequate Indoor and outdoor games facilities.

#### (i) Outdoor games:

Institution has spacious outdoor game facility with an area of 658x376m. It has one Cricket ground, one foot ball field with 33750 sq.ft area, three volley ball court with 1862 sq.ft area, one Basketball court with 646 sq.ft area, one Ball Badminton court 1064 sq.ft area, two Hand ball court with 4900 sq.ft area, two Kho-Kho court with 1944 sq.ft area, two kabaddi court with 570 sq.ft area, Throw ball court with 850 sq.ft area and Tennis court with 1680 sq.ft area.

#### (ii) Indoor games:

Institution has a total of indoor games area. The indoor games facilities such as 2 table tennis boards, 2 shuttle court, chess and carom boards are provided. Indoor games competitions are conducted during the sports day.

#### **Power Gym:**

Institution has power gym for both boys & girls with facilities such as bench press. Tumbles, etc... Our College has 1 gym with the total area of 1560 sq.ft area for boys &girls. Students can use the power gym facilities regularly from 4.00 AM till 7.00 AM in the morning and from 5 PM till 8 PM in the evening including Sundays & Holidays.

#### **Yoga Centre:**

Institution has spacious yoga centre with a capacity of 300 participants. Hostel students are given yoga training regularly in the morning. Yoga centre celebrates international yoga day with a participation of more than 1000 students and faculty members.

| S.NO    | AREA   | NO.S | TOTAL AREA |  |
|---------|--------|------|------------|--|
| OUTDOOF | RAREAS |      |            |  |

|      | TOTAL INDOOR PLAYING AREAS                              |   | 142.4mX73m   |
|------|---|---|--------------|
| 5    | CARROM  |   |              |
| 4    | CHESS   |   |              |
| 3    | YOGA  |   |              |
| 2    | SHUTTLE COURT   | 2 | 25.60mX16.5m |
| 1    | MULTI GYM HALL  | 1 | 60'7mX26m    |
| INDO | OR AREAS  |   |              |
|      | TOTAL OUTDOOR PLAYING AREAS                             |   | 658mX376m.   |
| 9    | HANDBALL COURT  | 2 | 70mX70m      |
| 8    | TENNIS COURT  | 2 | 42mX40m      |
| 7    | KHO-KHO COURT   | 2 | 54mX36m      |
| 6    | THROW BALL COURT  | 1 | 24mX19m      |
| 5    | ATHLETIC TRACK AND FIELD FOOTBALL FIELD & CRICKET PITCH | 1 | 250mX135m    |
| 4    | BALL BADMINTON COURT                                    | 2 | 56mX19m      |
| 3    | KABADDI COURT   | 2 | 30mX19m      |
| 2    | BASKETBALL COURT  | 1 | 34mX19m      |
| 1    | VOLLEYBALL COURT  | 3 | 98mX19m      |

| File Description                      | Document             |
|---------------------------------------|----------------------|
| Upload any additional information     | <u>View Document</u> |
| Paste link for additional information | View Document        |

# 4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 88.1

#### 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 37

| <u> </u>  |                      |
|---|----------------------|
| File Description  | Document             |
| Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template) | View Document        |
| Upload any additional information   | <u>View Document</u> |
| Paste link for additional information   | <u>View Document</u> |

# 4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 8.07

# 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

| 2020-21  | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|----------|---------|---------|---------|---------|
| 11.12244 | 1.98033 | 85.52   | 94.72   | 35.69   |

| File Description   | Document      |
|--|---------------|
| Upload Details of budget allocation, excluding salary during the last five years (Data Template) | View Document |
| Upload audited utilization statements  | View Document |

### 4.2 Library as a Learning Resource

### **4.2.1** Library is automated using Integrated Library Management System (ILMS)

#### **Response:**

• Name of the ILMS software: CampesiLIB

• Nature of automation (fully or partially): Fully

• **Version:** 6.4.10 MS SQL server

• Year of automation: 2009

The library has Integrated Management System called CampesiLIB. It has functionalities that enable a library to manage its housekeeping operations viz., acquisition of books and materials, creation and maintenance of catalogue database, circulation of its holdings, Transaction etc., CCTV cameras are installed in the library for strict surveillance.

#### Platform

CampesiLIB Software is designed to manage the institutional library management process. It captures almost every activity related to library and it has provision to log almost all stocks kept in the library like books, periodicals, back volumes and other non-book materials.

#### **Working Environment**

CampesiLIB software works as client server architecture. It executes the data in a centralized fashion. Multiple instants of modules can be installed in workstations with common data provided by an

RDBMS Server (SQL Server).

#### **Module Details**

Administration Module, OPAC, E-gate Register and Web OPAC

#### Company profile

Logic Launch Technologies started in the year 2004 aiming at providing service to enhance the data management process of academic institutions. The default user is Librarian and the default password will be shared with the librarian at the time of installation. Further, the users can be created and privileges can be assigned at sub module level.

#### **Manage Members**

The Library members denote the students and staff using the library. The members can be created with the primary key as member id which is mandatory.

#### **Manage Books**

The Primary stock in the institution libraries are books and it is mandatory. This module manages creation, edit, and deletion of books.

#### Manage Non-Books

The Materials other than books, like periodicals and back volumes, are managed as Non-books. The Non-Books materials are allowed to create by users themselves.

#### **Prerequisites**

They are the subentries that avoid the hot coding method of programming and enable any group of data that can be created for future needs.

#### **Manage Periodicals**

Journals and periodicals are entered in master log using the respective periodicities generated in subentries. Each Periodical issue can be entered after completing subscription entries.

#### **Circulation Reports**

Daily Transaction Reports can be taken to manage the books and other material issued to members.

#### **Book Stock Verification**

Stock verification master is created to begin a stock. The verification module will capture the accession no. available in the rack as online entry or an external file can be read.

### Reports

The user friendly report design allows changing the format of report in certain aspects. Every report can be ported to excel, word, and pdf formats.

### **Online Public Access Catalog (OPAC)**

Books Search, Periodicals Search, Non-Book Search, Member Due Check, Member Transaction

History View and Book Reservation.

#### **E-gate Register**

About the Module Online Module works interactively capturing the data from a barcode or an RFID scanner and logs as visitor Entry.

| File Description                      | Document      |  |
|---------------------------------------|---------------|--|
| Upload any additional information     | View Document |  |
| Paste link for Additional Information | View Document |  |

### 4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- 6. Remote access to e-resources

**Response:** A. Any 4 or more of the above

| File Description  | Document             |
|---|----------------------|
| Upload any additional information   | <u>View Document</u> |
| Details of subscriptions like e-journals, e-<br>ShodhSindhu, Shodhganga Membership, Remote<br>access to library resources, Web interface etc (Data<br>Template) | View Document        |

# 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 13.14

## 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e- journals year wise during last five years (INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2.612   | 7.23    | 16.50   | 17.81   | 21.57   |

| File Description  | Document      |
|---|---------------|
| Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template) | View Document |
| Audited statements of accounts  | View Document |

# 4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the latest completed academic year

Response: 24.74

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 189

| File Description                                  | Document             |
|---|----------------------|
| Details of library usage by teachers and students | <u>View Document</u> |

#### 4.3 IT Infrastructure

#### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

#### **Response:**

Our institution has well equipped system with trained and experienced professionals for providing IT facilities. We are having secure and stable wired and wireless network campus for administrative and academic areas. The computer laboratories are equipped with futuristic technology and are available for all the staff and students. The college has well equipped internet lab working 24/7. The college has 75mbps from JIO and 40mbps from BSNL internet. The internet can be accessed by 1000+ desktop computers through LAN and also the Wi-Fi. The center supports an Institution Wide Fiber Optic Network' and wireless with centralized server.

The center provides system admistration and technical support which includes software installation, Network monitering (Both Wired and Wireless) for troubleshooting etc. Our Institution has dual core/core to duo/core i3 processor with 2GB/4GB RAM and 250GB/500GB HDD for academic purpose. It has number of servers and licensed application softwares. The computer systems are upgraded based on-

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demand. As per the syllabus updation, the required software is purchased and license will be renewed. The institution has licensed software like oracle, Autodesk EDU, Lab view, windows xp/7/8 professional, windows 2003/2008/2012/2016 server etc. Firewall and anti-virus software are installed to ensure better security. A separate team is formed to takecare of IT related needs of the campus such as software development, Hardware and networking, website designing and hosting, E-mail and SMS solutions etc.

The hostels has Wi-Fi connectivity with the speed of 115mbps for academic purpose. Effective CCTV surveillance network is available in the entire campus. Institution has Sophos Firewall Protection, which ensures Threat protection (Spyware,denial of service attacks etc) VoIP security, VLAN, content filtering, packet filtering, URL blocking, anti-spam,anti-virus and intrusion detection and prevention and other are endorsed to securitize.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

### 4.3.2 Student - Computer ratio (Data for the latest completed academic year)

Response: 1:1

 File Description
 Document

 Upload any additional information
 View Document

 Student – computer ratio
 View Document

#### 4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

| File Description   | Document      |
|--|---------------|
| Upload any additional Information  | View Document |
| Details of available bandwidth of internet connection in the Institution | View Document |

#### 4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 14.01

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 73.735  | 38.619  | 65.565  | 88.449  | 39.740  |

| File Description  | Document      |
|---|---------------|
| Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates) | View Document |
| Audited statements of accounts  | View Document |

# 4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

#### **Response:**

#### Upkeep of infrastructure

The buildings, furniture & fittings, lawns, and gardens are properly maintained

- Against wear and tear arising out of their use
- To prevent damage caused by the vagaries of the weather

The institute has dedicated Civil maintenance, Electrical maintenance and General maintenance departments to monitor the maintenance work.

#### **Facilities Maintenance**

The campus is maintained by an exclusive housekeeping department. During class committee meetings, students are asked for their feedback regarding infrastructure facilities and service.

- Every day, class rooms are swept.
- Each day, the corridors are wiped clean.
- All rest rooms are sanitized and cleaned daily.
- Every day, the lawns and gardens are cleaned

#### **Civil Maintenance**

Campus manager is the in-charge for all civil related maintenance. The maintenance operation includes classrooms, seminar halls, tutorial halls, carpet, floors, walls and ceilings, Doors exterior/interior, Windows, Restrooms/Plumbing fixtures (Commode, Lavatories, Urinals, restroom partition, mirrors, exhaust fans), estate facilities such as water tank, Treatment Plant, Mineral Water plant, etc., Building maintenance is comprised of plumbing, painting, carpentry and minor construction.

#### **Electrical Maintenance**

A faculty member from Electrical department is the in-charge for overall electrical maintenance. It includes all electrical facilities in academic blocks, hostels; generator, air-conditioners, etc., Electrical department maintains a list of electrical devices that requires regular maintenance.

#### **General Maintenance**

#### **Laboratory Equipment and accessories**

All equipment in the laboratories are maintained to prevent breakdowns through scheduled preventive maintenance. List of equipment is prepared by the concerned Lab in-charges. Laboratory Technicians / Laboratory in charge in consultation with HoD prepare a list of maintenance activities to be carried out. Any breakdowns of equipment are attended by the competent professionals or the manufacturer.

#### Fire Extinguisher

Fire Extinguisher are provided and placed in different locations of the building for ensuring safety.

#### First Aid Equipment

First Aid Equipment is provided to every department and there is a dispensary functioning in the college. A Doctor is nominated who visits during prescribed hours to provide medical treatment.

#### **Central Library**

The BEC library has been built to International Standards with an area of 1400 sq.mts. It has a collection of books, Journals, Delnet – IESTC, IMC Packages of E-Journals and latest CDs. All the Library functions such as issue, return, renewing, reservation and searching books have been automated. Development of Library collection is based on the needs of users and AICTE/NBA/UGC/NAAC/Anna University Norms.

#### **Physical Education**

To enhance the physical capability of the students, the Institute has brought in various practices apart from core curriculum necessities. For example, the Physical Education Department of Our College has provided a ground for track and field events of about 400m, unique court for Volley Ball, Basket Ball, Ball Badminton, Tennis, Kho-Kho, Kabaddi, Throw ball, Table Tennis, Hand Ball, Cricket and Football. A 16-station fitness center for both boys and girls are also available. Institution has spacious yoga centre with a capacity of 100 participants. Hostel students are given yoga training regularly.

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

### **Criterion 5 - Student Support and Progression**

### **5.1 Student Support**

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

**Response:** 59.32

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 421     | 523     | 703     | 844     | 840     |

| File Description   | Document      |
|--|---------------|
| upload self attested letter with the list of students sanctioned scholarship   | View Document |
| Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template) | View Document |

5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 25.45

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 143     | 195     | 293     | 420     | 448     |

| File Description  | Document      |
|---|---------------|
| Upload any additional information   | View Document |
| Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template) | View Document |

# 5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

**Response:** A. All of the above

| File Description  | Document      |
|---|---------------|
| Details of capability building and skills enhancement initiatives (Data Template) | View Document |
| Any additional information  | View Document |
| Link to Institutional website   | View Document |

# 5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 60.48

# 5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 278     | 595     | 758     | 955     | 950     |

| File Description  | Document      |
|---|---------------|
| Number of students benefited by guidance for competitive examinations and career counselling during the last five years | View Document |
| Any additional information  | View Document |

# 5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

**Response:** A. All of the above

| File Description   | Document      |
|--|---------------|
| Upload any additional information  | View Document |
| Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee | View Document |
| Details of student grievances including sexual harassment and ragging cases  | View Document |

### 5.2 Student Progression

#### 5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 24.38

#### 5.2.1.1 Number of outgoing students placed year - wise during the last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 71      | 38      | 119     | 100     | 179     |

| File Description  | Document      |
|---|---------------|
| Upload any additional information                                       | View Document |
| Self attested list of students placed                                   | View Document |
| Details of student placement during the last five years (Data Template) | View Document |

#### 5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 31.16

### 5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 86

| File Description   | Document             |
|--|----------------------|
| Upload supporting data for student/alumni                          | <u>View Document</u> |
| Details of student progression to higher education (Data Template) | View Document        |

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 86.67

# 5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 4       | 1       | 2       | 2       |

# 5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 6       | 1       | 2       | 3       |

| File Description  | Document      |
|---|---------------|
| Upload supporting data for the same   | View Document |
| Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template) | View Document |

### 5.3 Student Participation and Activities

5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural

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activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.

Response: 37

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) yearwise during the last five years.

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 7       | 4       | 6       | 6       | 14      |

| File Description  | Document             |
|---|----------------------|
| Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year | <u>View Document</u> |
| e-copies of award letters and certificates  | View Document        |

5.3.2 Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

#### **Response:**

Our students are representing in various commitee

#### 1. Class Committee

A class committee consists of a chairperson, class advisor, subject handling faculties and the students' representatives. Student members are nominated based on various categories. The first meeting shall be at the beginning of the semester. During the consecutive Class committee meeting students express the major problems they faced in class and Specific feedback on the teaching-learning process, internal tests, covering of the syllabus, difficult areas of learning, infrastructure, attendance, special help needed, etc.

#### 2. Internal Quality Assurance Cell

The prime task of the IQAC is to develop a system for conscious, consistent and catalytic improvement in the performance of institutions. Institutional IQAC has student members to provide suggestions for improving academic and administrative status.

#### 3. Library Committee

The Library committee comprises of Principal, librarian, faculty, and students as representatives. Student members of the library committee will assist in the procurement of textbooks, journals, and other learning material.

#### 4. Students association

Students association is formed in departments under the guidance of the HOD as the President. Office bearers meet once in a month to plan and carry out the activities. They conduct symposiums, seminars, workshops, and conferences every year.

#### 5. Hostel Committee

The hostel committee comprises warden and student representatives. The meeting is held weekly once and discuss the hostel administration and mess of each hostel. The various subcommittees in each of these hostels are Food Committee, Maintenance Committee, and Discipline Committee.

#### 6. Grievance and Redressal committee

The matters of harassment and suppression of any single individual are handled by grievance redressal cell. Students can express the general issues related to academic and non-academic in the meeting. The chairman and other members of the committee will scrutinize, investigate consider all complaints grievances of the students.

#### 7. Anti-Ragging Committee

The College has formed an Anti-Ragging committee with the Principal as the Convener. The functions of the Anti-Ragging Squad will be to keep a vigil and stop the incidences of Ragging if any, happening/reported in the places of Student aggregation including, Classrooms, Canteens, Buses, Grounds, Hostels, etc. The student representatives are educated by the faculty regarding anti-ragging measures and impact, in turn, they will educate peers.

#### 8. Women's Empowerment cell

The College has established a Women Empowerment Cell in the college campus to empower and safeguard the rights of female faculty, staff, and students of the College. Members of the committee including student representatives meet once in a quarter and discuss the women's development, ragging, sexual abuse, harassment, etc. and solved with the support of management.

#### 9. Sports Committee

The student representatives along with the physical directors meet once in a quarter and take up agenda like to identify the talented students, forthcoming tournaments, sports schedule, etc. The committee will arrange fitness programs and sports programs.

#### 10. Cultural Committee

The cultural committee consists of faculty advisors as head and students as members. The purpose of the committee is to identify the talented students in the campus and train them suitably.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 14.6

# 5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 14      | 18      | 13      | 16      | 12      |

| File Description  | Document      |
|---|---------------|
| Report of the event   | View Document |
| Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template) | View Document |

#### 5.4 Alumni Engagement

# 5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

#### **Response:**

Alumni Association has been actively engaged during the last five years for the welfare of the students, college and society. Students can become the members after course completion by registering in our alumni web portal http://erp.builderscollege.edu.in:2656/cms/alumni/login.

Alumni across the globe have an opportunity to connect with people on a global scale to explore technically or socially as well as to keep in touch with the college and among them. We provided an opportunity for the present students to interact with their seniors through an Alumni meet. All Alumni and Alumnae of Builders Engineering College were invited and meeting happened on several weekends through online because of pandemic. Alumni eagerly and actively visited the college on regular intervals.

Builders Engineering College - Alumni Association goal is to create a strong, world-wide, fully interactive community of Alumni. They play different role as mentioned below.

#### **Mentorship:**

Alumni used to actively mentor their juniors in their technical aspects of their expertise. They use to share various motivational information through their experience in real world. The present students in college will be guided through them and got encouraged that they can also flourish in various fields.

#### **Placements:**

The Alumni network of the college used to support students by providing opportunity for placements. Alumni entrepreneurs who started their business/start-up company used to recruit for their own concern. Alumni who were working in higher designations used to refer the placement opportunities to their juniors.

#### Career Guidance:

Alumni's were invited through CDC (Career Development Cell) and EDC (Entrepreneur Development cell) for seminars, workshops and value added courses. Alumni, who are working in government based jobs, completed their higher education in reputed institutes, working in reputed core industries /software companies will be called for career guidance. Alumni who are running their start-up companies will be called to inspire through Entrepreneur development.

#### **Communication Networking:**

Alumni network by itself is one of the best professional networking platforms available today. A website link is provided recently to build a strong network between the institute, present students, parents and Management.

#### **College Alumni Day:**

Alumni meet used to happen by even semester of every academic year. They will be invited by their respective department coordinators & Heads through Telephonic means, emails, and personal invitations and by postal invitations. The event is to bring together all the old students and the faculty of Builders Engineering College to share their experiences with each other.

#### **Alumni contribution:**

#### Our enrolled Alumni are contributing to our institution as:

Coducting seminars

**Supporting Placement** 

Participating in career guidance program

Sharing current oppurtunities in network across globally.etc..

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 5.4.2 Alumni contribution during the last five years (INR in lakhs)

**Response:** E. <1 Lakhs

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

# Criterion 6 - Governance, Leadership and Management

# 6.1 Institutional Vision and Leadership

# 6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

#### **Response:**

#### Vision

To be the most preferred knowledge provider.

#### Mission

Builders Engineering College endeavors to prepare rural students for successful careers through academic and applied research.

#### The nature of Governance

The institute has a decentralized decision-making framework that is focused on building a strong academic foundation through a methodical and participatory teaching-learning process. The Governing Council meets to discuss all major decisions and strategies pertaining to academic and non-academic activities and assignments. The Institute is on its way to victory, guided by a well-constructed Governing Council that includes individuals from both academic and non-academic backgrounds. The Principal is the institute's chief authority, responsible for carrying out the Governing Council's decisions. He has the power to make decisions and plans for both academic and non-academic activities.

The Principal, in collaboration with the HODs of several departments, effectively implements the Governing Council's recommendations. The principal has regular meetings during which concerns relating to academic and non-academic activities are discussed and communicated to all staff members through their respective HODs. Following that, the HODs organize meetings with the department staff members, and all academic tasks are equitably distributed among all faculty members to ensure proper implementation of the institute's strategies. The principal makes sure that everyone on the staff, both teachers and non-teachers, is involved in making decisions, which makes them more accountable.

Because we know that feedback can help us look inside ourselves through things like class committee meetings, mentoring systems, post-program submissions, alumni connect, and so on, we mostly used the method above.

For factual remarks submitted by students, the individual discipline heads and the principal take the necessary actions. The performance appraisal system worked well, and the heads of the department were curious about how well the department worked.

#### Perspective plans

In line with its vision and objective, the institute is focusing on delivering holistic education in a variety of subjects by motivating and inspiring students through quality educational services, appropriate

infrastructure, and placement possibilities. With the following strategic plans, the institute is on its way to success.

- Motivating faculty members to obtain supervisor recognition and establishing research centers
- NAAC and NBA accredited institute
- Getting Autonomous status
- Establishing innovation centers
- Establishing business incubation centers

## Participation of the teachers in the decision-making bodies

The head of the institution is regularly organizing the meetings in connection with IQAC, Governing Council, Academic Council and regular meetings with HODs to discuss policies, routine activities and other issues. All the decisions are disseminated to teachers by their respective heads and implemented through the effective participation of teachers.

Teaching staff members are bridging the gap between the management and students. They are the only source having direct communication with management students. Their involvement and participation in decision making plays a vital role in directing everyone towards the vision and mission of the institute. Teachers are identifying the right students as the representatives for various committees and motivating them towards organizing various events at the department level as well as college level.

| File Description                  | Document      |
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| Upload any additional information | View Document |

# 6.1.2 The effective leadership is visible in various institutional practices such as decentralization and participative management

#### **Response:**

Builders Engineering College practices decentralization and participative management reflecting the effectiveness of the leadership.

#### **Decentralization**

The governing council empowers and authorizes the head of the institution to manage the institute's academic and administrative activities on a day-to-day basis. As a result, the directors of each department enjoy complete autonomy over their department's ordinary academic and administrative activities. To support the continuation of regular academic activity in all departments, the Governing Council has allowed the principal to sanction all proposals filed by department heads up to Rs.5,000 per proposal. The institution's day-to-day operations are divided into the following levels.

- Chairman
- Secretary
- Treasurer

- Correspondent
- Principal
- Head of the Departments
- Faculty members
- Students

Senior faculty members are taking on more responsibility in their departments, such as coordinating numerous academic events. The principal should be told about the work of department heads, administrative offices, exam cells, hostel wardens, physical directors, librarians, training and placement officers, and other people who work at the school.

### **Participative Management**

The Principal and Heads of several departments allocate well-balanced additional tasks to ensure active participation of all staff members. In addition to their academic responsibilities, senior faculty members have extra responsibilities. Anti-ragging committee, Grievance redressal committee, Internal complaint committee, Committee for SC/ST, IQAC, NSS, YRC, RRC, Women development cell, and Academic calendar are among the committees they convene. Other members of the faculty serve on these committees to assist the conveners. These extra tasks raise all employees' accountability and promote more collaborative management.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# **6.2 Strategy Development and Deployment**

# 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

### **Response:**

The institute is dedicated to providing chances for human resource development in order to achieve its goal of continuous improvement in the quality of education given, which meets the needs of industry. All of the institution's actions are geared toward accomplishing this goal, and activities are planned and implemented accordingly. Each department decides on its own approach to provide quality education and prepare students for the workforce after consulting with its members. Students will be able to flourish in their academic careers and find better prospects in the future thanks to the implementation of this plan.

### **Strategic / Perspective plan**

The following are the strategic / perspective plans of the institute

- 1. To achieve a high NAAC ranking by 2022.
- 2. To establish a research centre for as many departments as feasible by 2022 and 2023.
- 3. Encouraging all faculty members to apply for Ph.D. programmes.
- 4. To encourage faculty members to submit more research papers to prestigious journals.

- 5. Increasing academic performance by increasing the number of university ranks
- 6. Value added courses
- 7. Boosting the effectiveness of smart classrooms
- 8. Establishing industrial/entrepreneurial incubation centers is number eight on the list.
- 9. To strengthen ties with business by signing additional memorandums of understanding.
- 10. Increasing the number of consulting and MDP engagements
- 11. Obtaining finances from a variety of sources in order to hold seminars, workshops, conferences, and other events.

## **Strategy Deployment and Outcome**

Faculty members are encouraged to form a group with varying levels of skill and collaborate to discover opportunities for industry institute collaboration. The institute benefits from such tasks in the following ways:

- 1. Generating revenue through consulting and management development programmes (This revenue is distributed in a 70:20:10 ratio, with 70% going to the faculty team for consultation or MDP assignments, 20% going to department development, and 10% going to the college.)
- 2. Internships and project opportunities in MOU-signed companies provide a first entrance point for students, who then convert those chances into placement offers.
- 3. Industry partnerships that link the institute to corporations like as BMW and Ford have strengthened our students' abilities through contributions of BMW engines and transmission units, as well as a FORD 1.5L Dragon, Ecosport vehicle drive automobile.
- 4. The consequence of industry relationships also aids in the planning of industrial trips to provide students with practical experience.

The majority of the faculty members have enrolled in Ph.D. programmes. All of the departments' industry institutes, Participative Cell, and ED cell coordinators are actively engaged and involving themselves in the planning of student activities. On the site, the institute has made tremendous headway in developing industry innovation hubs and incubation centres.

| File Description                                       | Document      |
|--|---------------|
| Upload any additional information                      | View Document |
| strategic Plan and deployment documents on the website | View Document |

# 6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules and procedures, etc.

#### **Response:**

The chairman of the institute has apical power in the institute's organization structure, allowing him to make any policy-related decisions. The principal is entirely responsible for the institute's academic administration. HODs have decision-making authority over their departments. The institution's

administrative officer oversees day-to-day operations, including purchasing and maintaining equipment, allocating funds according to the year's budget, and submitting appropriate documentation to the auditing committee, among other things.

The Governing Council is quite effective, and it has established standards and procedures for hiring teaching and non-teaching faculty, as well as administrative and support employees. The institute's service rules have been drafted to include all relevant elements and to provide guidance to management and all employees in making important decisions.

During the beginning of the academic year, Heads of Departments are asked to submit their department's annual budget under various headings, which are then consolidated and submitted to the Governing Council for approval by administrative officers.

Once a week, the Principal hosts a meeting with the department heads to discuss the academic progress and administrative activities of the school. All required information is provided to faculty members at their respective department meetings, and the meeting minutes are correctly communicated.

Different cells and committees are formed, and all curricular, co-curricular, and extracurricular activities are carried out appropriately. This guarantees that policies are carried out in a transparent manner. The operations of several cells are overseen by interested faculty members as well as interested students

To ensure academic administration, the HODs' tasks and responsibilities are listed below.

- Ensuring that policy decisions are implemented
- Monitoring the department's day-to-day activities
- Preparing budgets in accordance with the department's road map
- Allocating subjects based on domain knowledge by obtaining faculty members' consent
- Assigning roles and responsibilities to staff members other than academic responsibilities
- Ensuring that the institute's performance appraisal mechanism is in place.

At the end of each semester, the institution collects feedback from students and holds parent meetings to better understand the expectations of both students and parents. Students can post their comments and criticisms in a suggestion box located in front of the principal's office. They can also make representations to the respective Class Advisor, Mentors, HoD, and Principal regarding any issues. According to Anna University's instructions, a class committee meeting is held to collect academic comments from students.

| File Description                              | Document             |  |
|---|----------------------|--|
| Upload any additional information             | <u>View Document</u> |  |
| Link to Organogram of the Institution webpage | View Document        |  |

### 6.2.3 Implementation of e-governance in areas of operation

- 1. Administration
- 2. Finance and Accounts

#### 3. Student Admission and Support

#### 4. Examination

**Response:** A. All of the above

| File Description  | Document             |
|---|----------------------|
| Screen shots of user interfaces   | <u>View Document</u> |
| ERP (Enterprise Resource Planning) Document   | View Document        |
| Details of implementation of e-governance in areas of operation, Administration etc | View Document        |
| Any additional information  | View Document        |

# **6.3 Faculty Empowerment Strategies**

### 6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

#### **Response:**

The institute offers statutory and non-statutory welfare benefits to both teaching and non-teaching employees. Some of the welfare services are also enjoyed by students.

# Statutory benefits provided to all the employees

- PF contributions by the Employee and an equal contribution by the Employer
- CL, Medical leave and maternity leave
- Group Insurance

#### Non Statutory benefits to teaching staff

- The institute helps fund attendance at conferences, seminars, and workshops hosted by other institutions and professional organizations.
- Permissions, special permissions, and summer and winter holidays are offered to teaching faculty members.
- Faculty members who use campus transportation services receive a 50% discount.
- All faculties have access to a separate system with internet access to further their education.
- Free lodging and meals for faculty members staying in the hostel.
- On-campus staff housing is provided. Staff quarters are assigned on a first-come, first-served basis.
- For faculty consulting and value-added services to distribute the fees for courses offered by each department, a 70:20:10 ratio is used.
- During annual day, management recognizes and honors faculty members who achieve 100 percent results every semester.

### Non Statutory benefits to non-teaching staff other than the above

• Non-teaching staff employees are given with uniforms

• The wards of non-teaching faculty members are eligible for tuition discounts when pursuing an engineering or MBA degree at our institution.

### **Benefits provided to Students**

- Insurance Policy Policy Name : Group Personal Accident Insurance
- This insurance benefit is available to all students, teaching and non-teaching personnel, and support employees.
- Exceptional students are admitted with additional considerations.
- Students who meet the sports quota are eligible for free tuition and housing at our college.
- Dr. E. M. Ashok, a psychiatrist, has been expressly appointed to assist pupils on any personal difficulties.

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

# 6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 35.16

# 6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 43      | 45      | 50      | 54      | 55      |

| File Description   | Document             |
|--|----------------------|
| Upload any additional information  | <u>View Document</u> |
| Details of teachers provided with financial support<br>to attend conference, workshops etc during the last<br>five years | View Document        |

# 6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 12

6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 20      | 12      | 11      | 9       | 8       |

| File Description   | Document      |
|--|---------------|
| Upload any additional information  | View Document |
| Reports of the Human Resource Development<br>Centres (UGC ASC or other relevant centres)   | View Document |
| Reports of Academic Staff College or similar centers   | View Document |
| Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff | View Document |

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

**Response:** 37.45

# 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 60      | 47      | 75      | 35      | 32      |

| File Description   | Document      |
|--|---------------|
| Upload any additional information  | View Document |
| Reports of the Human Resource Development<br>Centres (UGC ASC or other relevant centers)     | View Document |
| IQAC report summary  | View Document |
| Details of teachers attending professional development programmes during the last five years | View Document |

# 6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

**Response:** 

Annually, the performance of teaching and non-teaching staff members is evaluated through a performance appraisal system. The institute has a well-organized method for evaluating employee performance. The principal is the last arbiter of the teaching and non-teaching staff's performance. The performance appraisal method is used to determine promotions, awards, and appreciation for all employees. This approach serves as a motivator for employees to work with greater zeal and improves the institute's reputation by giving a better career path for employees.

# Parameters of Performance Appraisal – Teaching Staff

- 1. No. of subjects handled, students feedback and university results
- 2. Participation in seminars, conferences, workshops and FDPs
- 3. Organizing seminars, conferences, workshops and FDPs
- 4. Papers presented in conferences
- 5. Papers published in national and international journals
- 6. Books published by faculty members
- 7. Attending NPTEL Courses
- 8. Additional responsibilities held by the faculty members
- 9. Proposals submitted to funding agencies
- 10. Value added programs conducted during the academic year
- 11. Proposals submitted to funding agencies
- 12. Rating by HODs, Principal and Management

### Parameters of Performance Appraisal – Non-Teaching Staff

Non-teaching staff employees are given honours and recognitions based on their performance, technical skill, lab and record management, timeliness, absenteeism, participation in college yearly events, and so on.

At the end of each academic year, the institute collects performance appraisal forms from faculty members and sends them to their respective HODs. After taking into account the HODs' comments, the forms are sent to the Principal for final approval before being sent to management for action. Every faculty member will have the opportunity to reflect on his or her performance and try to improve it in the coming years. This has been proved to be more successful and gives faculty members more credibility.

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

# **6.4 Financial Management and Resource Mobilization**

### 6.4.1 Institution conducts internal and external financial audits regularly

#### **Response:**

The Principal, with the assistance of the Administrative Officer, is preparing the consolidated budget proposal and submitting it to the Governing Council for approval, based on the budget submitted by the

HODs of all departments and other appropriate authorities of the institute. The budget is adopted by the Governing Council after taking into account the previous year's income and expenditure statement as well as the activities scheduled for the following academic year. The institute has an effective internal and external audit mechanism in place to verify income and expenditure statements, and the comprehensive audit report is sent to management through the Principal.

#### **Internal Audit**

Collection of tuition fees, salary distribution, tax payment, loan distribution, purchase orders for all necessary materials, and maintenance are all handled by the finance department, which is led by the administrative officer (Finance). The institution is quite conscientious about keeping accurate records. The administrative officer additionally double-checks budget use records on a regular basis. Every year in January, the internal auditor and his team conduct an internal audit and submit a report to the principle. The internal audit findings are being addressed by management and the principal, who are taking the required steps to ensure that income and expenditures are in line with the budget proposal.

#### **External Audit**

The management team appoints the external auditor. He comes to our office on a regular basis to audit our books of finances. The audit report is provided to Management for review by the auditor when the audit is completed. Every year in March, an external audit is performed. There is no adverse remark on the institution's finances as of the date of the previous external audit. Every year, the organization files its income tax returns well in advance of the deadline.

| File Description                  | Document             |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

# 6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

#### Response: 0

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last five years (INR in Lakhs)

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 0       | 0       | 0       | 0       | 0       |

| File Description   | Document      |
|--|---------------|
| Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years | View Document |

#### 6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

### **Response:**

#### **Funds Mobilization**

Being a Self Financed Institute, fee collection is the major source of income generation for the institute. In addition to the income from fees, institute has few other sources through which it mobilizes the funds to meet out all the expenditures incurred. Individual Departments are playing a vital role in sourcing the funds for the college, some of the unique heads through which the different departments are involved in generating funds are Research Grants, Funded Projects, Management Development Programmes, Consultancy Assignments. TNSCST also awards grants based on research applications, allowing students to pursue studies and cover the costs associated in meeting out the breakups associated with the project. Throughout every Academic Year, Department of Civil Engineering is making a sensible fund in Soil Investigation as a part of its Consultancy Assignment.

#### **Utilization of funds**

During the commencement of every Academic Year, the budget is prepared by the Department Budget Incharge by considering various expenses heads well in advance. Some of the key highlighting heads considered while preparing budget are Repair Maintenance of Consumables, Parents Meeting, Programme Participation by Teaching and Non-Teaching Community, Faculty Development Programme, Professional Bodies, Travelling Expenses etc., The prepared budget is forwarded to the Principal, through formal consent by the department head and at the same time in consultation with Department Faculty Members as well.

In HOD's meeting Principal elucidate the Budget Proposals submitted by various departments and perform the discussion. Then it is sent to the management for approval. In addition to the above expenses head, provisions like books, salaries, maintenance expenses such as electricity, water, telephone etc., are also considered as a heads towards utilizing the allotted funds. The Governing body of the college will blow the final approval whistle for the proposed budget. The approved budget is effectively utilized based on the priority requirements against the proposed activities.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

# 6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

#### **Response:**

The IQAC department was established at the institution to promote common transparent incremental

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development and constant improvement across all departments, and it is adopting a number of steps to construct various quality assurance measures.

### **Practice - 1: Orientation programme for Students**

The induction programme is an annual event that takes place at the start of each academic year for all admitted students. It's a promising start because the programme ensures that the admitted students chose the right college choice. The institute has its own orientation timetable, which assists students in preparing for a successful profession after completing their courses. When the college hosts an orientation programme, the following are the main goals of the institute.

- Introducing students to college life
- Integrating them into the institute atmosphere
- Allowing students to network with faculty members, senior students, alumni students, and their classmates
- Creating a career path and defining goals
- Recognizing the internal and external environments and pursuing success
- Recognizing students' strengths and capabilities, as well as scheduling academic and non-academic activities to match their needs.

The SIP (Students Induction Program) at the institute lays the groundwork and leaves an indelible effect on new students and their parents. This orientation program's overall result is that it bridges the gap between instructors and students while also ensuring strong communication among professors, students, and alumni.

#### **Practice – 2: Skill Development Program for Students**

The institute adheres to strict student skill development programmes that begin in the first semester of each batch. The institute's objective is to prepare rural students for successful jobs, thus these programmes are geared toward that goal. During their 2 or 4 years of education, students will participate in a skill development programme established by the training and placement cell with the help of IQAC.

- Communication skills
- Programming language skills
- Aptitude training
- Group Discussion
- Mock HR Interview
- Industry-specific training
- General counselling programme

To ensure knowledge enhancement through guest lectures, industrial visits, and other means, the institute encourages all departments to sign memorandums of understanding (MOUs) with their respective domains of industry. Students receive exposure to industry norms and prepare for good placement through these programmes. Students are also given continuing aid in preparing for competitive examinations such as UPSC/TNPSC, Department Exams, Banking Exams, and so on.

# **Practice – 3: Faculty Seminar Programs**

Faculty seminar programmes give a forum for faculty to present new ideas, new instructional pedagogies,

create interest, and push faculty members to action that is particular to faculty needs. Faculty seminars are held at the departmental level to share new ideas in the subject and enhance teaching methods. Faculty members are encouraged to participate in various professional organizations and other institutions' initiatives. Every faculty member should deliver a departmental presentation and discuss the consequences of the programmes they attended.

| File Description                      | Document      |
|---------------------------------------|---------------|
| Upload any additional information     | View Document |
| Paste link for additional information | View Document |

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )

#### **Response:**

The IQAC analyses the teaching learning process and approaches at regular intervals using the IQAC's recommended norms.

#### Example: 1

#### **Teaching Learning Process and Learning Outcomes**

After subject allocation, each faculty member is needed to compile a course file to verify the success of the teaching-learning process, which is audited by the IQAC at the end of each semester. Improvements for better teaching methodology, course material, and improved outcomes are offered by auditing the course file by either the HOD or the topic expert. Regular meetings between the principal and the IQAC are held to review the academic process and the teaching learning process. The following are some crucial actions to take.

- Before the start of each semester, the respective faculty member prepares a detailed lesson plan for each course.
- Faculty members should keep a logbook for each of their subjects to track student attendance and syllabus coverage, which should be validated by the HOD and Principal on a regular basis.
- The institute has a better e-governance system (CMS: College Management System), and the topic in-charges keep track of all academic activity. The data can be easily traced and monitored by the principal and HODs.
- The CMS contains information on attendance, internal exam results, university results, and students' extracurricular activities performance. Parents, mentors, class advisers, and students can access the data at any moment to monitor their children's progress.
- Students' performance is evaluated based on their grades in internal examinations for all theory

topics, while performance in practical areas is evaluated based on lab experiments and viva voce examinations.

- At the conclusion of each internal examination, a result analysis meeting is held at the departmental and college levels to address low performers. Slow learners are recognised, and the topic in-charges provide extra attention to help the pupils improve their grades.
- The relevant topic in-charges provide comprehensive study materials and question banks to the students in order to boost their academic performance.
- Faculty and students are always encouraged to register for and attend NPTEL courses in their areas of expertise, as well as to take online certification courses.
- The institute has set up ICT-enabled classrooms to help pupils improve their academic performance.
- MS Teams classrooms are designed to help teachers and students learn more effectively.
- Every year, the Academic Audit is undertaken to ensure that all IQAC criteria are properly implemented.

### Example: 2

#### **Review Meetings**

Regular class committee meetings, department meetings, and HODs meetings with the Principal are held at the institute to discuss and enhance the students' performance. At the end of each semester, students' input is collected, and this data is used to determine subject assignments for the following semester. Subject incharges are given ample leeway by the institute to engage in self-motivated activities for their subjects in order to boost student performance.

# Example: 3

#### **Training and Placement Cell**

A separate training and placement cell is run by the institute's training officer and placement officer, respectively. Training activities begin in the first semester, and company-specific training is provided during the interview process. The English department at BEC has built a language lab to help students improve their communication skills. The HI-class software includes all of the tools needed to improve communication skills, and first-year students are required to attend communication class on a regular basis. Programming language training, GD, aptitude training, and mock interviews are all held on a regular basis to ensure that students are industry ready at the end of the course.

| File Description                  | Document      |
|-----------------------------------|---------------|
| Upload any additional information | View Document |

### **6.5.3** Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality intitiatives with other institution(s)

- 3. Participation in NIRF
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

**Response:** A. All of the above

| File Description   | Document             |
|--|----------------------|
| Upload e-copies of the accreditations and certifications           | View Document        |
| Upload details of Quality assurance initiatives of the institution | View Document        |
| Upload any additional information                                  | <u>View Document</u> |
| Paste web link of Annual reports of Institution                    | View Document        |

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

# 7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

## **Response:**

Gender sensitivity is about creating awareness among the students and the stake holders of the organisation by creating facilities, awareness programs, training and workshops for the stake holders so that the inequality can be eradicated inside the organisation and the society.

# **Safety and Security**

#### Class room and laboratories

The Institution is strictly maintaining the gender equivalence among the male and female members. More than 40% of the faculties are female members. Lady attendants and sweepers are employed inside the institution. The Class room and the laboratories are equipped with female students and faculties in mind. So that the resources can be utilised by the members without any hurdle.

To ensure the safety in the laboratories, students are instructed to wear coat, shoes and proper safety measures while inside the lab for experiments.

### Hostel safety and security

A separate hostel facilities is being provided to Ladies and Gents which is housed inside the campus. Separate security is appointed for the ladies hostel alone and they keep vigilant round the clock to maintain the safety and security of girl students.

#### Transport safety and security

The institution runs more than 20 buses in various routes for day scholars. Transport facility is provided to the students from various localities around the institution.

Bus facilities are provided to the students those who are involved in various curricular, cocurricular and extra-curricular activities beyond the college hours. Institution provides transportation and lady faculty members when girl students participate in the events outside the campus.

#### • Cyber safety

Internet is a crucial thing in the todays learning activities. It's been provided to all the students, faculties and staff members 24x7 and systems are protected with Cyberoam firewall and Seqrite Endpoint Security antivirus software..

The firewall and antivirus systems is protecting and removing the unwanted content that encourages gender inequality and threats to girls and women.

Camera facility is also providing to monitor all activity in and outside of the campus. A separate camera facility is provide for both girls and boys hotel for security processes.

### Counselling

Mentors are allocated to the students to counsel their academic and personal problems to create fearless environment. Counselling is given to the students during mentor hour and after college hours. To instil confidence among girl students, many opportunities are given to interact with successful women entrepreneurs and leaders. Interpersonal skill development and stress management programs are conducted with doctors and specialists. A doctor is exclusively appointed to address the stress and health issues in the campus.

#### Common Rooms and medical care

Common rooms are available for both boys and girls. Magazines and newspapers are made available in the common room. Medical facilities like first aid box are kept for emergency. A well-equipped Indian and allopathic Clinic is run inside the campus. A doctor and nursesare exclusively available during the college hours to attend the student's health problems.

| File Description   | Document      |
|--|---------------|
| Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information | View Document |
| Link for annual gender sensitization action plan   | View Document |

# 7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

- 1. Solar energy
- 2. Biogas plant
- 3. Wheeling to the Grid
- 4. Sensor-based energy conservation
- 5. Use of LED bulbs/ power efficient equipment

**Response:** A. 4 or All of the above

| File Description               | Document             |
|--------------------------------|----------------------|
| Geotagged Photographs          | <u>View Document</u> |
| Any other relevant information | View Document        |

# 7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

## **Response:**

### **Solid Waste Management:**

Builders Engineering College has paved a way to manage the waste and to create a clean & healthy environment. In our campus wastes are collected in segregated dustbins (ie) biodegradable and non-biodegradable. Biodegradable and non-biodegradable dustbins are placed in all the floors, classrooms, laboratories, restrooms, canteen, auditorium, ground and various locations in campus. Moreover our students are educated to dispose solid waste strictly in the respective dustbins. Housekeeping team allotted sweepers for each floor to dispose all the garbages in campus. The biodegradable wastes collected from the bins are disposed through the compost pit. Non- biodegradable wastes such as plastic, glass, metal etc are considered as scrap and it will be disposed through authorized agency periodically.

### Biogas Plant:

Our college has installed bio gas plant with the capacity of 45m3 to process food waste and other biodegradable waste like vegetable wastes, kitchen waste etc. The organic wastes collecting from hostel mess are fed as raw material. After the anaerobic digestion is done properly, we are getting significant quantity of bio gas with a group of calorific value. The same will be used for cooking in the mess.

#### **Liquid Waste Management:**

Builders Engineering College has 115m3 capacity Effluent treatment plant, which will collect the waste water from the whole campus through sewer pipeline. This sewer pipeline is connected to inlet of the treatment plant. In the treatment plant the sewage water will flow to several processes. Finally from the outlet chamber the water is pumped and carried through pipeline for gardening purpose.

Reverse Osmosis plant has been installed to treat drinking water with outlet capacity of 4000 litres/hour. Potable water is provided to whole campus. Waste water from the RO plant is recycled through sewage treatment plant.

#### **E-Waste Management:**

The institution initiated E- waste management with the motto of creating an eco-friendly environment in the campus. E- Waste such as computers and its peripherals are upgraded regularly for continuous usage and to avoid its wastage. When the electronic equipments have become obsolete and malfunction, it will be stored in the e-waste storage room. It will be collected by the agency.

#### Waste Recycling System:

45m3 capacity Biogas plant in which the organic waste collecting from hostel mess are fed as raw

material. It has undergone three stages such as hydrolysis, acidification, and methanization in the process of digestion of inputs in an anaerobic condition before the final product methane is produced. After the entire process we are getting considerable quantity of biogas with group of calorific value that will be used for cooking purpose.

In our institution the Sewage Treatment Plant for the entire campus which includes sewage from hostels, staff quarters, administrative buildings, academics. It is based on activated sludge process principle. The treated water from this plant is used for gardening.

| File Description   | Document             |
|--|----------------------|
| Any other relevant information   | <u>View Document</u> |
| Link for Relevant documents like agreements/MoUs with Government and other approved agencies | View Document        |
| Link for Geotagged photographs of the facilities   | View Document        |

#### 7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting
- 2. Borewell /Open well recharge
- 3. Construction of tanks and bunds
- 4. Waste water recycling
- 5. Maintenance of water bodies and distribution system in the campus

**Response:** A. Any 4 or all of the above

| File Description                                 | Document      |
|--|---------------|
| Geotagged photographs / videos of the facilities | View Document |
| Any other relevant information                   | View Document |

#### 7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles
- 2. Use of Bicycles/ Battery powered vehicles
- 3. Pedestrian Friendly pathways
- 4.Ban on use of Plastic
- 5. landscaping with trees and plants

**Response:** A. Any 4 or All of the above

| File Description   | Document      |
|--|---------------|
| Various policy documents / decisions circulated for implementation | View Document |
| Geotagged photos / videos of the facilities                        | View Document |
| Any other relevant documents                                       | View Document |

# 7.1.6 Quality audits on environment and energy are regularly undertaken by the Institution and any awards received for such green campus initiatives:

- 1. Green audit
- 2. Energy audit
- 3. Environment audit
- 4. Clean and green campus recognitions / awards
- 5. Beyond the campus environmental promotion activities

**Response:** A. Any 4 or all of the above

| File Description  | Document             |
|---|----------------------|
| Reports on environment and energy audits submitted by the auditing agency | View Document        |
| Certification by the auditing agency                                      | <u>View Document</u> |
| Any other relevant information  | View Document        |

### 7.1.7 The Institution has disabled-friendly, barrier free environment

- 1. Built environment with ramps/lifts for easy access to classrooms.
- 2. Divyangjan friendly washrooms
- 3. Signage including tactile path, lights, display boards and signposts
- 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
- 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

**Response:** B. 3 of the above

| File Description   | Document      |
|--|---------------|
| Policy documents and information brochures on the support to be provided | View Document |
| Geotagged photographs / videos of the facilities                         | View Document |
| Details of the Software procured for providing the assistance            | View Document |
| Any other relevant information   | View Document |

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

# **Response:**

Builders Engineering College give wide opportunity to the students to develop their cultural, regional linguistic, communal socioeconomic and other diversities through various program organized through various forum every year.

- The college has taken sincere efforts to reinforce the significance of the classical and mother language Tamil by forming a Tamil Mandram club which is supported by a senior faculty member and they have conducted various programs like speech, poetry, etc., many interested students showcased their potential through these competitions. Prizes were awarded to the students who won the competitions on that day.
- Apart from Tamil, Debate club gives students of all abilities a fun way of developing their English language skills.
- Since the institution is located in rural area and many students came from heterogeneous backgrounds, it motivates them to take part in its activities.
- These clubs are active and serve to improve the usage of English which very essential for the academic as well as placement too.
- Health awareness program is conducted to the students to aware about their basic symptom and their precautions to be handled in their early stages of the issue.
- Counselor Mr. S. Karuppusamy, spoke about Human Immunodeficiency Virus which is identified in the year 1981 at USA. HIV is spread by unprotected sex, contaminated blood transfusions, and hypodermic needles and from mother to child during pregnancy. The types of test are Enzyme Linked Immunoassay (ELISA) with confirmatory testing by western blot and PCR. Tuberculosis (TB) which is an infectious disease usually caused by Mycobacterium Tuberculosis and it is spread from one person to the next through the air and treatment is antibiotics to kill the bacteria. Annually blood donation camp is conducted through by nearby hospitals.
- Every year Women's Day is celebrated in a very grand manner where in women celebrities from various walks of life are felicitated. Many programmes will be are organized for women student on women's day and special appreciation and award will be there for every year to encourage them.
- Traditional activities will be encouraged by celebrating their traditional functions like Pongal, etc., to reinforce the cultural identity of the state, every year Pongal celebrations are held in the college. The students take part in the celebrations like preparation of traditional Pongal in earthen pots as a

- token of thanks giving to the Mother Nature.
- Ayutha pooja celebrations will be carried out every year in our campus with great spiritual attitude by cleaning every lab, equipments and buses. The rituals done for the ceremonious "Ayutha Pooja" festivals.
- A special program is conducted on "Swachhta Action Plan Program" is presented gby Dr. Uma Rani pursothaman and she spoken about the cleanliness to be maintained in their place where they live, work, etc.,
- A special COVID-19 Vaccination Camp is held at our college campus for their students, Parents and staff Members at their critical stage of availability.

| File Description                                 | Document      |
|--|---------------|
| Link for supporting documents on the information | View Document |
| provided (as reflected in the administrative and |               |
| academic activities of the Institution)          |               |

# 7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).

### **Response:**

Builders Engineering College aspires to build the holistic expansion of its students and employees and accords due importance on inculcating Constitutional and Social responsibilities. The institution organizes various events towards this objective. A representative list of activities focused on inculcating the values and responsibilities as a responsible citizens are

- Builders Engineering College celebrate Independence Day every year on 15 August as a national holiday in India to commemorate the independence of the nation from the United Kingdom on 15 August 1947.
- National Flag for 75th Independence Day is hoisted by C. Jeyakumar, Revenue Inspector, Nathakadiyur, along with him R.Parthiban, VAO, Mullipuram Village and P.Krishnamoorthi, VAO, Nathakadaiyur has took part and share their thoughts. How a individual can took part in the development of Indian National among the world like Mahatma Gandhi.
- It was on this day in 1950 that this sacred essence of us all assumed a formal shape. That day, India was established as the largest democratic republic and 'we the people' put into effect a Constitution that is an inspired document of our collective vision. It is this spirit of unity and of being one nation which is celebrated every year as Republic Day.
- Republic Day Flag is hoisted by our Principal Dr.G.Gopalakrishnan, and he addresses the gathering appealing to their nationalistic spirit and urging them to take pride in being an Indian and fulfilling one's duty with responsibility.
- The Flags has been distributed to the students and staff members before hoisting the flag and Sweets have been distributed to the students and the staff members after the flag hoisting.
- The resource person Er.A.Sivaraman started delivering his views on Energy Conservation. He shared the knowledge about importance of Renewable Energy and basic concepts in conservation of energy. He also shared his views on tariff rating, energy consumption and Demand ratio. From this webinar students gained knowledge about important aspects in energy consumption and

various methods in power consumption.

- Meenakshi umesh had spoken about "sustainable architecture invites sustainable living" in Environment Day celebrations she elaborately describes the utility, strength and beauty are the strength of architecture and we forget that sustainability is also a principal of architecture and nature. And she said five steps to transform paradigms of sustainable living they are change our perspective, change our self, minimalize, be a conscious consumer and reuse, recycle and reduce waste.
- Human Rights are the subject which acquires the basic knowledge of human rights against natural moral and legal rights in India. Professional Ethics in Engineering is the subject that taught the ethics in society discuss the ethical issues related to engineering and realize the responsibilities and rights in the society. Principals of Management are the subject which enrich the student's managerial functions like planning, organizing, staffing, leading & controlling and have same basic knowledge on international aspect of management.

| File Description   | Document      |
|--|---------------|
| Link for details of activities that inculcate values necessary to render students in to responsible citizens | View Document |

# 7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website
- 2. There is a committee to monitor adherence to the Code of Conduct
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff
- 4. Annual awareness programmes on Code of Conduct are organized

**Response:** C. 2 of the above

| File Description  | Document      |
|---|---------------|
| Details of the monitoring committee composition<br>and minutes of the committee meeting number of<br>programmes organized reports on the various<br>programs etc in support of the claims | View Document |
| Code of ethics policy document  | View Document |
| Any other relevant information  | View Document |

# 7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

#### **Response:**

# Republic Day

- Republic Day is celebrated on 26th January in order to honor the date on which the constitution of India came into effect.
- Every year on this day, the national flag is being hoisted in the college premises to commemorate this day.
- Republic Day is celebrated in front of administrative building with students and staff of our college.
- National flags are distributed to promote a sense of pride.

#### Women's Day

- The Women's Day programme is regularly conducted in our institution with the support of the management, the Principal and the Heads of the Departments and with the cooperation of the faculty members and the students.
- Resource persons and the students make this program a huge success.
- On account of this day, several events will be conducted for students, teaching and non-teaching faculty members and the prize winners will be awarded at the celebration event.
- The celebration brought happiness, entertainment and a sense of unity among all.

# **World Environment Day**

- World Environment is happily celebrated worldwide on the 5th of June every year.
- On this day awareness and action programs are organized to support & protect our environment.
- It celebrates awareness about those things that affect the world and the environment in a positive and negative way.

#### **International Yoga Day**

- International Day of Yoga, or regularly and informally alluded to as Yoga Day, is commended every year on 21 June since its commencement in 2015.
- The intention of this day is to spread awareness about the physical emotional and spiritual benefits of practicing yoga.
- Practicing Yoga aids in the regulation of one's mind, body and spirit. It combines physical and behavioural disciplines to promote a peaceful body and mind; it aids in stress management and relaxation.
- Due to this COVID 19 pandemic situation prevailing the international yoga day was celebrated on 21-6-2021 at online mode .

#### **Independence Day**

- Independence Day is celebrated on 15th August annually to commemorate the Nation's Independence.
- The National flag is being hoisted in the college premises to commemorate this day. Faculty, non teaching faculty and students gather on this day to commemorate this event.
- Independence Day, is celebrated every year in front of Administrative Building of the institution with students and staff of our college.
- National flags are distributed to all the participants to promote a sense of pride.
- To commemorate this day, parade by security personnel is held during the celebrations.

# **Energy Conservation Day**

- It is observed on 14 December to spread awareness about the importance of energy and the need of conserving energy by using less energy.
- Energy independence cannot come without energy conservation wishing you a very Happy National Energy Conservation Day with a message to save energy.
- Due to this COVID 19 pandemic situations prevailing the National Energy Conservation day was celebrated on 14-12-2021 at online mode.

| File Description  | Document      |
|---|---------------|
| Link for Geotagged photographs of some of the events  | View Document |
| Link for Annual report of the celebrations and commemorative events for the last five years | View Document |

# 7.2 Best Practices

7.2.1 Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual.

#### **Response:**

#### **BEST PRACTICE - I**

1. Title of the Practice: Career Oriented Skill Development Training Modules

# 2. Objectives of the Practice

• To make the curricula more robust, enhance the skill component of the syllabi and to introduce Career Oriented Skill Development to empower students to be job worthy/ create entrepreneurial ventures.

# This was implemented -

- To provide career education and develop skills in students, interested in directly entering the workforce.
- To support students in the vocational exploration, identification, pursuit and integration of personal and professional career goals.
- Incorporation of skilling in the curriculum is to provide opportunities for quality long and short-term skill training.
- To develop courses of interest for personal and community development.
- To broaden the skill-base of the students and to empower them for alternative vocations.
- To connect students directly to opportunities for employment, internship /on the job training.
- To develop professionals with global competencies viz. soft skills, information and communication

technologies etc.

#### 3. The Context

- The Specific Objective of the Placement Based Training is to Train and Expertise the students to meet the present day requirements in the market for the Survival. This includes the Personality Development; Resume writing, Communication Skills, Aptitude, Personal Interview and Group Discussion.
- The institution's philosophy is to develop a student centric, rigorous, flexible curriculum which is relevant for the individuals, the country's economy, and the society at large.
- It motivated to look beyond traditional pathways of 3 Es viz. Education, Employability and Employment and think of strategies to bridge the gap between skill and knowledge.
- To incorporate vocational & skill component in the regular courses
- To offer short-term skill-based courses along with traditional degree courses
- To offer vocational and industry-aligned professional courses
- To promote interdisciplinary programmes that prepare students for diversified career opportunities
- These courses focus on real-world application, with many programs including internships or projects in their field of study.
- To offer value added courses based on the recent advancement.
- This Placement based Training helps students to improve the academic standards and to provide all the academic facilities to the students based on today's need of the Software industry/hardware Industry into which the students enter after they complete the course.

#### 4. The Practice

- We Practiced skill based training courses which cater to the requirements of various professional fields.
- They provide opportunities to students for enhancing their career development & exploratory learning through hands-on practice, classroom sessions, self-study, understanding of the job market, skill development and decision-making
- Students first year to final year are eligible to take up this training alongside their regular course of study
- They are characterised by multiple exit options, credit system, unit-based syllabi, outcome-based assessment, and Input and output-based credit criteria for general education and skills respectively
- At the end of four years, the students are equipped with soft skill training along with conventional degree in Engineering.
- They are designed to be interdisciplinary in nature and promote horizontal mobility.
- A dedicated slot of minimum one hour to maximum 4 hours in a week is reserved in the college timetable for each of the courses.
- Internships, projects, on the job training, practicals, seminars, presentations by the students form an integral part of the syllabi of most of these courses.
- The campus maintains a robust industry-academia interface to bridge the gap between the two and make the content of these courses industry relevant.
- Students are constantly motivated through counselling, to increase their morale.
- Students are also informed and advised on the importance of maintaining good academic scores as these play a major role during recruitment. The cell helps students improve their academic scores through a series of programs and workshops.

- Builders Engineering College looks to develop its students from industrial perspective. For this we have designed training modules to impart technical, logical, analytical, behavioural and managerial skills in every student.
- We also promote students to visit various industries pertaining to their disciplines so that they get the right exposure.
- We are also assessing the students through various online testing methodologies so that the right set of students is channelized towards the right profile.
- The following training programmes are conducted for the students by proper planning prior the academic start.

# 1. Soft Skill Training Programme:

This helps students develop effective communication skills and presentation capabilities in academic and professional settings. These interactive activities focus on work environment and real life situations. Individual attention is given and even shy students are encouraged and empowered to develop their public speaking, interactive and interpersonal skills. This includes the enhancement of following skills

- Presentation Skills
- Group Discussion
- Resume Preparation
- Interview Preparation
- Just a Minute
- Leadership Qualities
- Goal Setting
- Time Management
- Team Player, etc

### (ii) Aptitude Skill Trainings:

It includes to increase the following abilities in the students – Reasoning, Data Interpretation,Logical

#### (iii) Analytical Technical Skill Trainings:

The students are trained in advanced techniques of the following languages and technologies and make the

- C/C++
- JAVA
- PHYTHON

#### 5. Evidence of Success

- The Placement Based Training programme has improved the success rate of the students in the final placement interviews to an appreciable extent.
- These courses have proved to be effective in student's overall progression and in seeking employment or to set up own start-ups.
- The multi-faceted and multi-disciplinary learning experiences have facilitated the scope for better employment which is reflected in the placements.

- Students have developed multiple skills through the field experiences/practical training/ summer internships and are able to apply theoretical knowledge in practical situations.
- Skill development enhances the proficiency of a student in their particular area of interest. Skill enhances to build the professional network, better communication, time management and so on.

# 6. Problems encountered and Resources required

- Sustaining the interest of the students of professional programmes in these courses is a challenge because they are under pressure to cope with the core courses of the programme
- Students at times do face problem in getting permission from their parents for internships.
- Getting adequately trained faculty to teach the skill based papers
- Further, in a tightly scheduled semester pattern of teaching, time management has been found to be one of the biggest challenges in giving special space to industry-academic interface
- At times fixing time slots in the timetable becomes a challenge in case of PG and UG (II, III& IV year) students opting for the Training course.
- Good Infrastructure, adequate faculty and resources are required to run them
- Modular curricula along with modern teaching-learning tools and methods like audio-visual preparations, group discussions, Student seminars and internships are required
- "Work to become, not to acquire"

#### **BEST PRACTICE-2**

### **Title of the Practice: Green Campus**

# **Objectives of the Practice:**

- It is to create awareness among the public about the importance of saving and conserving electrical energy. It is said that "an unit of electrical energy saved is an unit generated".
- Energy conservation refers to the methods of reduction in energy consumption by way of elimination of wastage and promotion of efficiency.
- We know that due to the vast gap between demand and supply, lot of efforts is being done to bridge the gap in terms of generation of more electricity which requires lot of capital investment and apart from it creates lot of environmental concerns.
- Energy conservation is the key element of energy management. We can reduce the energy consumption by adopting various ways of energy conservation which includes efficient use of technologies and avoiding energy wastages.
- The main objective of energy conservation is
- To minimize Energy cost /wastage of energy.
- To minimize the environmental effects.

#### The Context

- Energy Conservation is a term that refers to consumption of the least amount of energy while avoiding unnecessary use of energy.
- In this context, efforts are made to make the consumers understand the importance of energy conservation, be aware of the efficient usage of energy and adopt measures and policies elicited for

- energy conservation.
- Energy Conservation reduces the stress on energy services to be provided by the utilities and can result in increased environmental quality, national security, personal financial security and improved economics. It is at the top of the sustainable energy hierarchy. It aims to save energy for future use.

#### The Practice

- To emphasize the above aspects, our campus has the practice of celebrating the National Energy Conservation Day, Renewable Energy Day every year to bring awareness among the students and all concerned, about energy conservation.
- The awareness among the consumers of electric power in the campus is ensured through proper informative sign boards affixed near all the strategic points of electric power supply units.
- As a part of energy conservation methods our BEC campus has been build with 200KWp Solar Plant to reduce the dependency of EB power.
- Minimum 600KWh per day consumption from TNEB has been reduced by installing 200KWp solar plant. Hence nearly 50% of EB bill has been reduced by the use of solar plant.
- As an energy conservation measure we adopted solar based street lights, Motion sensor based street lights and 70-80 % of our campus is equipped with LED lights.
- Our campus has been designed with the Biogas plant capacity of 45m3 in boy's hostel which can handle the waste from 750-800 Persons and Food waste.
- Invited lectures, workshops, seminars, group discussions, etc. are held periodically at the campus to acquire the awareness among the consumers of electric power about the energy conservation opportunities and measures to be adopted.
- Everyone is motivated to voluntarily adopt energy conservation measures based on the energy conservation opportunities at their disposal such as, reduced use of AC or heater that consume a larger amount of energy every day, increased usage of LED bulbs or smart lighting options, avoid the use of water heating equipment (resistive loads) that consume higher units of energy, fitting the properly rated power factor improvement devices (reactive power compensators) at the captive generation units set up in the campus, etc.
- It is advised that using less hot water can save a lot of energy. Water conservation also leads to better energy conservation. We have established solar energy panels in the campus to generate solar power.
- Energy Conservation Day and Renewable Energy Day are celebrated every year to raise global awareness to take positive environmental action to protect nature and to promote the use of renewable energy resources.

#### **Evidence of Success**

- Celebration of National Energy Conservation Day was that it emphasizes every person to adopt energy conservation measures while using electric power in their day to day activities. Anyone can save energy by taking small steps at home or office by eliminating unnecessary use of light, fan, AC or any other energy consuming equipment.
- Green Energy Club has been successfully implemented in our campus. Every year we will be conducting minimum two programmes through Green Energy club to bring awareness among the students about green campus and green environment.
- Energy saving education is an indispensable part of quality education for college students. In

today's world, the quality education for college students is increasingly valued by the education sector. Besides quality education such as daily scientific culture, ideological morality and mental health, the environmental quality with energy saving and environmental protection consciousness should become the basic quality of college students.

By adopting the conservation methods students are equipped with the knowledge of using the electric energy effectively with recent technologies.

| File Description                                      | Document             |
|---|----------------------|
| Link for Best practices in the Institutional web site | View Document        |
| Link for any other relevant information               | <u>View Document</u> |

### 7.3 Institutional Distinctiveness

# 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

### **Response:**

#### **Women Development Cell (WDC)**

Builders Engineering College commences one of its major objectives of uplifting rural women by offering a variety of value added events. All the events organized through Women Development Cell have empowered the women's community with skills and knowledge to become a successful entrepreneur.

For the well being of girl students, institute has outlined a cell called Women's Development Cell (WDC), through this cell institute has addressed various subjects on safety, entrepreneurial skills, medical issues etc., Institute has invited an assortment of successful women entrepreneurs to act as a chief guest during women's day to address the female community on Historical Achievements of Women, Equal rights of Men and Women, Individual Skills, Importance of Education, Work Life Balance, Opportunity Utilization, Decision Making etc., As like above Many activities are organised for empowering women. The college has provided enough mentoring assistance to the women's community and has a magnanimous community outreach program.

The outstanding education system offered to the financially feeble girls students has reflected healthy in their Academic Performance and Non-Academic Performance. From the academic year 2016 till as on date, institute has created twelve Anna University Rank Holders (https://builderscollege.edu.in/civilengineering/) as listed below excluding male community.

| S.No | Name          | Department | Rank     |
|------|---------------|------------|----------|
| 1    | Kokulprithi K | Civil      | 4th Rank |

| 2  | Janani S         | Civil | 15th Rank |
|----|------------------|-------|-----------|
| 3  | Shalini S K      | Civil | 16th Rank |
| 4  | Soundariya P     | Civil | 21th Rank |
| 5  | Jeeva Nandhini P | Civil | 41th Rank |
| 6  | Seetha M P       | Civil | 44th Rank |
| 7  | Saranya E        | Civil | 46th Rank |
| 8  | Mohana Sindhu B  | CSE   | 24th Rank |
| 9  | Nandhini S       | CSE   | 50th Rank |
| 10 | Sangavi P        | EEE   | 46th Rank |
| 11 | Saranya D        | MBA   | 40th Rank |
| 12 | Anandhi K        | MBA   | 48th Rank |

The Non-Academic Performance of the female community has reflected in promoting their entrepreneurial calibre as well. Institute has shaped women successful entrepreneurs from the Academic year 2016 till as on date. Few victorious entrepreneurs and their details are listed below. Some of them have registered their firm under the Ministry of Micro, Small and Medium Enterprises.

Nivya Selvi k of Department of Civil Engineering has established modernized *home interiors business in the name of Anex Designs during 2018 in Erode, Tamil Nadu. She is undertaking* all designing works which includes architectural plan, elevation and interior works.

The major portfolio of her business includes Architecting, Interior Design, Town Planner of restaurant interior designer services, residential interior designing service and commercial interior design services in Erode, Tamil Nadu. Her business profile is enlisted in IndiaMart (https://www.indiamart.com/anex-designs/).

Bavadharani G of Department of Civil Engineering is running a successful embroidery business in the name of Bava Aari Designer at Erode. During her Academic journey she has shown much importance for Entrepreneurship and groomed herself accordingly by attaching herself in various Entrepreneurship Development programmes organized by the institute.

She specialized in Aari Bridal Blouse, Simple Blouse Embroidery, Machine Embroidery, Normal Blouse Stitching, and Princess Cut Blouse Stitching. She has made herself expertise in giving training for the Women's Community interested in Embroidery work. She has offered online, offline and pre-recorded Aari Embroidery Classes for the Embroidery aspirants.

Bavadharani G has registered her enterprise 'BAVA AARI Academy' under Ministry of Micro, Small and Medium Enterprises on 01.09.2021 and her Udyam Registration Number is UDYAM-TN-07-0020822. She has her official website https://bavas-aari-work-designer.business.site/. Her official website carries all the testimonial details, product categories and her contact details as well. Bavadharani G has received a certificate of appreciation from Urchava Creations for her successful completion of a one day makeup and hairstyle seminar on 10th April 2022 at Coimbatore. This certificate was issued by Mrs. Santhoshi Srikar, Celebrity Makeup Artist.

Bavadharani G has received best makeup artist award from Patras Miracle Cosmetics and Sri Balaji

Cosmetics, Trichy during Grand Master Seminar in Vetri Vendhan by 2nd May 2022.

#### **PLACEMENT:**

From the academic year 2016 till as on date, institute has made few girls community to get placed at well reputed tier 1 company, who has entered the institute with shortage of financial backup. Few reputation cases are listed below excluding the male community.

| S.No | Name            | Department | Placed at            |
|------|-----------------|------------|----------------------|
| 1    | Bavanyaa P V    | MBA        | SBI Life Insurance   |
| 2    | Yasinipriya A S | BE-CSE     | TCS                  |
| 3    | Saranya S       | BE-CSE     | Wipro Technologies   |
| 4    | Dhivya Sri S    | BE-ECE     | Infosys Technologies |
| 5    | Kowsalya M      | BE-ECE     | Infosys Technologies |
| 6    | Kavidharshini C | BE-CSE     | HCL Technologies     |
| 7    | Sandhiya Devi S | BE-CSE     | HCL Technologies     |
| 8    | Harshni J       | MBA        | City Union Bank      |
| 9    | Gavyamathi.M    | MBA        | City Union Bank      |

#### **HIGHER EDUCATION:**

Abinaya.P Student of Department of Management Studies has opted higher education as a move towards her career up-lift. She has registered for full time PhD in Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore for the academic year 2020-21.

| File Description                                      | Document      |
|---|---------------|
| Link for appropriate web in the Institutional website | View Document |
| Link for any other relevant information               | View Document |

# 5. CONCLUSION

### **Additional Information:**

- Acquired state-of-the-art equipment & efficient laboratories with 200 acres of modernized campus.
- Internet of Things (IoT) Experience Incubation Center at Department of Electronics and Communication Engineering with a *Rs. 11 lakh worth*.
- Artificial Intelligence (AI), Machine Learning (ML) and Digital Marketing (DM) Experience Innovation Centre at Department of Computer Science and Engineering with a *Rs. 16 lakh worth*.
- Research Tie up with reputed organizations like REDHAT, FORD, BMW Engine for Education, Renold Chain India.
- Entrepreneurship Development Cell was established in the year 2011 and its ideas were inculcated and motivated the students to become successful entrepreneurs.
- Has shaped entrepreneurs in various ranges of Business Like Agro, Cosmetics, Construction, Textile, Food and Beverage, Television Media, Photography, Poultry Farming, Automobile etc.,
- Holds 10 published patents in Engineering Discipline.
- Proposal submitted to MSME to obtain Host Institute's credentials.
- Headed by major infrastructure developers.
- Green, Eco friendly and Wi-Fi enabled campus.
- Highly qualified and experienced faculty members.
- SWAYAM NPTEL Local chapter for online education.
- Focus on enlightenment, employability and entrepreneurship.
- Providing outcome based education.
- Enjoyable teaching learning environment.
- 100 percent placement assurance.
- Scholarships for meritorious students.
- Tie up with high profiled industries and companies for internship training.
- Furnished separate hostels for Boys and Girls.
- Institutional bus facility for a radius of 50 kms.
- MOU's with CISCO, REDHAT, Microsoft Learn for Educators, VMware IT Academy, Palo Alto Networks, AWS Educate, Trial Head Sales force, Enthu Technology Solutions India Private Limited, Spectrum Infotech, CALIBER Embedded Technologies India Private Limited, Skill Safari.
- Internships with Full Stack Development at Skill Safari, Calibrant Technologies, Maventic Innovative Solutions Pvt. Ltd., Labdox Private Limited, Pune, Kaashiv InfoTech, Chennai, Suven Cosultants & Technology Private Limited, Mumbai, Alpha Associates, Coimbatore, Ampere Vehicles Private Limited, Coimbatore.
- Laboratories with four Blade-Mounted Servers, Special software packages like MENTOR GRAPHICS, PSPICE, MATLAB, VHDL, MULTISIM, MODELSIM & KIEL, PLC and DSP based Drives, PRO-E, CATIA, DELMIA, TEKLA etc.,

# **Concluding Remarks:**

Institute was established in 2009, which is approved by AICTE, New Delhi and affiliated with Anna University, Chennai. Institution has B++ NAAC accreditation and is ISO 9001:2015 certified. The Civil Department of the institution has applied for NABL accreditation. In the fields of Civil Engineering, IoT, AI, and CAD/CAM, the institution has a good infrastructure and facilities for research, testing, consulting, and

incubation. More than 20 Memorandums of Understanding (MoUs) have been signed between the institution and various industries. The IoT incubation centre is being built in collaboration with M/s Enthu Technologies, Coimbatore and the CSE department has established an Innovation Centre in AI and ML. A solar energy system with a capacity of 200kVA has been installed. More than nine projects have been submitted for patent, with all of them being published in the journal. Civil and Computer Science Engineering departments are working together to create software for small and medium-sized house plans, estimation, and construction materials and CSE and ECE are working on a project to create a digital catalogue software application. The institution has adequate infrastructure, technical expertise and well trained faculty community.

# **6.ANNEXURE**

#### 1.Metrics Level Deviations

Metric ID Sub Questions and Answers before and after DVV Verification

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
  - 1. Academic council/BoS of Affiliating university
  - 2. Setting of question papers for UG/PG programs
  - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
  - 4. Assessment /evaluation process of the affiliating University

Answer before DVV Verification : A. All of the above Answer After DVV Verification: D. Any 1 of the above

Remark: As per the clarification document, Input edited accordingly.

## 1.2.2 Number of Add on /Certificate programs offered during the last five years

### 1.2.2.1. How many Add on /Certificate programs are offered within the last 5 years.

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 20      | 20      | 19      | 15      | 14      |

#### Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 18      | 18      | 17      | 15      | 14      |

Remark: Input edited as per the clarification documents excluding java program and banking management program.

# 1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

# 1.2.3.1. Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 483     | 505     | 592     | 570     | 579     |

# Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 408     | 443     | 507     | 570     | 579     |

|    | verage percent<br>ork/internship   | 0  |   | -   | riential lear   | ning throug                 | gh project worl              | k/fie |
|----|--|--|---|---|---|-----------------------------|------------------------------|-------|
| "  | •  | G  | •   |   |   |                             |                              |       |
| W  | 1.3.2.1. Numl<br>ork/internship  |  |   | -   | ential learı  | ing through                 | n project work               | /fiel |
|    | Answer be  | fore DVV V   | Verification:   |   |   |                             |                              |       |
|    | 2020-21  | 2019-20  | 2018-19   | 2017-18   | 2016-17   |                             |                              |       |
|    | 159  | 113  | 139   | 123   | 140   |                             |                              |       |
|    | Answer Af  | fter DVV Vo  | erification :   |   |   |                             |                              |       |
|    | 2020-21  | 2019-20  | 2018-19   | 2017-18   | 2016-17   |                             |                              |       |
|    | 132  | 113  | 139   | 125   | 131   |                             |                              |       |
| D. | .Sc. / D.Litt. yo  |  | ring the las  | st five years   | D. / D.M. /   | est degree f<br>M.Ch. / D.N | or count)<br>J.B Superspecia | ılity |
| D. | .Sc. / D.Litt. yo  | ear wise du  | ring the las  | st five years   | D. / D.M. /   | G                           |                              | ılity |
| D. | Answer be  | ear wise du<br>fore DVV V  | ring the last   | st five years   | D. / D.M. /   | G                           |                              | ılity |
| D. | Answer be 2020-21  | fore DVV V   | Verification 2018-19  | 2017-18   | D. / D.M. / S 2016-17   | G                           |                              | ulity |
| D. | Answer be 2020-21  | ear wise du<br>fore DVV V<br>2019-20<br>14   | Verification 2018-19  | 2017-18   | D. / D.M. / S 2016-17   | G                           |                              | ality |
| D. | Answer Af  2020-21  Answer Af  2020-21   | ear wise du<br>fore DVV V<br>2019-20<br>14<br>Eter DVV V<br>2019-20  | 2018-19 14 erification: 2018-19 2018-19   | 2017-18<br>2017-18<br>2017-18   | D. / D.M. / S 2016-17 11 2016-17                                | G                           |                              | ulity |
| D. | Answer be 2020-21 17  Answer Af 2020-21 31   | ear wise du<br>fore DVV V<br>2019-20<br>14<br>Eter DVV V<br>2019-20<br>27  | 2018-19 14 erification: 2018-19 2018-19 23  | 2017-18<br>14<br>2017-18<br>21  | D. / D.M. / S 2016-17 11 2016-17 17                             | G                           |                              | ulity |
|    | Answer Af  2020-21  17  Answer Af  2020-21  31  Remark : Inpu  | ear wise du<br>fore DVV V<br>2019-20<br>14<br>Ster DVV V<br>2019-20<br>27  | 2018-19 14 erification: 2018-19 23 per the clari  | 2017-18 2017-18 21 fication doc   | D. / D.M. / S 2016-17 11 2016-17 17 cuments.                    | M.Ch. / D.N                 | J.B Superspecia              |       |
| A  | Answer be 2020-21 17  Answer Af 2020-21 31  Remark : Inpu  | ter DVV Volume 14 2019-20 27 27 27 21 edited as particular and par | 2018-19 14 erification: 2018-19 23 per the clarice of full times                                    | 2017-18 2017-18 21 fication docume teachers   | D. / D.M. / S 2016-17 11 2016-17 17 cuments.                    | M.Ch. / D.N                 |                              |       |
| A  | Answer be 2020-21 17 Answer Af 2020-21 31 Remark : Inputering teaching ompleted acade                | ter DVV Volume 14 2019-20 27 27 27 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29   | 2018-19 14 erification: 2018-19 23 per the clarice of full time number of                           | 2017-18 14 2017-18 21 fication docume teachers of years)                                      | D. / D.M. / S 2016-17 11 2016-17 17 cuments.                    | M.Ch. / D.N                 | J.B Superspecia              |       |
| A  | Answer be 2020-21 17 Answer Af 2020-21 31 Remark : Inpu verage teachin ompleted acade 2.4.3.1. Total | ter DVV Volume 2019-20  2019-20  27  at edited as particular experience experience   | 2018-19 14 erification: 2018-19 23 per the clarice of full time number of full-time.                | 2017-18 21 fication docume teachers of years) te teachers                                     | D. / D.M. / S 2016-17 11 2016-17 17 cuments.                    | M.Ch. / D.N                 | J.B Superspecia              |       |
| A  | Answer be 2020-21 17 Answer Af 2020-21 31 Remark : Inputered acade 2.4.3.1. Total Answer be          | ter DVV Volume 14 2019-20 27 27 27 27 27 27 27 28 29 29 29 29 29 29 29 29 29 29 29 29 29   | 2018-19 14 erification: 2018-19 23 per the clarice of full time number of full-time derification.   | 2017-18 21 fication docume teachers of years) te teachers: 764                                | D. / D.M. / S 2016-17 11 2016-17 17 cuments.                    | M.Ch. / D.N                 | J.B Superspecia              |       |
| A  | Answer be 2020-21 17 Answer Af 2020-21 31 Remark : Inputered acade 2.4.3.1. Total Answer be          | ter DVV Volume of the distribution of the dist | 2018-19 14 erification: 2018-19 23 per the clarice of full time number of full-time derification: 7 | 2017-18  2017-18  2017-18  21  fication docume teachers of years)  the teachers of years  162 | D. / D.M. / S  2016-17  11  2016-17  17  cuments.  s in the sam | M.Ch. / D.N                 | J.B Superspecia              |       |

### government agencies during the last five years

# 3.1.3.1. Number of departments having Research projects funded by government and non-government agencies during the last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 5       | 6       | 5       | 2       | 0       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 5       | 6       | 6       | 2       | 0       |

# 3.1.3.2. Number of departments offering academic programes

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6       | 6       | 6       | 6       | 6       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 6       | 6       | 6       | 6       | 6       |

Remark: Input edited as per the clarification documents given in 3.1.1

# Number of research papers per teachers in the Journals notified on UGC website during the last five years

# 3.3.2.1. Number of research papers in the Journals notified on UGC website during the last five years.

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 27      | 17      | 20      | 18      | 22      |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 12      | 4       | 3       | 1       | 0       |

Remark: Input edited as only considering research papers in the Journals notified on UGC website during the last five years.

3.4.2 Number of awards and recognitions received for extension activities from government/government recognised bodies during the last five years

3.4.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 5       | 5       | 5       | 1       | 2       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 0       | 1       | 3       | 1       | 2       |

Remark: Input edited as per the awards given in clarification.

- Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years
  - 3.4.3.1. Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 7       | 9       | 12      | 6       | 7       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 3       | 8       | 3       | 6       | 4       |

Remark: Input edited as per the extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognized bodies only.

- Average percentage of students participating in extension activities at 3.4.3. above during last five years
  - 3.4.4.1. Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
|---------|---------|---------|---------|---------|

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 160     | 916     | 356     | 1217    | 850     |

Remark: Input edited as per the metric 3.4.3 and number of students in the year 2019-2020 is edited as per the extended metric 2.1.

- 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year
  - 3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 12      | 22      | 25      | 58      | 15      |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 2       | 1       | 25      | 31      | 15      |

Remark: Input edited as per the clarification documents.

- 4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)
  - 4.4.1.1. Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 99.4    | 58.55   | 94.48   | 119.82  | 108.2   |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 73.735  | 38.619  | 65.565  | 88.449  | 39.740  |

Remark: Input edited as per the clarification documents.

# 5.2.1 Average percentage of placement of outgoing students during the last five years

5.2.1.1. Number of outgoing students placed year - wise during the last five years.

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 109     | 176     | 155     | 222     | 236     |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 71      | 38      | 119     | 100     | 179     |

Remark: Input edited as per the clarification document.

- Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)
  - 5.2.3.1. Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, *etc.*)) year-wise during last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 6       | 1       | 2       | 3       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 4       | 1       | 2       | 2       |

5.2.3.2. Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 6       | 1       | 2       | 3       |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 4       | 6       | 1       | 2       | 3       |

Remark: Input edited as per the clarification documents.

- Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.
  - 5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 7       | 4       | 6       | 7       | 16      |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 7       | 4       | 6       | 6       | 14      |

Remark: Input edited as per the clarification documents

- 5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)
  - 5.3.3.1. Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

Answer before DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 19      | 24      | 22      | 24      | 31      |

Answer After DVV Verification:

| 2020-21 | 2019-20 | 2018-19 | 2017-18 | 2016-17 |
|---------|---------|---------|---------|---------|
| 14      | 18      | 13      | 16      | 12      |

Remark: Input edited as per the clarification documents

- 7.1.7 The Institution has disabled-friendly, barrier free environment
  - 1. Built environment with ramps/lifts for easy access to classrooms.
  - 2. Divyangjan friendly washrooms
  - 3. Signage including tactile path, lights, display boards and signposts
  - 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment
  - 5. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading

Answer before DVV Verification: A. Any 4 or all of the above

|        | Answer After DVV Verification: B. 3 of the above  |
|--------|---|
|        | Remark : Input edited as per the clarification documents.                                   |
| 7.1.10 | The Institution has a prescribed code of conduct for students, teachers, administrators and |
|        | other staff and conducts periodic programmes in this regard.                                |
|        | 1. The Code of Conduct is displayed on the website  |
|        | 2. There is a committee to monitor adherence to the Code of Conduct                         |
|        | 3. Institution organizes professional ethics programmes for students, teachers,             |
|        | administrators and other staff  |
|        | 4. Annual awareness programmes on Code of Conduct are organized                             |
|        | Answer before DVV Verification : A. All of the above  |
|        | Answer After DVV Verification: C. 2 of the above  |
|        | Remark: Input edited as per the clarification documents.                                    |
|        |   |

# **2.Extended Profile Deviations**

| Litteriaca .                    | Questions                               |                                       |             |                            |               |         |         |          |        |
|---------------------------------|---|---------------------------------------|-------------|----------------------------|---------------|---------|---------|----------|--------|
| Number o                        | of courses of                           | fered by the                          | Institution | across all p               | orogram       | ıs duri | ing the | last fiv | e year |
|                                 |   |                                       |             |                            |               |         |         |          |        |
| Answer be                       | fore DVV V                              | erification:                          |             |                            | _             |         |         |          |        |
| 2020-21                         | 2019-20                                 | 2018-19                               | 2017-18     | 2016-17                    |               |         |         |          |        |
| 246                             | 259                                     | 255                                   | 264         | 254                        |               |         |         |          |        |
| Answer A                        | fter DVV Ve                             | rification:                           |             |                            | _             |         |         |          |        |
| 2020-21                         | 2019-20                                 | 2018-19                               | 2017-18     | 2016-17                    |               |         |         |          |        |
|                                 |   |                                       | 20.5        | 255                        | 7             |         |         |          |        |
| Number o                        | 259                                     | final year s                          | 285         | 275<br>r-wise duri         | <br>ng last f | ive ve  | ars     |          |        |
| Number o                        | of outgoing /                           | final year s                          |             |                            | ng last f     | ive yea | ars     |          |        |
| Number o                        |   | final year s                          |             |                            | ng last f     | ive ye  | ars     |          |        |
| Number of                       | of outgoing /                           | final year s                          | tudents yea | r-wise duri                | ng last f     | ive ye  | ars     |          |        |
| Number of Answer be 2020-21 276 | of outgoing /<br>efore DVV V<br>2019-20 | final year s erification: 2018-19 478 | tudents yea | <b>r-wise duri</b> 2016-17 | ng last f     | ïve yea | ars     |          |        |
| Number of Answer be 2020-21 276 | of outgoing / efore DVV V 2019-20 331   | final year s erification: 2018-19 478 | tudents yea | <b>r-wise duri</b> 2016-17 | ng last f     | ïve ye: | ars     |          |        |