



## YEARLY STATUS REPORT - 2020-2021

### Part A

#### Data of the Institution

<b>1.Name of the Institution</b>		<b>BAPATLA ENGINEERING COLLEGE</b>
• Name of the Head of the institution	<b>Dr V Damodara Naidu</b>	
• Designation	<b>Principal</b>	
• Does the institution function from its own campus?	<b>Yes</b>	
• Phone No. of the Principal	<b>08643224244</b>	
• Alternate phone No.	<b>08643224266</b>	
• Mobile No. (Principal)	<b>9440730035</b>	
• Registered e-mail ID (Principal)	<b>bec_principal@becbapatla.ac.in</b>	
• Address	<b>GBC ROAD, MAHATMAJI PURAM</b>	
• City/Town	<b>Bapatla</b>	
• State/UT	<b>Andhra Pradesh</b>	
• Pin Code	<b>522102</b>	
<b>2.Institutional status</b>		
• Autonomous Status (Provide the date of conferment of Autonomy)	<b>23/06/2010</b>	
• Type of Institution	<b>Co-education</b>	
• Location	<b>Rural</b>	

• Financial Status	<b>Self-financing</b>				
• Name of the IQAC Co-ordinator/Director	<b>Dr P Sundara Kumar</b>				
• Phone No.	<b>08643224244</b>				
• Mobile No:	<b>9182426301</b>				
• IQAC e-mail ID	<b>beciqac@gmail.com</b>				
<b>3.Website address (Web link of the AQAR (Previous Academic Year))</b>	<a href="http://www.becbapatla.ac.in/uploads/BCE1623824090932.pdf">http://www.becbapatla.ac.in/uploads/BCE1623824090932.pdf</a>				
<b>4.Was the Academic Calendar prepared for that year?</b>	<b>Yes</b>				
• if yes, whether it is uploaded in the Institutional website Web link:	<a href="http://www.becbapatla.ac.in/pages/academic-calenders">http://www.becbapatla.ac.in/pages/academic-calenders</a>				
<b>5.Accreditation Details</b>					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
<b>Cycle 1</b>	<b>B</b>	<b>2.70</b>	<b>2015</b>	<b>03/03/2015</b>	<b>02/03/2015</b>
<b>Cycle 2</b>	<b>B++</b>	<b>2.99</b>	<b>2020</b>	<b>11/03/2020</b>	<b>10/03/2025</b>
<b>6.Date of Establishment of IQAC</b>			<b>07/10/2015</b>		
<b>7.Provide the list of Special Status conferred by Central and/or State Government on the Institution/Department/Faculty/School (UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC, etc.)?</b>					
Institution/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount	
<b>Dr N Sudhakar</b>	<b>SPDP</b>	<b>AICTE</b>	<b>Nil</b>	<b>1633000</b>	
<b>8.Provide details regarding the composition of the IQAC:</b>					
• Upload the latest notification regarding the composition of the IQAC by the HEI			<a href="#">View File</a>		
<b>9.No. of IQAC meetings held during the year</b>			<b>3</b>		

<ul style="list-style-type: none"> <li>Were the minutes of IQAC meeting(s) and compliance to the decisions taken uploaded on the institutional website?</li> </ul>	Yes	
<ul style="list-style-type: none"> <li>If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded	
<b>10. Did IQAC receive funding from any funding agency to support its activities during the year?</b>	No	
<ul style="list-style-type: none"> <li>If yes, mention the amount</li> </ul>		
<b>11. Significant contributions made by IQAC during the current year (maximum five bullets)</b>		
<p>Strengthening of Knowledge Dissemination: The IQAC strengthens knowledge dissemination in two ways digitalizing and disseminating i.e. ICT Tools and Video Lectures.</p>		
<p>All staff/student members are encouraged to take NPTEL (MOOC) online courses in order to stay current with the latest technologies.</p>		
<p>Faculty members have been encouraged and assisted in receiving financial support to attend faculty development training programs and seminars at reputable organizations. Patent publishing is promoted in order to foster research and innovation.</p>		
<p>Students and staff are motivated to engage in innovation, entrepreneurship, Skill Development activities, and contests in various events via the Institutions Innovation Council.</p>		
<p>IQAC has been conducted a two-day national-level national seminar on Quality improvement via accreditation and ranking..</p>		
<p>ISO &amp; Green Certifications / Audit</p>		
<b>12. Plan of action chalked out by IQAC at the beginning of the academic year towards quality enhancement and the outcome achieved by the end of the academic year:</b>		

Plan of Action	Achievements/Outcomes
Organization of Conferences and Seminars	Faculty were motivated towards the contemporary developments.
Wide usage of ICT Tools	Maintaining Quality of Education in the Pandemic . Teachers are able to transfer wide range of information in multiple formats.
To promote Institution in multiple ways	College has received Best Engineering College Award. Besides The faculty have also excelled and received many awards recognized by government and private bodies.
Improving the Placements	Nearly 750+ students were placed in various MNCs.
Increasing the Patent and Paper Publications	Faculty have published good number of peer reviewed articles.
Industry - Institute interactions	Number of Internships were increased
<b>13. Was the AQAR placed before the statutory body?</b>	<b>Yes</b>
<ul style="list-style-type: none"> <li>Name of the statutory body</li> </ul>	
Name of the statutory body	Date of meeting(s)
Academic Council	18/02/2021
<b>14. Was the institutional data submitted to AISHE ?</b>	<b>Yes</b>
<ul style="list-style-type: none"> <li>Year</li> </ul>	
Year	Date of Submission
19/02/2021	19/02/2021

## Extended Profile

<b>1.Programme</b>	
1.1 Number of programmes offered during the year:	<b>24</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
<b>2.Student</b>	
2.1 Total number of students during the year:	<b>5334</b>
File Description	Documents
Institutional data in Prescribed format	<a href="#">View File</a>
2.2 Number of outgoing / final year students during the year:	<b>1208</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
2.3 Number of students who appeared for the examinations conducted by the institution during the year:	<b>7212</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
<b>3.Academic</b>	
3.1 Number of courses in all programmes during the year:	<b>749</b>
File Description	Documents
Institutional Data in Prescribed Format	<a href="#">View File</a>
3.2	<b>260</b>

Number of full-time teachers during the year:		
File Description	Documents	
Institutional Data in Prescribed Format	<a href="#">View File</a>	
3.3	47	
Number of sanctioned posts for the year:		
<b>4.Institution</b>		
4.1	949	
Number of seats earmarked for reserved categories as per GOI/State Government during the year:		
4.2	79	
Total number of Classrooms and Seminar halls		
4.3	1504	
Total number of computers on campus for academic purposes		
4.4	1002.508	
Total expenditure, excluding salary, during the year (INR in Lakhs):		
<b>Part B</b>		
<b>CURRICULAR ASPECTS</b>		
<b>1.1 - Curriculum Design and Development</b>		
1.1.1 - Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which are reflected in Programme Outcomes (POs), Programme Specific Outcomes (PSOs) and Course Outcomes (COs) of the various Programmes offered by the Institution.		
<p>The curriculum for the B.Tech courses is developed by the respective Board of Studies. All the Boards of studies are having members from both academia and industry. A strong emphasis is given to the needs of the industry. As local developmental needs are also essential, some of the subjects relevant to the local needs are also included. Program Outcomes for each program are clearly defined and disseminated amongst all the stakeholders. Course Outcomes(Cos) are clearly mentioned for each course and included in the handbook. To inculcate moral values a subject on "Professional Ethics and human values" is included in all the programs. As environmental protection</p>		

is a responsibility of every civilian, a course on Environmental science is made mandatory. As the world is trending towards artificial intelligence and allied subjects, enough emphasis is given to the latest technologies like IOT, Artificial Intelligence, Machine Learning, Robotics, Data Science, Python coding are included in the Institutional Electives. Any student can choose the institutional electives and enhance his/her knowledge. In the R20 regulations, a student can opt a Minors or Honors by which he can acquire additional qualifications. To achieve program outcomes (POs), and Program Specific Outcomes(PSO), MOOCS courses, internships are included.

File Description	Documents
Upload additional information, if any	No File Uploaded
Link for additional information	<a href="http://www.becbapatla.ac.in/pages/co-po-mapping">http://www.becbapatla.ac.in/pages/co-po-mapping</a>

### 1.1.2 - Number of Programmes where syllabus revision was carried out during the year

09

File Description	Documents
Minutes of relevant Academic Council/BOS meeting	<a href="#">View File</a>
Details of syllabus revision during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

### 1.1.3 - Number of courses focusing on employability/entrepreneurship/ skill development offered by the Institution during the year

484

File Description	Documents
Curriculum / Syllabus of such courses	<a href="#">View File</a>
Minutes of the Boards of Studies/ Academic Council meetings with approval for these courses	<a href="#">View File</a>
MoUs with relevant organizations for these courses, if any	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

## 1.2 - Academic Flexibility

### 1.2.1 - Number of new courses introduced across all programmes offered during the year

484

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	No File Uploaded
Institutional data in prescribed format (Data Template)	<a href="#">View File</a>

### 1.2.2 - Number of Programmes offered through Choice Based Credit System (CBCS)/Elective Course System

09

File Description	Documents
Minutes of relevant Academic Council/BoS meetings	<a href="#">View File</a>
Any additional information	No File Uploaded
List of Add on /Certificate programs (Data Template)	<a href="#">View File</a>

## 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and Human Values into the curriculum

**PROFESSIONAL ETHICS AND HUMAN VALUES** This course is comprised of classroom discussions with real-life situations. It also focuses on



ethical concerns common to human service situations. It is in response to a long-felt and urgent need to integrate value education with decision-making skills in their professions. The issues in professional ethics are analyzed in the context of right understanding with the main focus on the development of ethical competence in individuals. The course concludes by proposing several salient steps to undertake the journey towards holistic and value-based living. As part of improving Human values in 2020-2021, the administration has initiated and introduced Professional Ethics and Human Values at the UG level as a subject in the curriculum as a credit course having 3 credits at the end of the semester final exam for 100 marks is conducted. ENVIRONMENT STUDIES This course introduces the academic approach of sustainability by covering the general understanding of what constitutes to the rates of renewable resource harvest, pollution creation, and non-renewable resource depletion and where these processes can be continued indefinitely, i.e., without sacrificing the needs of future generations. It is a course to better equipped students for making informed decisions and taking economically feasible actions that are in the interests of protecting the natural world.

File Description	Documents
Upload the list and description of the courses which address issues related to Gender, Environment and Sustainability, Human Values and Professional Ethics in the curriculum	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 1.3.2 - Number of value-added courses for imparting transferable and life skills offered during the year

15

File Description	Documents
List of value-added courses	<a href="#">View File</a>
Brochure or any other document relating to value-added courses	No File Uploaded
Any additional information	No File Uploaded

### 1.3.3 - Number of students enrolled in the courses under 1.3.2 above

1868

File Description	Documents
List of students enrolled	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.3.4 - Number of students undertaking field work/projects/ internships / student projects**

1699

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.4 - Feedback System**

**1.4.1 - Structured feedback and review of the syllabus (semester-wise / year-wise) is obtained from 1) Students 2) Teachers 3) Employers and 4) Alumni**

B. Any 3 of the above

File Description	Documents
Provide the URL for stakeholders' feedback report	<a href="http://www.becbapatla.ac.in/pages/igac">http://www.becbapatla.ac.in/pages/igac</a>
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	<a href="#">View File</a>
Any additional information	No File Uploaded

**1.4.2 - The feedback system of the Institution comprises the following**

A. Feedback collected, analysed and action taken made available on the website

File Description	Documents
Provide URL for stakeholders' feedback report	<a href="http://www.becbapatla.ac.in/pages/igac">http://www.becbapatla.ac.in/pages/igac</a>
Any additional information	<a href="#">View File</a>

TEACHING-LEARNING AND EVALUATION	
<b>2.1 - Student Enrollment and Profile</b>	
<b>2.1.1 - Enrolment of Students</b>	
<b>2.1.1.1 - Number of students admitted (year-wise) during the year</b>	
1528	
File Description	Documents
Any additional information	No File Uploaded
Institutional data in prescribed format	<a href="#">View File</a>
<b>2.1.2 - Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year (exclusive of supernumerary seats)</b>	
949	
File Description	Documents
Any additional information	No File Uploaded
Number of seats filled against seats reserved (Data Template)	<a href="#">View File</a>
<b>2.2 - Catering to Student Diversity</b>	
2.2.1 - The institution assesses students' learning levels and organises special programmes for both slow and advanced learners.	
<p>The Institution assesses the knowledge and competence levels of the students at the time of their entry into the program. Students learning abilities are obtained from their performance in the qualifying examination and the induction training program is conducted immediately after admission. The facilities in the college along with the scope of the subjects being learnt will be introduced in these sessions. Apart from this, sessions are also included to inculcate a positive attitude and competitive spirit. This process helps as a base for monitoring the future progress of the students. Bridge courses are also conducted in the individual departments to help the students to the level of higher education.</p> <p>Bapatla Engineering college believes in the outcome-based learning process. Institution adopts a process to identify slow and advanced learners among students. Advanced learners and slow learners have identified as per their responses in the classroom as well as the</p>	

performance in the assignment test, mid examination, and end-semester examinations. After knowing slow and advanced learners, the teachers prepare a separate list of slow and advanced learners based on their performance in internal examinations. The faculty takes a keen interest while ordering books for the Central library and ascertains that the library collection of books caters to the needs of both slow and advanced learners. The library also ensures accessibility to computer facilities and the internet for the online material, extends its timings and provides the atmosphere for conducive learning to both slow and advanced learners. All departments have special programs for advanced learners and also for slow learners and almost all departments have several effective methods in place for this purpose.

For slow learners the following activities are conducted:

- 1.The institute ensures that a slow learner clears all his courses within a stipulated time and provides extra attention to build additional skills which makes them employable.
- 2.Remedial classes are arranged after the regular classwork. The schedule for organizing remedial classes for slow learners was prepared. This exercise is done in a discreet manner and slow learners are encouraged and driven to recognize their shortcomings and register on their own without compulsion. Teachers can give one to one attention in remedial classes and focus on individual problems in a better manner when compared to a regular classroom in which the advanced learners' participation may inhibit the others from raising their problems.
- 3.Individual counselling by the concerned mentor. All the departments in the Bapatla Engineering College use mentoring to keep track of slow learners' progress. Teachers are encouraged to mentor weak students and help them with explanations and notes. Revision classes and counselling sessions are held, and additional teaching is taken up if required.
- 4.Bilingual explanations and discussions are imparted to the slow learners after the class hours for better understanding.
- 5.Adopting compensatory teaching methods by using methods like pictures, films, videos, live experiences for learning.
- 6.Provision of simple and standard lecture notes are provided to the students for their better understanding.

7. Discuss the old question papers regarding the exam pattern.

8. Special tests are conducted on basic concepts.

9. The communication skills classes are conducted for students from rural Backgrounds to improve skills.

10. Encouragement in sports and extra cultural activities.

11. Parents of students are informed in case of poor academic performance and psycho-social problems whenever necessary.

For advanced learners the following activities are conducted:

1. Encourage the students towards national competitive Examinations.

2. Special guidance is given to students to participate in Hackathons, Paper Presentations, Project Competitions and participate in Summer Projects and Internships.

3. Students are encouraged to participate in seminars, conferences and workshops to gain knowledge.

4. Talented students are motivated to participate in extra-curricular activities, exhibitions, and cultural competitions.

5. Advanced learners are given opportunities to be part of innovative projects and other technology initiatives of the institute.

6. Students are encouraged to work on the newsletter and actively participate in the Department Association committee.

7. The faculty facilitates students to publish their articles in renowned peer-reviewed journals.

8. Special training Programs were conducted like coding contests, campus recruitment training etc.

9. Capacity building for the job market through counselling and other skill-development initiatives such as providing input on communication skills

10. Concerned Mentors are encouraged to take up job-oriented NPTEL/MOOCs courses in addition to regular courses.

11. Training and Placement Cell conducts CRT classes for the students

to develop their communication skills along with technical skills and be ready for the campus interviews to enhance the employability of the students.

12.The academic achievements of the students are extremely motivated and highly praised by the college by celebrating graduation day every year. Students who secured higher marks are honoured with medals and scholarships.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

### 2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
30/06/2021	5334	260

File Description	Documents
Upload any additional information	No File Uploaded

### 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:

**I. Experiential Learning: Each department conducts add-on programs to support students in their experiential learning**

The institution imparts the following experiential learning practices to enhance the creativity and cognitive levels of the students

1. Laboratory Sessions are conducted with content beyond syllabus experiments.
2. Summer Internship -Students get hands-on training while working in the company.
3. Add-on Courses on latest technologies with NPTEL, ICT-IITK, SAP, Coursera, etc.

4. Project development on latest technologies by students where they showcase their working model in the technical fest.
5. Industrial Visits to engage them in experiential learning while visiting the organization.
6. Certification Courses (Value Added Courses) by the market experts such as Microsoft/ Google/ NSE etc. to develop their expertise
7. Participation in simulated events such as simulated stock exchanges or hackathons where they acquire experience of working on some real-life model.

II. Participative Learning: In this type of learning, students participate in various activities such as seminar, group discussion, wall papers, projects, and the skill based add-on courses. Students are encouraged to participate in activities where they can use their specialized technical or management skills, such as

1. Students are encouraged and presently made mandatory to take (Massive Open Online Courses) MOOCs offered by premier institutions of the country.
2. Participation in professional societal activities of CSI, IEEE, IETE, etc. are currently mandatory.
3. The institution has a club/ association with every department which organizes a number of student-centric activities. The participating students are from the same department or from other departments which promotes interdepartmental collaborative activities. These activities are an integral part of the departmental activity. These events promote leadership qualities in the students.
4. Institute organizes students activities to promote the spirit of Teamwork activities like Camp of NSS, institutional social responsibility through Red Cross, Tree plantation. Swatch Bharat and Health awareness camp to help the students to learn Art of living in a team for Social and community welfare.
5. The institute organizes a technical fest, BECTAGON in which students showcase their learning in the form of innovative projects and Models. Also, students are motivated to participate in inter-college as well as national-level competitions.
6. Proficiency in soft and communication skills through lab sessions, placement training programs and guest lectures.
7. Industrial/field visits, Practical training/internship at Industry and/or renowned institutions like TCS, Infosys, HCL, VTPS, Steel plants, BHEL, ISRO etc. are mandatory at present.

III. Problem-solving methods: Departments encourage students to

acquire and develop problem-solving skills. For this, the college organizes expert lectures on various topics, motivate students to join MOOC courses, participate in various inter-college and intra-college technical fests and other competitions such as:

1. In-house summer training with project development
2. Regular Assignments based on problems
3. Mini Project development
4. Regular Quizzes
5. Case studies Discussion
6. Class presentations
7. Debates
8. Participation in Inter-college events

#### IV. Independent learning Method:

1. The institute provides a well-stocked library which consists of a bulk of books, journals, project reports and other teaching materials for the use of students and faculty.
2. The department provides well-equipped and advanced labs for improving programming skills & logical thinking.
3. Faculty and students has got access to NPTEL video lectures for effective teaching-learning practices. Students are also encouraged to use MITS open courseware.
4. Students are encouraged to give seminars starting from the first year on the basics/fundamentals of subjects.
5. The students are encouraged to attend workshops and conferences. Students are encouraged to take up engineering projects in community service.

#### V. Group Learning Method:

1. Group Learning allows slow learners to develop problem-solving, interpersonal, presentational, and communication skills to confirm quality in learning with Peer groups. Under group learning, a heterogeneous group of students comprising Fast, Average, and Slow learners are divided into groups of 5 to 10 members.

#### VI. Project-Based Learning:

1. Project work is mandatory for all the courses offered at the institute. The period of implementation spans from one to two semesters.
2. The effective phases of survey, case study, implementation, testing, and report writing ensure the required project-based



learning among the students. Some subjects are augmented with learning through the implementation of mini-projects.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Link for additional Information	Nil

### 2.3.2 - Teachers use ICT-enabled tools including online resources for effective teaching and learning

Bapatla Engineering College realises the potential of Information Communication Technology tools in enhancing the quality of teaching and learning processes. The ICT tools that are being used by the college are as follows

**LCD Projectors:** Every classroom is equipped with LCD Projector and Screen in addition to the conventional green board.

**Laptops:** Almost 70 % of the faculty use laptops for teaching to leverage the potential of ICT tools for effective teaching.

**Internet:** All the classrooms have access to internet that enables the teacher to refer to online content while teaching. The campus has free Wi-Fi that facilitates collaboration among teachers and students.

**Online Assessment Platform:** Each department of the college has subscribed to online assessment platform by name Testportal ( <https://www.testportal.net> ) for conducting online MCQ and Descriptive tests.

**Productivity Tools:** Both teaching faculty and students at the college have access to Microsoft Office 365. All formal interaction between faculty member and student takes place in paperless mode through Microsoft Office 365 apps for communication. Other apps like Power Point Presentation, Word, Excel, and One Drive are used by both students and teachers.

**Virtual Classroom:** All physical sections of the college have virtual teams, created using Microsoft Teams app. Sharing of teaching content, teacher student collaboration and collaboration among students outside the physical classroom takes place through virtual

classrooms. Interaction between students and experts from outside the college also takes place using Microsoft Teams app.

**Annotation Tools:** Each department is provided with Pen Tablets that can be used for on-the-fly annotation of the digital teaching content.

**Audio Facility:** Each classroom has speakers for enhancing the audibility of the lectures given by faculty to students.

**Self-Paced Learning:** The recorded lectures are uploaded using Microsoft Streams app which are made available to students for watching multiple times as per their learning pace.

**Online Recourses:** Faculty and students register for MOOC courses offered by reputed organizations like Swayam, NPTEL and Coursera to further enhance their knowledge.

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	<a href="https://teams.microsoft.com/">https://teams.microsoft.com/</a>
Upload any additional information	No File Uploaded

### 2.3.3 - Ratio of students to mentor for academic and other related issues

#### 2.3.3.1 - Number of mentors

230

File Description	Documents
Upload year-wise number of students enrolled and full-time teachers on roll	<a href="#">View File</a>
Circulars with regard to assigning mentors to mentees	No File Uploaded

### 2.3.4 - Preparation and adherence to Academic Calendar and Teaching Plans by the institution

A detailed academic calendar including examination dates and holidays is prepared after thorough discussions with all the Heads of the Departments. The academic calendar is circulated amongst all the students and is put on the website also. This enables the

students to prepare and plan their academic career by choosing online courses and internships. A clear teaching plan is prepared by all the faculty members handling a particular course. Equal distribution of class periods is allotted for all the units with equal emphasis. The course plan is circulated to all the students and the details of the classes taken is noted in the attendance book. Units of the syllabus to be covered for AAT (Alternate Assessment Test) and CIE(Continuous Internal Evaluation) are clearly identified for each course. Uniform coverage of the syllabus as per the academic calendar is ensured with the help of department academic monitoring committee. The academic progress of the students and the progress of the curriculum is monitored by conducting meetings in the departments. A short report is prepared regarding the percentage of coverage of the syllabus. Extra classes are conducted when there is any deviation from the plan due to unavoidable circumstances.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	<a href="#">View File</a>

## 2.4 - Teacher Profile and Quality

### 2.4.1 - Number of full-time teachers against sanctioned posts during the year

260

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	<a href="#">View File</a>
List of the faculty members authenticated by the Head of HEI	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.4.2 - Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year

92

File Description	Documents
List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.4.3 - Total teaching experience of full-time teachers in the same institution: (Full-time teachers' total teaching experience in the current institution)

10

File Description	Documents
List of teachers including their PAN, designation, Department and details of their experience	<a href="#">View File</a>
Any additional information	No File Uploaded

### 2.5 - Evaluation Process and Reforms

#### 2.5.1 - Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year

Nil

File Description	Documents
List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 2.5.2 - Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year

169

File Description	Documents
Upload the number of complaints and total number of students who appeared for exams during the year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

2.5.3 - IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution

The College Assessment and Evaluation Policy clearly states the objectives and process of evaluation. It also enlisted various evaluation methods that can be followed by the faculty members. There is flexibility for innovative methods of evaluation.

The college has a continuous evaluation system with different types of assessments. The college has a full-fledged examination cell headed by the controller of examinations (COE). Continuous internal evaluation methods and their weightage is pre-defined by each instructor as per the academic rules and regulations, except two mid examinations that are mandatory.

Mid examinations and Semester End Examinations (SEE) are organized centrally by the examination cell for optimum utilization of resources. COE continuously coordinates with the Heads of the department and Chief Superintendent for solving the examination and academic hurdles from time to time.

The Controller of Examinations along with his team meticulously executes the pre-examination and post-examination processes. The pre-examination consists of preparation of academic calendar, the appointment of examiners for question paper setting, scrutiny, and invigilators. The post-examination work consists of the appointment of external and internal examiners for valuation of answer scripts, scrutiny of evaluated scripts, schemes display in the college website, verification of scripts by the students, results processing, declaration of results in time and issue of certificates.

Reforms on the Examination procedures and processes areas are listed below:

1. Freedom to the teacher to choose the mix of continuous evaluation

methods.

2. Preparation of lesson plan by the teacher at the beginning of the semester and communicate to the students.

3. Question paper scrutiny: Question paper is scrutinized an hour before the examination by a team of subject teachers to ensure the standard, spread of the syllabus, and mapping of course objectives, following BLOOMS taxonomy.

4. Availability of examinations notice in the college website

5. Upload the scheme and solution of each question paper to the college website for student reference.

6. Distribution of evaluated semester-end examination answer scripts to students for scrutiny as a part of transparency in the evaluation system.

7. Course Repetition: Students secured less than 40% marks in the continuous internal evaluation may register for a maximum of two courses in one notification to improve the performance.

8. Adherence to the academic calendar and timely publication of results.

Transparent computer-based system: The entire teaching-learning and evaluation procedures are interpreted with the college MIS called "CAMU". The evaluation activities were automated including

- Generation of student hall tickets
- Result processing
- Preparation of tabulation chart
- Generation of students marks memos
- Uploading students' marks in the college website
- Generation of consolidated marks memo, provisional certificate and original degree

The positive impact of reforms:

- Total transparency in the student evaluation processes
- Personal verification of semester-end answer scripts by the students.
- Additional options for a student to improve his performance
- Students can access their data from the college website

**Web links for student information:**

- <http://www.becbapatla.ac.in/pages/schemes-of-evaluation>
- <http://www.becbapatla.ac.in/pages/student-marks>
- <http://www.becbapatla.ac.in/pages/results>
- <http://www.becbapatla.ac.in/pages/course-repetition>

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/pages/schemes-of-evaluation">http://www.becbapatla.ac.in/pages/schemes-of-evaluation</a>

**2.6 - Student Performance and Learning Outcomes**

2.6.1 - Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students

Outcome Based Education (OBE) is implemented in Bapatla Engineering College as it gives emphasis on what is expected from the student when they finish their course. In line with OBE Program Specific Outcomes (PSOs), Program Outcomes (POs) and Course Outcomes (COs) are evolved. OBE provides/helps the student to achieve the outcomes of significance before leaving the Institute.

Every department establishes the Program Specific Outcomes (PSOs), Program Outcomes (POs) in consistent with the Graduate Attributes mandated by NBA and PEOs of the programme by considering the inputs from faculty and alumni in cognizance of latest technology demand, job prospects and societal requirements.

The faculty, course coordinators and the program coordinator prepare the course outcomes (CO) and map them with the program outcomes (PO) and program specific outcomes (PSO) employing numeric weightages. They are approved by IQAC after deliberations in program assessment committee (PAC) and are displayed on website. The preparation of COs is done with brain storming sessions such that the objectives of each course are translated at the end in the form of outcomes. Blooms taxonomy is attributed while formulating the outcomes.

Course Outcomes (COs) are defined for every course, which describe the competencies gained by the student through the course. Every CO is mapped to one or more POs, and is measured at the end of the course through various assessments. These are designed specifically to measure the CO and contribute to the PO that it is mapped to. The

number of COs for a course is not fixed and may have about four to six. The faculty in each of their classes addresses on these COs and their interrelationship with PO/PSOs. In the beginning of each unit of every course handled by the faculty, the Cos are emphasized in the classroom for the students. By this exercise, the students completely understand the concepts and try to enhance the cognitive skills of the course under consideration. Apart from corridors, classrooms, and laboratories, the COs, POs/PSOs, PEOs are displayed in several places for ready reference.

**Syllabus:** All courses of the curriculum have well-defined COs, the CO-PO mapping with its strength. This is included in the syllabus. The hardcopy of the syllabus is made available to every student.

**Website:** The syllabus of all programs offered by the department is uploaded on the college website which includes the COs of various courses of the curriculum.

**Course hand-out:** The course hand-outs of every program include Vision-Mission, PEOs, POs, PSOs of the Program offered by the department, and COs of various courses of the Curriculum.

**Library:** Institute's central library keeps all the POs, PSOs and COs for easy access to students and faculty through the syllabus books of various programs.

**Lab Manual:** All POs, PSOs and COs of specific lab course are printed on lab manuals and issued to all students at the beginning of every semester.

**Course Files:** The faculty prepare a course file for each semester that lists the POs, PSOs and COs.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	<a href="#">View File</a>
Upload any additional information	No File Uploaded
Link for additional Information	<a href="http://www.becbapatla.ac.in/pages/co-po-mapping">http://www.becbapatla.ac.in/pages/co-po-mapping</a>

2.6.2 - Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution

The evaluation of Course Outcomes in the form of attainment level



for each course is accomplished based on the data collected from direct and indirect assessment tools and processes. Each course has four units of syllabus, and each unit is associated with a Course Outcome. The attainment level is computed based on the direct and indirect assessment components which carry weightages of 80% and 20% respectively. The direct attainment of COs is determined from the performances of the students in all the assessments of continuous internal evaluation (CIE) and the semester end examination (SEE). The CIE comprises of two alternative assessment tests and two term examinations. The computation of indirect attainment is based on the student's perception of attainment of Course Outcomes.

**Direct attainment:** For each Course outcome the percentage P of marks obtained in the assessment of questions in CIE and SEE related to the corresponding unit of syllabus by all the students put together is calculated. The percentages are mapped to Direct Attainment Levels (D) as follows.

Range of

Marks in Percentage (P)

Attainment

Level

$P > 60 \%$

3

$P \geq 50 \ \& \ P \leq 60$

2

$P \geq 40 \ \& \ P < 50$

1

**Indirect attainment:** For each Course outcome the opinion of attainment level - Excellent (3), Very Good (2), and Good (1) - of all the students is collected. The weighted average of the number of students and their opinion of attainment level is calculated as the indirect attainment level (I).

The final attainment level is calculated as  $(D * 0.8 + I * 0.2) / 3$ . The tools and processes used to calculate the COs attainment for R14

and R18 regulations.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/pages/co-po-mapping">http://www.becbapatla.ac.in/pages/co-po-mapping</a>

### 2.6.3 - Pass Percentage of students

#### 2.6.3.1 - Total number of final year students who passed in the examinations conducted by Institution

1081

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for the annual report	Nil

### 2.7 - Student Satisfaction Survey

#### 2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire). Results and details need to be provided as a weblink

<https://forms.gle/QpbpuG4iExK2rAtY8>

### RESEARCH, INNOVATIONS AND EXTENSION

#### 3.1 - Promotion of Research and Facilities

3.1.1 - The institution's research facilities are frequently updated and there is a well-defined policy for promotion of research which is uploaded on the institutional website and implemented

##### 1. PREAMBLE:

Research and knowledge sharing activities are core elements of an Institution as a learning organization. The faculty members have to

update their knowledge continuously as the innovations, new paradigms and technology are changing at a higher pace and the students have to be provided with the latest developments in their domain area rather than teaching age-old practices. The College policy on research and knowledge sharing sets out the measures to encourage appropriate behavior to achieve the strategic aims and sets out the direction that the College has to go.

UGC emphasizes research in Universities and Colleges. According to UGC research Policy, UGC is creating major research facilities in the University system with cooperative and autonomous management and use of such facilities. It is also trying to strengthen or create links with other institutions and laboratories to have more national centers of research function in close collaboration of the universities.

In line with the UGC Research Policy, BEC commits to contribute to the research fervor of the Nation by creating research opportunities for faculty and students and by creating centers of research excellence. The purpose of this document is to present a policy framework for support and development of research at the Bapatla Engineering College and to provide a strategy to achieve the research goals.

#### 1. DEFINITIONS:

For purposes of this policy, unless otherwise stated, the following definitions and abbreviations shall apply:

- Research is the systematic investigation into existing or new knowledge. Research may be undertaken primarily to acquire new fundamental knowledge (basic research) or to acquire new knowledge for a specific practical objective (applied research).
- Development is systematic work directed to producing new or improved materials, products or devices, processes, systems and services.
- Research and development or "R&D" covers both the work to create new knowledge and use it to improve technologies. R&D is closely linked to innovation, which can be defined as the introduction of new ideas, devices, or methods into use.
- Researcher is a member of the faculty or staff or post-graduate student of Bapatla Engineering College.
- Sponsor is any Company, Organization, or Institution, either within India or abroad, that funds research projects at the Bapatla Engineering College.

## 1. PURPOSE

The policy outlines the guiding principles to carry out research and development to all those involved in research at the Bapatla Engineering College and also the support system for R & D. It is applicable to all teaching and non-teaching employees, as well as the students of the College.

The purpose of the research policy is to:

- Provide a framework for the research development and management
- Provide for continued effective support for research
- Ensure the fair treatment of all researchers - staff and students
- Ensure effective communication to all stakeholders (internally and externally) on the research policy and strategy including research support
- Establish rational, and transparent mechanism for approval of research projects and the allocation of research funds and other kinds of support for research
- Establish mechanism for collaborative research with public and private organizations and other Institutions, national as well as international.
- Integrate support for postgraduate research into the main research system and
- define roles, responsibilities and functions within the College research system.

## 1. RESEARCH POLICY

- Bapatla Engineering College supports research that is aligned with the College Mission and Strategic Goals.
- The allocation of research fund in the College is seen as an investment that maximizes the outcomes that the College expects to result from the research of faculty/ staff member and students.
- All the faculty members are required to carry out research either individually or in collaboration with others, and have a freedom to choose the field or topic for their research.

- The College Research Committee (CRC) is responsible for the management of research at the College and to motivate the faculty.
- The non-teaching staff members, such as the Librarian, are also encouraged to participate in the research projects.
- The researchers in the College are encouraged and supported to take up sponsored research projects, funded by private or public organizations, locally and internationally.
- The postgraduate (masters and doctoral) students are provided support in terms of fellowships, material and in-kind support for creating an enabling research environment.
- Requests for support of research projects or activities are judged on the merits of the proposal, the merits of the applicant, the need for research capacity development, and the need to sustain existing research activities or capacity.
- All applicants requesting support for research are advised to seek funds outside the College, and if outside fund is not available, provide a persuasive rationale why this is not feasible, in order for their application to be considered.
- The College allocates a research budget annually to initiate research projects or as a seed money to obtain external funding.

## 1. RESEARCH STRATEGY

The research strategy identifies the strategic research goals and the resources and actions required to achieve the stated goals. The strategic goals for research, stated below, and the activities designed to achieve those goals, serve to give effect to the Research Mission statement and the concomitant core value.

### 1. RESEARCH VISION

BEC aims to become a state-of-the-art Research and Development Centre that can serve the industry and the society at large.

### 1. RESEARCH MISSION

The Mission of the BEC Research and Development is to enhance the knowledge base of the society adding to the high quality human and social capital.

#### 1. STRATEGIC RESEARCH GOALS

- Encourage faculty, staff and students to quality and useful research
- Create a state-of-the art research centers
- Develop collaborative research on the contemporary local and global issues.
- Maintain and enhance the quality of research undertaken.
- Enhance the institutional research profile.
- Encourage, manage and structure the external and internal funding for research.
- Support national, regional and industry-specific research and development
- Maximize the impact and international recognition of BEC research.
- Commercialize on BEC intellectual property.

#### 1. RESEARCH MANAGEMENT

The CRC is the College research management body. It advises the Researchers on research strategies to be pursued, develops policy and reviews progress in these areas.

##### 6.1 RESEARCH PLANNING

- The College Research Committee (CRC) provides guidance to the Departments on research activities and monitors the research progress twice a year.
- Department Committee is required to develop and implement its own research plan in coordination with the CRC.

##### 6.2 EVALUATION AND MONITORING OF RESEARCH PERFORMANCE

- The research performance of Faculty member is monitored and evaluated as part of the annual appraisal and staff

development process.

- Faculty members are required to supply full and accurate details of their research outputs on an annual basis to the Head of the Department to compile the Research Report and submit to the CRC after approval in the Department Committee (DC).
- CRC, after review, forwards it to the College Academic Council and for inclusion in the Annual report of the College.
- The interpretation of this policy, in case of any dispute, rests with the College Academic Council.

### 6.3 INCENTIVES FOR OUTSTANDING RESEARCH

BECs perception is that the outstanding and quality research contributions of the faculty, research associates and students should be recognized and the incentives should be given.

The incentives can be

- Individual Awards and prizes - both financial and non-financial
- Additional funding for ongoing research Certificates as a measure of due recognition
- Weightage for selection to the higher post or for nominated posts

Governing Body takes decision from time to time on the type of recognition or incentive and the amount in the case of financial incentive.

### 1. STRATEGIC ACTION PLAN

- The CRC coordinates efficient institutional support systems to researchers to develop and maintain research quality;
- Develop motivational strategies to enhance participation of staff and students in research
- implement peer review processes for selection of research projects and evaluation of research output;
- recognize, encourage and reward research and innovation excellence by incentives
- establish research collaborations and partnerships with national and international universities and research institutions;

- Participate in collaborative research with public and private industries
- Create adequately-resourced research capacity and mentoring for new researchers at both institutional and faculty level;
- attract, retain and provide support for postgraduate students and postdoctoral researchers; and
- promote international exchange of researchers at all levels.
- Publish and Communicate research findings to all stakeholders to attract research funding
- Take up at least one research project in every Department with industry participation
- Publish a minimum of five journal articles a year out of each Department's research
- Involve at least 50 percent of the faculty in research projects at any point of time
- Establish research Chairs

#### 1. STANDARD OPERATING PROCEDURE FOR RESEARCH (SOP)

- The faculty members, staff and students seeking research fund from the College, either individually or as a Team, are required to submit a request in the Application Form for R & D Support to the Principal through the Head of the Department.
- The applicants must have completed at least one semester at the College.
- Principal refers the proposal to the CRC for review for compliance with the research policy of BEC and approves after discussion in HODs Meeting. .
- The researchers must follow the rules and regulations of the College while spending the fund.
- Procurement of hardware or software, if needed, should be done as per the College Procurement Process.
- The researchers should submit a report on the progress of the research twice a year in the last Week of every Semester to CRC through the HOD.
- CRC reviews the progress and if unsatisfactory, may revise the milestones or may recommend for cancelling further support.
- After the completion of the project, and also for discontinued projects, the hardware and/or software purchased must be handed over to the Department for use.
- The entry in the stock registers should be corrected accordingly.
- After completion of the Project, the researcher or the



research Team should submit the Final Report to the CRC before submitting to the Sponsor, if any.

- The researcher or the Research Team must obtain permission to publish full or any part of the Project Report or to present a paper based on the research in a Conference/Symposium/Workshop.
- The Researcher or Research Team that obtained funding from external sources must follow the rules and regulations of both the Sponsor and the College.
- The authority rests with the Governing Body to resolve any dispute in this regard.
- The CRC and the Heads of Department are responsible for compiling and maintaining a research database, containing information about research activities by the staff and students of the College in accurate and comprehensive form and to compile an annual Research Report.
- The CRC, with assistance from the Website administrator are responsible for placing research information on the College website and regularly updating the information.
- College Research committee (CRC) is responsible for driving external funding campaigns and keeping a database of all strategic partnerships with the help of the Departments.

#### 1. KEY PERFORMANCE INDICATORS (KPIs)

The Key Performance indicators stated below are used to measure, monitor and evaluate the research in BEC. The KPIs of the BEC research and development are

- R&D expenditure of BEC is at least 3% of its budget.
- Percent of faculty and staff involved in research and consultancy.
- Number of journal publication output from BEC
- Number of patents & industrial designs filed
- Number of collaborative research projects with industry
- Number of joint research projects with regional or international universities
- Number of papers presented in Conferences/Symposiums/Workshops
- Number of participants in regional/international research networks.

#### 1. STATUTORY AND ETHICAL OBLIGATIONS

All the Researchers of the College are required to carry out their research in compliance with all statutory ethical and contractual obligations.

- Researchers should be honest in respect of their own actions in research and in their responses to the actions of other researchers.
- This applies to the whole range of research work, including field study design, generating and analyzing data, applying for funding, and publishing results.
- They should maintain highest integrity and acknowledge the direct and indirect contribution of colleagues, research students, collaborations and others.
- All researchers must refrain from plagiarism, deception or the fabrication or falsification of results or other forms of research misconduct.
- Researchers are encouraged to report cases of suspected misconduct and to do so in a responsible and appropriate manner.

## RESEARCH POLICY

### 1. PUBLICATION AND INTELLECTUAL PROPERTY

- BEC encourages and provides support to the researchers to obtain patents for their work and the copyright.
- BEC is committed to support its employees in publishing their research in appropriate venues such as Journals, Books, Monographs, Project Reports, Conference Proceedings, and Working Papers.
- The Researchers are required to observe any contractual, confidentiality or privacy obligations entered into in respect of the research and need to ensure protection of any intellectual property arising out of the research.
- The Researchers should observe BEC policies regarding Intellectual Property Policy.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	<a href="#">View File</a>
Provide URL of policy document on promotion of research uploaded on the website	<a href="http://www.becbapatla.ac.in/uploads/NAAC_DATA/C3/3.1.1_Research_Policy.pdf">http://www.becbapatla.ac.in/uploads/NAAC_DATA/C3/3.1.1_Research_Policy.pdf</a>
Any additional information	<a href="#">View File</a>

### 3.1.2 - The institution provides seed money to its teachers for research

#### 3.1.2.1 - Seed money provided by the institution to its teachers for research during the year (INR in lakhs)

150000

File Description	Documents
Minutes of the relevant bodies of the institution regarding seed money	<a href="#">View File</a>
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	<a href="#">View File</a>
List of teachers receiving grant and details of grant received	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.1.3 - Number of teachers who were awarded national / international fellowship(s) for advanced studies/research during the year

24

File Description	Documents
e-copies of the award letters of the teachers	<a href="#">View File</a>
List of teachers and details of their international fellowship(s)	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.2 - Resource Mobilization for Research****3.2.1 - Grants received from Government and Non-Governmental agencies for research projects, endowments, Chairs during the year (INR in Lakhs)**

16.33

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	<a href="#">View File</a>
List of projects and grant details	No File Uploaded
Any additional information	<a href="#">View File</a>

**3.2.2 - Number of teachers having research projects during the year**

1

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/news/spdpskill-and-personality-development-program">http://www.becbapatla.ac.in/news/spdpskill-and-personality-development-program</a>
List of research projects during the year	<a href="#">View File</a>

**3.2.3 - Number of teachers recognised as research guides**

22

File Description	Documents
Upload copies of the letter of the university recognizing teachers as research guides	No File Uploaded
Institutional data in Prescribed format	<a href="#">View File</a>

**3.2.4 - Number of departments having research projects funded by Government and Non-Government agencies during the year**

01

File Description	Documents
Supporting document from Funding Agencies	<a href="#">View File</a>
Paste link to funding agencies' website	<a href="http://www.becbapatla.ac.in/news/spdpskill-and-personality-development-program">http://www.becbapatla.ac.in/news/spdpskill-and-personality-development-program</a>
Any additional information	<a href="#">View File</a>

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an ecosystem for innovations and creation and transfer of knowledge supported by dedicated centres for research, entrepreneurship, community orientation, incubation, etc.

We have established Centre for Innovation, Incubation and Entrepreneurship, (CIIE) in our campus. The primary objective of the cell is to promote Innovation & Entrepreneurship (I&E) ecosystem in the campus. We are actively involved in various activities pronounced by MoE's Innovation cell such as Institution Innovation Cell (IIC), National Innovation & Start-up Policy (NISIP-2019) and Atal Ranking of Institutions on Innovation Achievements (ARIIA). We have entered MoU with Atal Incubation centre (AIC-SKU) Anatapuramu for accelerating the process of Ideation, Pre Incubation & Incubation support and finally achieving a feasible business model /Start-up. Our IIC is now 3.5 stars rated and progressively reaching out to the students for achieving the goal.

The R&D Cell is consistently conducting the research review meetings periodically to review the status of the research work of faculty members and also to encourage the other faculty members, those who have not yet registered the Ph.D programme, to register their Ph.D program.

The R&D Cell is constantly reminding all the researchers about the quality of the research work to be done, which would be really helpful to the public and good publications from the work which inturn leads to the citations.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="http://www.becbapatla.ac.in/facilities/ciie">http://www.becbapatla.ac.in/facilities/ciie</a>

**3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year**

Nil

File Description	Documents
Report of the events	<a href="#">View File</a>
List of workshops/seminars conducted during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.4 - Research Publications and Awards**

**3.4.1 - The Institution ensures implementation of its Code of Ethics for Research uploaded in the website through the following: Research Advisory Committee Ethics Committee Inclusion of Research Ethics in the research methodology course work Plagiarism check through authenticated software**

A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.4.2 - Number of PhD candidates registered per teacher (as per the data given with regard to recognized PhD guides/ supervisors provided in Metric No. 3.2.3) during the year****3.4.2.1 - Number of PhD students registered during the year**

50

File Description	Documents
URL to the research page on HEI website	<a href="http://www.becbapatla.ac.in/pages/recognized-phd-supervisors">http://www.becbapatla.ac.in/pages/recognized-phd-supervisors</a>
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.4.3 - Number of research papers per teacher in CARE Journals notified on UGC website during the year

75

File Description	Documents
List of research papers by title, author, department, and year of publication	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.4.4 - Number of books and chapters in edited volumes / books published per teacher during the year

30

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="http://www.becbapatla.ac.in/uploads/IOAC/3.4.4_Proofs.pdf">http://www.becbapatla.ac.in/uploads/IOAC/3.4.4_Proofs.pdf</a>

### 3.4.5 - Bibliometrics of the publications during the year based on average Citation Index in Scopus/ Web of Science/PubMed

#### 3.4.5.1 - Total number of Citations in Scopus during the year

191

File Description	Documents
Any additional information	No File Uploaded
Bibliometrics of the publications during the year	<a href="#">View File</a>

**3.4.6 - Bibliometrics of the publications during the year based on Scopus/ Web of Science – h-Index of the University****3.4.6.1 - h-index of Scopus during the year**

21

File Description	Documents
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.5 - Consultancy****3.5.1 - Revenue generated from consultancy and corporate training during the year (INR in lakhs)**

11.05

File Description	Documents
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	<a href="#">View File</a>
List of consultants and revenue generated by them	<a href="#">View File</a>
Any additional information	No File Uploaded

**3.5.2 - Total amount spent on developing facilities, training teachers and clerical/project staff for undertaking consultancy during the year**

0



File Description	Documents
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	<a href="#">View File</a>
List of training programmes, teachers and staff trained for undertaking consultancy	<a href="#">View File</a>
List of facilities and staff available for undertaking consultancy	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.6 - Extension Activities

3.6.1 - Extension activities carried out in the neighbourhood sensitising students to social issues for their holistic development, and the impact thereof during the year

Bapatla Engineering College (BEC) is trying to inculcate popular saying "Helping Hands are Better than Praying Lips" to its students and motive of the College is imparting values such as "Service to mankind is service to self", "dignity of labor", "harmony and team spirit", and to develop positive attitudes in students. To achieve that goal, the College carries out a number of extension activities in the neighborhood villages. The college has established one NCC unit, and 3 NSS units (2 boys' units, 1 girls' unit) with nearly 400 dedicated student volunteers. BEC concentrates on the welfare of the neighborhood community Major social outreach programs being done by BEC-SAC volunteers on a regular basis are:

1.SAC is helping an NGO called Suryodaya Awakening Community in taking care of the needs of the destitute children in a hostel. They meet them regularly, teach them, and play with them so that these children never feel that they are alone.

2.Blood donations: Every year 100s of our students donate blood directly to the needy patients in the nearby hospitals. So far our students have carried out 1000 units of live blood donations since 2010.

Blood donations camps are held every year in association with the Red Cross Society to enrich the blood bank.

3.Swath Bharath: BEC-SAC students have participated in training

programs organized every year as well as in the programs awareness and cleanliness.

4. Medical Camps: Participated in medical camps, as volunteers, organized by an independent

foundation which conducted camps where around 2000 patients attend.

5. Village Schools: Support the students of primary educational institutions by tutoring, mentoring, career guidance, conducting quizzes, sports/games at the following villages.

1. Mahatmajipuram.

2. Epurupalem.

3. Vedullapalli.

4. Muttaipalem.

5. Maruproluvaripalem.

6. Jammulapalem.

7. Deaf & Dumb School, Vedullapalli.

6. Plantation: 1000s of plants were planted by our volunteers in the College premises and in the

nearby communities in association with the Ramakrishna Seva Samithi, Bapatla. They have also

started geo tagging the plants.

SAC is also organizing other Extension activities, from time to time, such as:

Rally for Rivers Collected donations for Kerala Flood Victims. Participated in rallies against smoking, drinking and drugs These social outreach programs brought a great impact on the holistic development of the BEC students as they come across different categories of the people in the society, different living standards, school children, their parents, patients. They also come across differing conditions of sanitary, cleanliness, etc. in the villages and neighborhood. The BEC students have also improved their communication skills, organizational and leadership skills, planning

and target reaching skills which immensely helped in their overall growth through these extension activities. This has helped them in multiple job offers in MNCs and

to qualify for IPS, IES, and other Government Services. The Counselling Cell provided helpline number in the institute website to provide counselling for all during the pandemic.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="http://www.becbapatla.ac.in/pages/student-activities">http://www.becbapatla.ac.in/pages/student-activities</a>

### 3.6.2 - Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government-recognised bodies during the year

3

File Description	Documents
Number of awards for extension activities in during the year	<a href="#">View File</a>
e-copy of the award letters	<a href="#">View File</a>
Any additional information	No File Uploaded

### 3.6.3 - Number of extension and outreach programmes conducted by the institution through NSS/NCC/Red Cross/YRC, etc. during the year (including Government-initiated programmes such as Swachh Bharat, AIDS Awareness, and Gender Sensitization and those organised in collaboration with industry, community and NGOs)

921

File Description	Documents
Reports of the events organized	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.6.4 - Number of students participating in extension activities listed in 3.6.3 during the year

921

File Description	Documents
Reports of the events	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 3.7 - Collaboration

#### 3.7.1 - Number of collaborative activities during the year for research/ faculty exchange/ student exchange/ internship/ on-the-job training/ project work

14

File Description	Documents
Copies of documents highlighting collaboration	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 3.7.2 - Number of functional MoUs with institutions of national and/or international importance, other universities, industries, corporate houses, etc. during the year (only functional MoUs with ongoing activities to be considered)

14

File Description	Documents
e-copies of the MoUs with institution/ industry/ corporate house	<a href="#">View File</a>
Details of functional MoUs with institutions of national, international importance, other institutions etc. during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

## 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 equipments, etc.

The College encompasses a well maintained lush green campus spread over 30 acres of land ensuring adequate availability and optimal utilization of physical infrastructure for teaching learning activities.

Classrooms: college encompasses the sufficient number of well-

furnished, well ventilated, spacious classrooms equipped with LCD projectors for conducting theory classes.

**Technology Enabled learning facility:** The College has ICT Classrooms where the provision of Multimedia learning, Wi-Fi connectivity and internet access is given.

**Seminar Hall:** The College has multiple seminar halls. These halls are regularly used for conducting national / international seminars at the college. The students are promoted for active involvement in paper presentations, group discussions, etc.

**Tutorial rooms:** Separate tutorial rooms are there in the college campus for tutorial lecture, doubt clarification and special remedial classes for weak and needy students.

**Laboratories:** All laboratories are well equipped with state of the art equipment and facilities. All the laboratories are established as per AICTE and ANU norms. These labs are utilized for conducting practical classes as per the requirements of the curriculum. Labs are also utilized for technology learning & training as a part of teaching contents beyond the syllabus. Labs have sufficient licensed software and open source tools to cater the requirements of curriculum & industry enabled teaching.

**Wi-Fi:** The entire campus is Wi-Fi enabled with 24/7 internet facilities to the students and staff.

**Available band width:** Band width available for college is 240 Mbps. Internet facility is available in whole campus including labs, classrooms, library, offices of all Departments and hostels.

**Student Accommodation:** More than 600 girl students avail the hostel accommodation at two different locations. Each hostel has a mess and a comfortable environment for students.

**Guest Houses:** The College has Guest house for visiting academicians.

**Reliable Power Supply:** To ensure regular and reliable power supply, BEC has invested in multiple solar plants at various locations with a total capacity of approximately 400KW peak.

**Library Facilities:** BEC Central Library is fully automated with SOUL 2.0 Software; updated with latest version in 2010 and Bar-coding system facilitating easy access to students. The library offers special services to the Students of SC & ST categories by providing

Book Banks enriched with 23,477 volumes related to 4,051 Titles. The library added a feather to its cap by having a wing of Digital Library featuring online connectivity with DELNET, New Delhi and providing Internet facility to students with the infrastructure of 28 Computers with DVD and CD Writers. The video library is furnished with 34" Colour T.V and DVD Player supported by a stack of 3,259 CDs. Library is providing reprographic facility to students to disseminate material quickly and cost effectively aiding better learning on campus.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>

4.1.2 - The institution has adequate facilities for cultural activities, yoga, sports and games (indoor and outdoor) including gymnasium, yoga centre, auditorium etc.)

Bapatla Engineering college gives importance to the all-around development of students by providing adequate facilities for cultural activities, yoga, sports, and games. The students are trained and encouraged to participate in extracurricular activities related to culture, creativity, arts and recreation thereby students to participate in various college levels, state level, and national level competitions with financial support if necessary.

#### SPORTS ACTIVITIES

The Campus is provided with both basic infrastructure for sports headed by a Trainer. The games like Basketball, Volleyball, Badminton, Cricket, Football, Chess, Carom, Athletics, Kho-Kho, Kabbadi, etc. underneath the standard sport activities of India are conducted. BEC will also host events to develop sportsmanship and to habituate playing games to improve physical as well as mental health. YOGA Day is also celebrated on JUN 21 with students, Teaching, and Non Teaching staff. FIT INDIA movement as per AICTE guidelines are conducted and the events were recorded.

#### CULTURAL ACTIVITIES

As a part of cultural activities, BEC has a club CCA and AWAAZ and organizes student cultural and technical fest BECTAGON once a year/ once in two years. Student activities are categorized into art literature and drama which include solo dance, group dance, singing

sketching, JAM, mono acting, mad-ads, etc. In addition to the above activities, the institution also celebrates State and National festivals without any gender discrimination.

File Description	Documents
Geotagged pictures	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>
Paste link for additional information	<a href="http://www.becbapatla.ac.in/event/international-yoga-day---2021-online-session">http://www.becbapatla.ac.in/event/international-yoga-day---2021-online-session</a>

#### 4.1.3 - Number of classrooms and seminar halls with ICT-enabled facilities

79

File Description	Documents
Upload any additional information	No File Uploaded
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View File</a>

#### 4.1.4 - Expenditure for infrastructure augmentation, excluding salary, during the year (INR in Lakhs)

1002.50829

File Description	Documents
Upload audited utilization statements	No File Uploaded
Details of Expenditure, excluding salary, during the years	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

#### 4.2 - Library as a Learning Resource

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

**Integrated Library Management System:-** The College Library is using a network version of SOUL software ( Software for University Libraries) developed by INFLIBNET for the Automation of Library operations like Circulation of books and Cataloguing etc. It is a

multi-user Integrated Library Management Software. OPAC ( online public access catalog) is accessible over LAN to the Students & Faculty. Hardware & Equipment used for the Library Automation:- one Server, 8 Systems, 2 barcode scanners, one bar code printer.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="http://www.becbapatla.ac.in/facilities/library">http://www.becbapatla.ac.in/facilities/library</a>

**4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources**

A. Any 4 or more of the above

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**4.2.3 - Expenditure on purchase of books/ e-books and subscription to journals/e-journals during the year (INR in lakhs)**

381.48

File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Any additional information	No File Uploaded
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the year (Data Template)	<a href="#">View File</a>

**4.2.4 - Usage of library by teachers and students (footfalls and login data for online access)**

**4.2.4.1 - Number of teachers and students using the library per day during the year**



300

File Description	Documents
Upload details of library usage by teachers and students	<a href="#">View File</a>
Any additional information	No File Uploaded

### 4.3 - IT Infrastructure

4.3.1 - Institution has an IT policy covering Wi-Fi, cyber security, etc. and has allocated budget for updating its IT facilities

The institution has a policy for periodical up-gradation of the IT facilities. New IT infrastructure are created taking into consideration based on the requirements of the entire college.

- The institution frequently updates its IT facilities including Wi- Fi.
- The CAMPUS IS Wi-Fi enabled.
- Hi-Speed dedicated leased line internet facility is provided.
- The institute has Microsoft Volume License.
- In order to ensure the safety and security of data, a firewall with web and application filters are used.
- The College will provide and update the existing facilities from time to time

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

### 4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
5334	1504

File Description	Documents
Upload any additional information	No File Uploaded

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on

A. ?50 Mbps

campus	
File Description	Documents
Details of bandwidth available in the Institution	No File Uploaded
Upload any additional information	No File Uploaded
<b>4.3.4 - Institution has facilities for e-content development: Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing</b>	A. All four of the above
File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="http://www.becbapatla.ac.in/facilities/cisco-dms">http://www.becbapatla.ac.in/facilities/cisco-dms</a>
List of facilities for e-content development (Data Template)	<a href="#">View File</a>
<b>4.4 - Maintenance of Campus Infrastructure</b>	
<b>4.4.1 - Expenditure incurred on maintenance of physical and academic support facilities, excluding salary component, during the year (INR in lakhs)</b>	
307.98064	
File Description	Documents
Audited statements of accounts	<a href="#">View File</a>
Upload any additional information	No File Uploaded
4.4.2 - There are established systems and procedures for maintaining and utilizing physical, academic and support facilities – classrooms, laboratory, library, sports complex, computers, etc.	
The College encompasses a well maintained lush green campus spread over 30 acres of land ensuring adequate availability and optimal utilization of physical infrastructure for teaching learning activities.	

**Classrooms:** college encompasses the sufficient number of well-furnished, well ventilated, spacious classrooms equipped with LCD projectors for conducting theory classes.

**Technology Enabled learning facility:** The College has ICT Classrooms where the provision of Multimedia learning, Wi-Fi connectivity and internet access is given.

**Seminar Hall:** The College has multiple seminar halls. These halls are regularly used for conducting national / international seminars at the college. The students are promoted for active involvement in paper presentations, group discussions, etc.

**Tutorial rooms:** Separate tutorial rooms are there in the college campus for tutorial lecture, doubt clarification and special remedial classes for weak and needy students.

**Laboratories:** All laboratories are well equipped with state of the art equipment and facilities. All the laboratories are established as per AICTE and ANU norms. These labs are utilized for conducting practical classes as per the requirements of the curriculum. Labs are also utilized for technology learning & training as a part of teaching contents beyond the syllabus. Labs have sufficient licensed software and open source tools to cater the requirements of curriculum & industry enabled teaching.

**Wi-Fi:** The entire campus is Wi-Fi enabled with 24/7 internet facilities to the students and staff.

**Available band width:** Band width available for college is 240 Mbps. Internet facility is available in whole campus including labs, classrooms, library, offices of all Departments and hostels.

**Student Accommodation:** More than 600 girl students avail the hostel accommodation at two different locations. Each hostel has a mess and a comfortable environment for students.

**Guest Houses:** The College has Guest house for visiting academicians.

**Reliable Power Supply:** To ensure regular and reliable power supply, BEC has invested in multiple solar plants at various locations with a total capacity of approximately 400KW peak.

**Library Facilities:** BEC Central Library is fully automated with SOUL 2.0 Software; updated with latest version in 2010 and Bar-coding system facilitating easy access to students. The library offers

special services to the Students of SC & ST categories by providing Book Banks enriched with 23,477 volumes related to 4,051 Titles. The library added a feather to its cap by having a wing of Digital Library featuring online connectivity with DELNET, New Delhi and providing Internet facility to students with the infrastructure of 28 Computers with DVD and CD Writers. The video library is furnished with 34" Colour T.V and DVD Player supported by a stack of 3,259 CDs. Library is providing reprographic facility to students to disseminate material quickly and cost effectively aiding better learning on campus.

### Sports

The Campus is provided with both basic infrastructure for sports headed by a Trainer. The games like Basketball, Volleyball, Badminton, Cricket, Football, Chess, Carom, Athletics, Kho-Kho, Kabbadi, etc. underneath the standard sport activities of India are conducted.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

#### 5.1.1 - Number of students benefitted by scholarships and freeships provided by the Government during the year

3361

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

#### 5.1.2 - Number of students benefitted by scholarships and freeships provided by the institution and non-government agencies during the year

7

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Institutional data in prescribed format	<a href="#">View File</a>

**5.1.3 - The following Capacity Development and Skill Enhancement activities are organised for improving students' capabilities Soft Skills Language and Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology**

**A. All of the above**

File Description	Documents
Link to Institutional website	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>
Details of capability development and schemes	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

**5.1.4 - Number of students benefitted from guidance/coaching for competitive examinations and career counselling offered by the institution during the year**

**1626**

File Description	Documents
Any additional information	<a href="#">View File</a>
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	<a href="#">View File</a>

**5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees**

**A. All of the above**

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	<a href="#">View File</a>
Details of student grievances including sexual harassment and ragging cases	No File Uploaded
Upload any additional information	No File Uploaded

## 5.2 - Student Progression

### 5.2.1 - Number of outgoing students who got placement during the year

823

File Description	Documents
Self-attested list of students placed	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

### 5.2.2 - Number of outgoing students progressing to higher education

10

File Description	Documents
Upload supporting data for students/alumni	<a href="#">View File</a>
Details of students who went for higher education	<a href="#">View File</a>
Any additional information	No File Uploaded

### 5.2.3 - Number of students qualifying in state/ national/ international level examinations during the year

#### 5.2.3.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year

47

File Description	Documents
Upload supporting data for students/alumni	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 5.3 - Student Participation and Activities

#### 5.3.1 - Number of awards/medals for outstanding performance in sports and/or cultural activities at inter-university / state /national / international events (award for a team event should be counted as one) during the year

0

File Description	Documents
e-copies of award letters and certificates	<a href="#">View File</a>
Any additional information	No File Uploaded

#### 5.3.2 - Presence of an active Student Council and representation of students in academic and administrative bodies/committees of the institution

Bapatla Engineering College encourages democratic functioning of all systems and participation of staff and students in planning, implementing, and decisionmaking. In order to encourage the inherent talents of students in various fields, College has institutionalized the activities. The Student Activities Committee is formed with staff and students that plays a major role in motivating students to participate in life skills activities. Different committees are constituted to implement this ambition. Every committee will have senior faculty members as staff coordinators and active students are taken as student coordinators. Other students become members of the committee on voluntary basis. Under the guidance of the staff coordinators, the student coordinators conduct the events successfully. This type of training to the students enables them to exhibit and develop their leadership qualities and organizing capabilities. Necessary funds are provided by the Management. i). CCA (Centre for Creative Arts): is a committee that encourages the creative talents which are hidden in the students. The committee include the student members with a Faculty convener and some faculty members. It is responsible to develop the students in various cultural activities that include fine arts and performing arts and organize cultural programs and events. ii). AWAAZ is a club intended to give a platform to the students to exhibit the elite skills of the students in oratory and communication. This helps to drive away

the stage fear in the students. It also organizes Literary Meets to make the students aware of the contemporary literature that helps to understand society. This is completely run by the students with a faculty member as convener. Many events are organized regularly by them. iii) Sports and Games Committee: This committee is formed with students and staff members and the Physical Director as the convener and the Principal as the chairperson. It encourages the students to participate in sports and games which improve general health, teamwork, as well as cooperative and leadership skills. They also develop a sportive spirit among the students. This committee organizes sports and games both outdoor and indoor. iv) Anti-Ragging Committee: The anti-ragging committee is constituted in the college to prevent the evil custom of ragging new students. It creates awareness in the students regarding the negative aspects of ragging. It tries its level best to prevent ragging inside and outside of the campus. vi) NCC and NSS: NCC and NSS are basically student bodies. They conduct various activities where most of the participants are students. They also extend their cooperation in maintaining discipline in the meetings organized by the college on the campus including the national festivals. They also participate in Swachh Bharat, Clean and Green programs of Govt. of A.P. Library Committee, SC/ST Committee, OBC Committee also have student representatives for the effective functioning of the Institute.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	<a href="http://www.becbapatla.ac.in/pages/cca">http://www.becbapatla.ac.in/pages/cca</a>

### 5.3.3 - Number of sports and cultural events / competitions organised by the institution

4

File Description	Documents
Report of the event	<a href="#">View File</a>
List of sports and cultural events / competitions organised per year	<a href="#">View File</a>
Upload any additional information	No File Uploaded

### 5.4 - Alumni Engagement

5.4.1 - The Alumni Association and its Chapters (registered and functional) contribute significantly to



the development of the institution through financial and other support services

The Alumni are a strong support to the institution. The active alumni association is contributing much in academic matters, student support as well as mobilization of resources—both financial and non-financial. Bapatla Engineering college alumni association is registered with the Registration number 31954, has a clear organizational structure elected once in two years to advance the activities of student-alumni interaction, work for the overall growth of the college and students duly maintaining the alumni through web site through which one can share their views, suggestions, and information. The institution nurtures the alumni association/chapters to facilitate them to contribute significantly to the development of the institution through financial and non-financial means. Alumni meet every year in the college which is active on social media with its groups. College is dedicating a column for alumni news letter, encouraging alumni to visit campus and participate in all activities and assisting the students to obtain the sponsorships, internships, projects, placements duly through the matching grant. Alumni are offering advice to the students who travel abroad and gave lectures to students both on technical and general topics. A general alumni meet is conducted for every year, in addition to alumni meets organized by individual departments of the college. A renowned events conducted in recent years by alumni are a 20 years reunion (1994-98) and a 30-year reunion (1984-88) during July 2018. A grant of 12.5 lakhs is provided by 1984-88 batch to assist a meritorious low economic group of college. The 1988-92 Batch reunion was held on 27th September 2019, who addressed the students on industry environment, opportunities, and need to master the skills. The BEC alumni are set to establish chapters in various cities of India and abroad.

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="https://becalumni.org/">https://becalumni.org/</a>

**5.4.2 - Alumni's financial contribution during the year**

**E. <2 Lakhs**

File Description	Documents
Upload any additional information	No File Uploaded

## GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

#### 1. Vision and Mission Statement:

##### Vision

To build centers of excellence, impart high quality education and instill high standards of ethics and professionalism through strategic efforts of our dedicated staff, which allows the college to effectively adapt to the ever changing aspects of education.

To empower the faculty and students with the knowledge, skills and innovative thinking to facilitate discovery in numerous existing and yet to be discovered fields of engineering, technology and interdisciplinary endeavors.

##### Mission

Our Mission is to impart the quality education at par with global standards to the students from all over India and in particular those from the local and rural areas.

We continuously try to maintain high standards so as to make them technologically competent and ethically strong individuals who shall be able to improve the quality of life and economy of our country.

#### 1. Nature of Governance:

The institution follows a democratic and participatory mode of governance with all stakeholders participating actively in its administration. The Governing Body delegates authority to the Secretary and Principal who, in turn share it with the different levels of functionaries in the college. The Heads of Departments, the Conveners of various committees and cells along with the staff representatives on higher decision-making bodies play an important role in determining the institutional policies and implementing the same.

## 1. Perspective/Strategic Plan

The institution has a Perspective/Strategic Plan in place to help it develop in a systematic, well-thought-out and phased manner.

1. Extension of available area through vertical expansion to accommodate more classrooms, laboratories, auditoria, staffrooms etc.
2. Renovations to revive the ageing infrastructure of the institution.
3. Improvement of the Scope and Profile of the Teaching-Learning Experience through greater use of ICT and other innovative means.
4. Introduction of new subjects at the under-graduate level.
5. Continuing the Post-Graduate Courses with all required facilities.
6. Achievement of national and international recognition in the form of grants and awards.
7. Partnering with Research Institutes.
8. Mobilization of funds and projects through the alumnae and other stakeholders.

## IV. Participation of Teachers in Decision-Making Bodies.

Teachers discharge an important role in implementing the vision and mission of the college and to that end play a proactive part in the decision-making process. Heads of Departments have considerable administrative and academic autonomy in running their disciplinary units. Teachers influence the institutional polity through the Board of Studies, Academic Council. Besides, teachers are members and conveners of the various committees that are instituted for the day-to-day functioning of the college. Some of these committees are the Academic Council, the Examination Committee, the Admission Committee, the Library Committee etc. Teachers, through their agency and autonomous interaction on these bodies are able to contribute in a significant way to the participatory culture of the institution. They determine admission criteria, marks cut-offs, examination modalities, library practices, various teaching learning innovations and other academic priorities. Additionally, teachers discharge an

energetically pervasive role as motivators and spearheads of cultural and socially conscious activities in the institution by steering the NSS unit, NCC Wing, the student activities Club etc.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>

6.1.2 - Effective leadership is reflected in various institutional practices such as decentralization and participative management

**Decentralization:** Institute has a mechanism for delegating authority and providing operational autonomy to all the functionaries to work towards a decentralized governance system. The Governing Body delegates all the academic and operational decisions based on policy to the Principal, HODs, and the standing committees in order to fulfill the vision and mission of the institute. They work according to the statutes and regulations of the College. . Principal is the Chief Executive Officer of the College and is empowered to take day-to-day academic and discipline decisions in consultation with the Heads of the Department. Heads of the Department are empowered to make decisions regarding work distribution, schedules, co-curricular activities in the Department, and the monitoring and discipline of the students and staff of the Department. They should bring staff issues to the notice of the principal and take approval wherever necessary. Standing Committees are formed for specific functions and are empowered to plan and organize or monitor the activities as per the objectives of the Committee. For example, College Disciplinary Committee monitors the discipline among students and take necessary actions as empowered. The Student Activities Committee plans extracurricular events, and organizes them. The Committee is empowered to scrutinize the content and also the participants. Faculty members and staff are given representation in various committees/cells and allowed to conduct various programs to showcase their abilities. They are encouraged to develop Leadership skills by being in charge of various academic, cocurricular, and extracurricular activities. They are given authority to conduct industrial tours and to have tie up with industry experts and appointed as conveners for organizing seminars/workshops/conferences/FDPs.

**Participative management:** The institute promotes a culture of participative management by involving the staff and students in various activities. At the Institute level, the Heads of the Department are part of the

decision making as the decisions are made by the HODs Committee for which the Principal is the Chairperson. At the Department level, all the faculty members are part of the decision making as the decisions are made in the Department Committee and technical and administrative staff are involved staff whenever necessary. The Standing Committees make decisions involving all the members of the Committee including student members. Both students and faculty/staff have the freedom to express themselves of any suggestions to improve the excellence in any aspect of the Institute.

File Description	Documents
Upload strategic plan and deployment documents on the website	No File Uploaded
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/pages/non-statutory-committees">http://www.becbapatla.ac.in/pages/non-statutory-committees</a>

## 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ Perspective plan has been clearly articulated and implemented

**Curriculum Development:** Our Curriculum Development strategy seeks to update the curriculum based on the needs of the society and paradigms and technologies developed from time to time. Therefore, curriculum development is a dynamic process. It is twofold. One, Annual review of the Curriculum. It generally does not change the curriculum structure but the syllabus of a particular subject may be modified. A new elective may be added if found necessary as the four-year cycle of These changes are based on the teacher experiences and the feedback from stakeholders. The second is the comprehensive review of the curriculum including its structure. It is a complete overhaul based on the benchmarking, feedback from stakeholders, etc.

**Teaching and Learning:** Teaching Learning Strategy of the Bapatla Engineering College is to assure the quality of learning of the students to the stakeholders. It includes the preparations stage to the delivery as well as evaluation stages, that is, the whole cycle of the teaching Learning Process. The College understands that Quality is assured only when monitoring and review happens. Therefore, in the teaching learning Process, it has incorporated the review at every stage, such as peer review of ILOs and Course Plans, Assessment instruments, final Exam answer scripts by both internal and external

members. Class Coordination Committees, and the Academic monitoring teams regularly monitor and verify the coverage of the syllabus, delivery issues, absenteeism, assessment, etc. Students are mentored by the faculty members. Underperforming students are identified and the information is communicated to the parents by registered post, SMS and by phone. Remedial classes are conducted for the underperformers. Assessment of learning process includes continuous evaluation of the student through the assignments, midterm examination. Assessment methods are identified in the beginning of the semester as part of the course plan and communicated to all the students

**Examination and Evaluation :** The evaluation process in the examination systems is transparent. Scheme of valuation of Semester End Examination (SEE) is displayed on the college website. After evaluation, SEE scripts are given to all the students for verification. No revaluation fee is collected from the students. Examination scheduling is prepared prior and subsequently informed to all the students in the class rooms and the information is kept on the website. Continuous evaluation is done through various assessment methods which are known under AAT (Alternate Assessment Tools), such as Quizzes, open book exam, online exam, take home assignments, seminar, miniproject. The students are allowed to verify the evaluation by distributing the scripts in the class rooms. They are apprised about the mistakes committed in the examination.

**Research and Development :** The Research Strategy of the College identifies the strategic research goals and the resources and actions required to achieve the stated goals. The strategic goals for research, stated below, and the activities designed to achieve those goals, serve to give effect to the Research Mission statement and the concomitant core value. Strategic Research Goals

- Encourage faculty, staff and students to quality and useful research
- Create a state of the art research centers
- Develop collaborative research on the contemporary local and global issues.
- Maintain and enhance the quality of research undertaken.
- Enhance the institutional research profile.
- Encourage, manage and structure the external and internal funding for research.
- Support national, regional and industry specific research and development
- Maximize the impact and international recognition of BEC research.
- Commercialize on BEC intellectual property.

**Library, ICT and Physical Infrastructure / Instrumentation :** The College Library primary goals are to provide the required resources, such as books, journals, video lectures, etc. to the users and to

information services through mails, to provide them an opportunity to gain very good user experiences. It is therefore well equipped with all the text books specified in the curriculum. In addition to the text books, various reference books are also provided. To improve the user experience further, one period per week is allocated in the time table for exclusively library work. Library committee monitors its functioning with regular meetings. The books identified and requested by the Departments are procured with the budget allocated. Library is fully automated in its processes using SOUL software and provides OPAC services. It is planned to use CAMU software for further customization in the college. Recent infrastructural facilities provided include Intercom system and LCD projectors in all the departments. WiFi access points are being provided at various places in the campus. All the departments are provided with the required physical infrastructure, chairs, tables, printers, Xerox machines etc. as per the need and requirements identified by the concerned Head of the department. The laboratories of the Department are also updated.

**Human Resource Management :**The College management perceives that the faculty members and staff are the backbone of the College. Its quality depends on the quality of the persons placed in different positions. Therefore, it gives utmost importance for their development and facilitates the improvement of their knowledge and skills. Several staff and faculty development programs are organized by the college involving experts from industry and reputed institutes like IITs as resource persons. They are also encouraged to participate in the short term Courses/workshops organized by the reputed organizations to further their interaction with faculty in other institutes to know the practices followed by them in academics and research. The management also perceives that research is essential to make the faculty members uptodate in their knowledge of the subjects of their discipline. Therefore, it provides all the resources required for research as well as encourages sharing their research findings through publications and conferences. It also incorporated awards and rewards to motivate them for research and development.

**Industry Interaction / Collaboration :**Bapatla Engineering College Management considers the industry interaction is essential not only to provide real life experiences to the students in their technical field, as well as to the development of faculty and curriculum. A dedicated cell, Industry Institution Interaction Cell, is established for this purpose. The College has been taking proactive steps to develop interaction with industries with winwin situation. It has Memorandum of Understanding with ten companies and another

three are in the pipeline. Their services are utilized to provide value added services to students in specific technologies like Robotics, AI (Artificial Intelligence), IoT, etc. Students are getting engaged in the live projects by the industries and some of them working for a semester in the industry. Some of them is leading to a collaborative research project with the active involvement of the faculty members. As part of this many students are doing internships in the vacation period.

**Admission of Students :** Admission of students is through AP EAMCET counseling for all the UG Courses. However, B category seats are filled up by the college as per the norms of APSICHE where in merit is given priority. For M. Tech. courses, AP PGECET is the basis. MCA seats are filled through ICET. All the M. Sc. courses admissions are within the purview of Acharya Nagarjuna university norms and APPGCET is the criterion for selection.

File Description	Documents
Strategic Plan and deployment documents on the website	No File Uploaded
Paste link for additional information	<a href="http://www.becbapatla.ac.in/pages/non-statutory-committees">http://www.becbapatla.ac.in/pages/non-statutory-committees</a>
Upload any additional information	No File Uploaded

6.2.2 - The functioning of the various institutional bodies is effective and efficient as visible from the policies, administrative set-up, appointment and service rules, procedures, etc.

The Institute has an Organizational Structure that has been practicing since the inception of our college and is displayed in the website. The hierarchy is followed at every level.

- The Institute is managed by the Governing Body (GB).
- The Institute has decentralized its operations and has delegated authority at various levels to ensure good governance.
- The Statutory bodies of the College are the Academic Council (AC) and Internal Quality Assurance Cell (IQAC) and framed as per norms of AICTE. These bodies play an important role in framing policies and its execution.
- The Principal is the academic and administrative head who monitors the overall functioning and growth of the Institute and also the Chairman of Academic Council and IQAC.
- The Constant growth of the college is with involvement of the



effective leadership is achieved through the well-defined system and organizational structure.

- Service Rules & Regulations are displayed in the website for dissemination amongst the faculty and staff .

The Principal is the functional head of the college with respect to the academic and administrative setup and reports to the executive body of the Management of the college. The Academic Advisor designs the complete spectrum of academic policies and practices aligned with the mission and vision of the college and compliance to the quality requirements of the statutory bodies.

The Governing body constituted in accordance with the guidelines of UGC is the pinnacle body which

guides the college in the implementation of autonomy. It approves the recommendations of the Academic Council, recruitment of faculty and budget allocations. The Academic Council is headed by the Principal and comprises of eminent people from academia, affiliating university, industry and heads of the departments. It scrutinizes and approves the curriculum recommended by the Boards of Studies with regard to courses of study, syllabi, examination & evaluation and academic regulations.

The Board of Studies comprising of eminent scholars from NITs, IITs and Industry along with the faculty members of the department, designs the curriculum and regulations with the inputs from the Program Review and Benchmarking committee. The Finance Committee prepares the budget plans and the accounts of the college are duly audited.

The office of the Principal headed by the office superintendent provides administrative services to the students and staff of the college. The fee section, scholarship section, accounts section, procurements section, examination section, certificates section provide the respective services. The establishment section is responsible for coordinating the recruitments, promotions, service regulations and payroll.

The Principal is assisted by the Deans of Academics, Student Affairs, Research, Heads of various departments, Coordinators of various committees, Controller of Examinations and Internal Quality Assessment Cell (IQAC) in implementing and monitoring the policies and procedures. The IQAC in association with the academic monitoring teams, academic audit teams and examination & evaluation

teams ensure the quality in academic processes.

The Appointments Committee of the college constituted as per the UGC-Autonomous/AICTE norms makes selection of faculty and staff with stipulated and meritorious qualifications according to the statutory requirements. The staff is provided with well-defined service rules and the promotional policies are transparent and are based on the merit of the candidatures.

The college follows well defined procedures for procurements and conduct of academic and co-curricular activities within the stipulated budgetary allocations. The students are provided with an online grievance redressal system which is an integral part of the ERP software procured by the college. The students select an academic or administrative domain in which they have a grievance and lodge the same. Each domain is mapped to a staff in-charge to whom the grievance is automatically sent. The in-charge will immediately resolve the grievance and the resolution status can be browsed by the student. The staff can submit their grievances to the coordinator of the staff grievance redressal committee.

The statutory committees like OBC committee, SC/ST Committee, Internal Complaints Committee, Antiragging Committee take care of welfare of the students and attend to the disciplinary problems if any.

File Description	Documents
Paste link to Organogram on the institution webpage	<a href="http://www.becbapatla.ac.in/uploads/NAAC_DAT_A/C6/6.2.2.pdf">http://www.becbapatla.ac.in/uploads/NAAC_DAT_A/C6/6.2.2.pdf</a>
Upload any additional information	No File Uploaded
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/uploads/NAAC_DAT_A/C6/6.2.2.pdf">http://www.becbapatla.ac.in/uploads/NAAC_DAT_A/C6/6.2.2.pdf</a>

**6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination**

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning) Documen	No File Uploaded
Screen shots of user interfaces	<a href="#">View File</a>
Details of implementation of e-governance in areas of operation	<a href="#">View File</a>
Any additional information	<a href="#">View File</a>

### 6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff and avenues for their career development/ progression

#### Teaching :

1. Employees are covered under EPF.
2. Study, Maternity and Medical leaves are sanctioned for the required staff.
3. Registration fees, Dearness allowance, Travel grants for faculty attending conferences and workshops are provided.
4. Concessional on Transport and Medical facilities for all the staff.
5. Full time Medical facility with qualified Doctor and ambulance is available in the institution.
6. Bank, ATM and post office facilities are available in the campus.
7. Mineral water is available in the campus for all.
8. Car facility along with fuel is provided to the heads of the departments.

#### Non teaching :

1. Employees are covered under EPF.
2. Study, Maternity and Medical leaves are sanctioned for the required non teaching staff.
3. Registration fees, Dearness allowance, Travel grants for non

teaching faculty attending Training Programs are provided.

4. Concessional on Transport and Medical facilities for all the non teaching staff.

5. Full time Medical facility with qualified Doctor and ambulance is available in the institution.

6. Bank, ATM and post office facilities are available in the campus.

7. Mineral water is available in the campus for all.

Students :

1. Insurance provided to all students.

2. Endowment prizes will be awarded to meritorious students.

3. Sponsored for student projects based on Innovative ideas

4. Provided Hostel facility for girls within the campus

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

**6.3.2 - Number of teachers provided with financial support to attend conferences / workshops and towards payment of membership fee of professional bodies during the year**

11

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	<a href="#">View File</a>

**6.3.3 - Number of professional development / administrative training programmes organized by the Institution for its teaching and non-teaching staff during the year**

27

File Description	Documents
Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

### 6.3.4 - Number of teachers who have undergone online/ face-to-face Faculty Development Programmes during the year: (Professional Development Programmes, Orientation / Induction Programmes, Refresher Courses, Short-Term Course, etc.)

143

File Description	Documents
Summary of the IQAC report	No File Uploaded
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	<a href="#">View File</a>
Upload any additional information	<a href="#">View File</a>

## 6.4 - Financial Management and Resource Mobilization

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

Governing Body of our college is responsible for regular internal and external audits. The finance committee proposes every year budget on consulting with each department heads and submits the same to the governing body for approval.

This budget is made of different criteria such as laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance. The college has an Internal Finance Committee to examine the budget proposals, receipts, bills and vouchers and supporting documents for the current year. The financial committee after the scrutiny, they may advise concerned departments for any possible improvement. The Financial Accounts were audited by External Auditor under the Income Tax Act. There are no major audit objections. The audited accounts for last five financial years are made available on the college office.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

#### 6.4.2 - Funds / Grants received from non-government bodies, individuals, and philanthropists during the year (not covered in Criterion III and V) (INR in lakhs)

2.050

File Description	Documents
Annual statements of accounts	<a href="#">View File</a>
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	<a href="#">View File</a>
Any additional information	No File Uploaded

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

Bapatla Engineering College is a self financed institute where authorities guide and encourage faculty to submit proposals for research grants. All the expenses are met from Revenue is generated through the student tuition fees, special fees, examination fee and other additional resources like Research grants, UGC grants, testing and consultancy. Funds are also mobilized through donations from philanthropists and social service organizations and also alumni. The allocated funds are utilized to purchase equipments, lab modernisation, organize seminars, workshops and conferences etc.

The institute has a well-defined mechanism to monitor effective and efficient utilization of available financial resources for the development of the academic and infrastructure development. The advisory body and finance committee and the management board, review the use of resources including audit, budgets and accounts. They make recommendation for better handling of resources and effective mobilization of available funds.

The Finance Committee of the institute, an advisory body to the Governing Body, consists of

1. The Principal (Chairman).
2. A person nominated by the Governing Body of the college.
3. A senior staff member of the college nominated by the Principal.

It will meet to consider, The finance committee exercises the monitoring of the financial matters. Various expenses of the College are:

- Salaries of regular staff, adhoc staff, time bound staff, part-time staff, NMR staff, contract labor daily wage labor, labor through outsourcing etc.
- Establishment and Maintenance budget it includes the electricity, telephone bills and other administrative expenditure including stationery and Printing expenditure
- All required Statutory, Affiliation, youth festival fee paid to university, AICTE and other Accreditation fee etc.
- Examination section related expenditure.
- Equipment related expenditure covering software and hard ware related to computer labs, Lab equipment, and Library maintenance and up gradation, infrastructure maintenance.
- Academic activities like conferences, workshops, seminars, college festivals, Special functions like Fresher's day, Engineers' day, Sports events, College day etc.

Funds utilization process is decentralized with high transparency:

College adheres to Utilization of budget approved for academic expenses and administrative expenses by management. After final approval of budget the purchasing process is initiated by purchase committee which includes all head of departments and senior faculty members after receiving quotations and negotiations.

The payments are released after checking quality condition of the respective equipment and accessories as per the terms and conditions mentioned in Purchase order only authorized person operate the transaction through bank. All the monetary transactions (both the receipts and payments) are processed through a Nationalized Bank.

All the required information pertaining to funded projects is placed on the website.

All the major financial transactions are analyzed and verified by the Governing Body for appropriateness and correctness to make efficient use of funds under different heads. The statements of accounts are audited by certified Chartered accountants.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional Information	Nil

## 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing quality assurance strategies and processes visible in terms of incremental improvements made during the preceding year with regard to quality (in case of the First Cycle): Incremental improvements made during the preceding year with regard to quality and post-accreditation quality initiatives (Second and subsequent cycles)

**IQAC has been taken a step to proceed further with the preceding years data for enhancing the quality in the current academic year. The following plan of action is implemented and the outcomes are detailed below**

### Plan of action

- It has been a responsibility of IQAC in the pandemic period to motivate the faculty for the development of e-content and video lectures.
- IQAC, BEC is regularly going to organise workshop and Faculty development programs for the faculty members to inculcate quality in teaching learning process.
- IQAC have advised the departments to conduct FDPs / Workshops and conferences
- Faculty were motivated to participate in various FDPs, workshops in order to upgrade the knowledge in the contemporary areas.
- IQAC advised the Training and Placement cell to grab the demand of software/hardware related Job opportunities by conducting training programs to students.
- Students and Faculty were financially supported to carry out their works.



- Innovations have been given a top priority and IQAC has directed the IIC to conduct number of events. It is also further advised to participate in national level events to improve ARIIA Band and reputation of the college.
- Implementation of grievance cells for students and staff.
- Submission of research proposals (Funding Projects) and quality journals.
- IQAC is going to conduct academic audit to monitor the teaching and learning process.

#### Outcomes in the current academic year:

- All the faculty were trained on several digital teaching techniques to blend teaching with ICT tools.
- Conduction of Workshops/Conferences in multiple departments along with IQAC.
- Training and Placements were increased with regards to previous year.
- Improvement in ARIIA Band for the year 2020-21
- Best College Award for the year 2020-21.
- Faculty award received prestigious awards from government and non - government agencies.
- Good Number of Quality publications
- Good number project proposals have been submitted in the current year.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

6.5.2 - The institution reviews its teaching-learning process, structures and methodologies of operation and learning outcomes at periodic intervals through its IQAC as per norms

**IQAC Closely monitors teaching-learning process of BEC and suggests necessary directions for improving the quality based on the outcomes attainment.**

- IQAC has participated in Academic council to finalize R20 Syllabus with latest courses
- IQAC has steered to conduct Academic audits
- IQAC has conducted a training program on "Digital Teaching techniques" in association with ICT academy.

- E-content development has been given a top priority.
- Students were trained on CRT for overall development.
- Feedback on Faculty teaching has been conducted at regular intervals.
- ISO audit has been done for imparting the better quality
- Proctors have been advised to monitor the online teaching process and student's feedback is collected at regular intervals for effective implementation.
- Faculty registers were checked at regular intervals to monitor the subject coverage in line with lesson and course plans
- A summary report of CO-PO attainments has been received from all the departments and consolidated.
- Test Portal has been used to conduct online Exams.
- All departments are advised to conduct remedial classes for the slow learners.
- Due Importance is given to internship trainings.

File Description	Documents
Upload any additional information	No File Uploaded
Paste link for additional information	Nil

**6.5.3 - Quality assurance initiatives of the institution include Regular meeting of the IQAC Feedback collected, analysed and used for improvement of the institution Collaborative quality initiatives with other institution(s) Participation in NIRF Any other quality audit recognized by state, national or international agencies (such as ISO Certification)**

A. Any 4 or all of the above

File Description	Documents
Paste the web link of annual reports of the Institution	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>
Upload e-copies of accreditations and certification	<a href="#">View File</a>
Upload details of quality assurance initiatives of the institution	<a href="#">View File</a>
Upload any additional information	No File Uploaded

**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 year**

To create awareness and promote Gender equality among the technocrats

Women Empowerment Cell (WEC) has been constituted to empower and safeguard the rights of female members; faculty staff and students of College. The WEC works to promote gender sensitivity in the college and conduct diverse programmes to educate, sensitize and produce a harmonious atmosphere on the campus. It organizes workshops and sensitization programmes both for staff and students inviting eminent people.

International Women's day was celebrated with great pomp at Bapatla Engineering College on 8th March 2021 to raise awareness about the status and dignity of women among the students.

The program started with a classical dance invocation to women. Mrs K.G.V. Saritha-S.P. Women Protection Cell was the chief guest of the occasion. Madam has delivered an impeccable speech of the day. She has triggered the minds of the audience on many issues that are happening in society. It was with all information about empowering women to protect themselves and celebrate womanhood.

Essay Writing competitions, Role plays and sports competitions were conducted on the occasion and prizes were distributed in the celebrations

File Description	Documents
Upload any additional information	<a href="#">View File</a>
Paste link for additional Information	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>

**7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation: Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment**

**B. Any 3 of the above**

File Description	Documents
Geotagged Photographs	<a href="#">View File</a>
Any other relevant information	No File Uploaded

7.1.3 - Describe the facilities in the institution for the management of the following types of degradable and non-degradable waste (within a maximum of 200 words)

**E-waste management:** The condemned batteries and damaged computers are disposed of through outside agencies. The low-configuration computers are donated to Bapatla Public School, Bapatla. Other recyclable Ewaste materials are properly disposed of by a local vendors. Awareness programs are initiated on Ewaste management.

**Energy conservation:** The institution has well-planned buildings for cross ventilation and lighting to reduce the consumption of electrical energy. All the computer centers are thermally insulated to increase the efficiency of the air conditioners. Planting trees to reduce the AC power consumption on the campus and thus building an Eco-friendly atmosphere. For street lighting on the campus LED bulbs are used instead of traditional lights. In order to conserve energy, all traditional tube lights are replaced with LED tube lights in a phased manner to save 50 lighting energy.

**5. Renewable energy sources:** Recently college is exploring various methods for availing the sources of renewable energy to cater to the needs of ever-increasing energy requirement. 400 KWP Solar Power Unit was installed and connected to the grid (APGENCO). Thus the institution avails the benefit by the number of units generated through our plant and the balance units are given to the grid thus saving the electrical energy.

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	No File Uploaded
Geotagged photographs of the facilities	No File Uploaded
Any other relevant information	No File Uploaded

**7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the**

A. Any 4 or all of the above

campus	
File Description	Documents
Geotagged photographs / videos of the facilities	<a href="#">View File</a>
Any other relevant information	No File Uploaded
<b>7.1.5 - Green campus initiatives include</b>	
<b>7.1.5.1 - The institutional initiatives for greening the campus are as follows:</b>  <ol style="list-style-type: none"> <li>1. Restricted entry of automobiles</li> <li>2. Use of bicycles/ Battery-powered vehicles</li> <li>3. Pedestrian-friendly pathways</li> <li>4. Ban on use of plastic</li> <li>5. Landscaping</li> </ol>	A. Any 4 or All of the above
File Description	Documents
Geotagged photos / videos of the facilities	<a href="#">View File</a>
Various policy documents / decisions circulated for implementation	No File Uploaded
Any other relevant documents	No File Uploaded
<b>7.1.6 - Quality audits on environment and energy undertaken by the institution</b>	
<b>7.1.6.1 - The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:</b>  <ol style="list-style-type: none"> <li>1. Green audit</li> <li>2. Energy audit</li> <li>3. Environment audit</li> <li>4. Clean and green campus recognitions/awards</li> <li>5. Beyond the campus environmental promotional activities</li> </ol>	A. Any 4 or all of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View File</a>
Certification by the auditing agency	<a href="#">View File</a>
Certificates of the awards received	<a href="#">View File</a>
Any other relevant information	No File Uploaded

**7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.**

A. Any 4 or all of the above

File Description	Documents
Geotagged photographs / videos of facilities	<a href="#">View File</a>
Policy documents and brochures on the support to be provided	No File Uploaded
Details of the software procured for providing assistance	No File Uploaded
Any other relevant information	No File Uploaded

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words).

The institute provides an eminent inclusive environment for both students and faculties. National festivals like Independence Day and Republic Day for celebrated every year with full vigor to build harmony and integrity.

Anti Ragging Committee , Sexual harassment committee and grievance

committee will function to monitor cast , creed, regions, and religion issues raised if any. No complaints were received on Linguistic segregation.

Differently-abled students, staff, or teachers are supported with ramps, lift facilities for the harmony of students.

Students organize the teachers' day every year in the College campus to felicitate the teachers and also to show their gratitude towards a great teacher and a legend Dr. Sarvepalli Radhakrishna.

Every year Institute organizes Engineer's Day on 15th September, to commemorate the birth anniversary of Bharat Rathna Sri. Mokshagundam Visvesvaraya. Best Teacher Awards were given on the day to felicitate the teachers excelled in teaching. In addition Technical Quiz and some other events are conducted and prizes were given purely based on the merit without any partiality.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View File</a>

7.1.9 - Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:

Bapatla Engineering College honors its noble role as architect of India's generation next. The Institute is committed to the philosophy espoused by the Indian Constitution, in word and spirit.

The institute organizes different programs to familiarize the students and staff about the constitutional obligations --- values, rights, duties and responsibilities of citizens.

Constitution of India is included as a subject in the curriculum of B.Tech course. The course enables the students to understand fundamental rights and duties, DPSP and the central government administration functions, Supreme Court functions. It also makes them get awareness on government administration functions, powers of division in federal system and emergency types.

The institute has conducted an awareness session on the importance of downloading and using Disha App to ensure women safety. All the girl students and lady faculty were requested to install the app in their mobiles.

The institute celebrates National days with pride and gaiety. Students and staff participate in Independence day and Republic day celebrations. Sports and cultural activities are conducted on the occasion.

NSS students organise different activities to promote Swachh Bharath. National Environment day is celebrated for creating awareness on the importance of safeguarding the nature to ensure pollution free society.

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	No File Uploaded
Any other relevant information	<a href="#">View File</a>

**7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized**

A. All of the above

File Description	Documents
Code of Ethics - policy document	<a href="#">View File</a>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programmes, etc. in support of the claims	No File Uploaded
Any other relevant information	No File Uploaded



#### 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

BEC, Bapatla Engineering College regularly celebrates national and international commemorative days, events, festivals like Republic Day, Independence Day, Teachers day, engineers day, International Yoga Day, Constitution day, Srinivasa Ramanujan's Birth Anniversary, international women's day, etc.

In addition to the above other activities like Health Checkups in the camps, Covid vaccination drives are conducted for the welfare of students, faculties, and employees.

A formal email and announcement is made before conducting these events for mass awareness. In a few cases, committees are formed in collaboration with faculties, employees, and students who can form a team and manage the activities in a smooth way.

Students take an active part in organising the Independence Day and Republic Day celebrations. On both these days, a parade was organized by our NCC cadets as a mark of respect for our nation and national flag. Our national flag is hoisted with our president with full honour and the national anthem is sung by all the attendees. Besides this, students in coordination with faculties and staff conduct various students events every year. Due to the covid pandemic, the institute is closed for students for a quite long period however, still, efforts have been made to conduct various important events either through skeletal staff or on virtual mode.

BEC, Bapatla regularly organizes the mathematics day in honor of the birth anniversary of the great mathematician and scholar Dr. Srinivasa Ramanujan, and events are conducted in mathematics in various levels for the first-year students, and cash prizes are given to the winners of these events. It takes pride in organizing all the important national events irrespective of any bias towards caste, creed, or religion.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	No File Uploaded
Geotagged photographs of some of the events	No File Uploaded
Any other relevant information	<a href="#">View File</a>

## 7.2 - Best Practices

7.2.1 - Provide the weblink on the Institutional website regarding the Best practices as per the prescribed format of NAAC

**BEST PRACTICE-I 1. Title of the Practice** Distribution of Evaluated Semester End Examination scripts to students for browsing. 2. Objectives of the Practice The objective of this practice is to assure the student that the evaluation system is objective and meticulous. The practice obviates the debatable provision for "revaluation" by paying an additional fee. The Scheme of Evaluation is displayed in the web site and is notified to the students before the distribution of the scripts for perusal by the students. The Scheme of Evaluation facilitates uniformity in evaluation across multiple examiners. The students can verify whether the valuation is in accordance with the Scheme of Evaluation and seek clarifications. The evaluation system becomes more transparent and enhances the accountability of the examiners. 3. The Context The conventional evaluation system is often vulnerable for criticism by the students who complain that they got less marks than what they expected. Another misconception carried by the students is that the evaluation system is not uniform due to the participation of multiple examiners in the evaluation process. To alleviate the complaints of the students, the students are allowed to browse the scripts and/or to apply for the revaluation of their scripts by charging an additional fee which is normally prohibitive. However, such a provision relates to the affordability by the students and makes natural justice questionable. An occasional increase in marks in the revaluation gives scope for quick generalization that the evaluation system is improper and irresponsible. An evaluation system that makes the Scheme of Evaluation overt and provides access to the evaluated answer scripts to the students without collecting any additional fee shall dispel all kinds of misconceptions. 4. The Practice An often criticized and bottleneck in the evaluation system of higher education is "revaluation". The fees are exorbitant and many educators believe that the system endangers 'Natural Justice'. The process is belated and hinders the time schedules of related

academic activities like publishing of results and promotion/detention of students. An unanswered just question till today is, "What should be the curative action if the marks of the student increase in revaluation?". Moreover, the revaluation system exposed many unethical practices in the past as evident from news. A vigilant revaluation system may be the solution but it demands for more human resources, further time delays and several other overheads. The college examinations and evaluation committee critically analysed the prevailing scenario of revaluation and concluded that the practice of revaluation needs to be annulled. The committee also recognised the just right of every student to browse his/her evaluated answer script of the Semester End Examinations. The students shall also be granted the privilege of seeking clarifications regarding the evaluation, if any. The committee concluded that the best solution to meet all these observations, though challenging, is the distribution of the answer scripts to the students. The practice is unique of its kind in the state and has phenomenally improved the credibility and respect towards the evaluation process in the campus.

5. Evidence of Success The evidence of success of this practice is more of qualitative rather than quantitative. The practice does not give room to any kind of unethical practices in evaluation. The feedback collected from the students shows that they abundantly acclaim the practice. The small number of clarifications sought during the distribution of scripts shows that the evaluation system is more robust, objective and uniform. The practice also proves that the teaching learning process is effective in attaining learning outcomes.

**BEST PRACTICE-II 1.**  
**Title of the Practice Holistic Academic Ecosystem**  
**2. Objectives of the Practice** The Holistic Academic Ecosystem is a set of cohesive academic practices that design, implement, monitor and audit regular and periodic academic activities to improve the quality of education. The objectives of the system are.

1. Program review by stakeholders to align with Program Outcomes.
2. Dynamic curriculum to meet the industry needs.
3. Orientation programs to accommodate change.
4. Teaching-learning process according to the documented course plans.
5. Periodic academic audits.
6. Correlation of assessment and examination with Learning Outcomes.
7. Mentoring and remedial measures for improvement of student performance.
8. Feedback systems to improve teaching methodologies
9. Practical training.

**3. The Context** The conventional academic system is content based, rigid, teacher centered and merely evaluates reproduction capabilities of the student. The present era of globalization demands for graduates who are industry-ready, innovative in designing solutions to real word problems, poised to work in global teams. In fact, such accomplished graduates contribute to the academic wealth of the nation. These requirements advocate for a

holistic academic system built on well-designed academic policies for tractability and shall be immune to changes in the academic and administrative roles. The system shall encompass the stakeholders' viz., employers, faculty, students and parents as its integral part. The key systems and processes that define a holistic academic system are - Program review policy, benchmarking policy, teaching-learning policy, research policy, academic audit policy, assessment and examination policy, student mentoring policy, internship policy, feedback systems, and academic regulations. 4. The Practice The Program Development and Review Policy provides a framework for review and improvement of an existing program. The policy ensures that the program's activities are in line with the college vision, and mission and are in compliance with the requirements of quality assurance and accreditation. Bench Marking Policy evaluates a program while revising an existing program or developing a new program. It is carried out with Universities of high standard and high international ranking. It identifies the best graduate attributes, Learning Outcomes, the curriculum structure and the courses. The curriculum after approval by the Boards of Studies is presented to the Academic Council and any changes suggested are incorporated. The teaching learning policy is implemented by the Head of the Department who is the exofficio member of the academic monitoring team. The academic monitoring team in association with the class coordinators, section coordinators and course coordinators monitors the quality of preparation and implementation of course plans. The course plan comprises of learning outcomes, course objectives, course coverage, mapping with the programming outcomes and their assessment and evaluation. A comprehensive feedback on the course and the teacher is conducted at the end of each semester. An exit survey of each program is collected from the graduating students at the end of each academic year. The examination and evaluation policy guides the monitoring of the achievement of learning outcomes in every course/subject. The assessment is divided into continuous internal assessment by the course teacher through various assessment methods like classroom tests, home assignments and the final examination. The final examination is based on a question paper set by an internal/external examiner whose compliance with the learning outcomes is scrutinized. The scheme of evaluation is displayed in the website and the evaluated answer scripts of the final examination are distributed to the students. The Academic audit team conducts an audit in each department at the end of each semester in accordance with the audit policy. The mentoring policy is aimed at the counseling of the students on academic progress and the mentors communicate with the parents. Orientation Programs for first year students are conducted for three to four weeks at the beginning of every academic year. The students are made aware of the

college vision, mission, regulations, the value systems and ethics to be followed. Special emphasis is given to enhance the communication skills and the bridge courses if needed. 5. Evidence of Success The holistic academic ecosystem was put in place for the last two academic years and is progressing towards the set objectives. The feedback surveys on the courses and curriculum collected from the current students, graduating students and the employers is helping the Program Review Committee in making the curriculum dynamic. The course plans are continuously improved for better teaching learning outcomes based on the feedback. The feedback on faculty is helping the Head of the Department in identifying the lacunae in teaching learning process and counsel the faculty for improvement. Best teacher awards are given to the faculty based on the feedback index and is contributing in developing a quality teaching ecosystem in the campus. The analysis of the Continuous Internal Evaluation identifies the students who are unable to cope up with the promotion requirements. Remedial classes are organized for such students. The success of the examination and evaluation system is evident from the attainment indicators of course and program objectives and outcomes. The evaluation system is acclaimed by the students as transparent and objective. The parents have expressed a great degree of satisfaction with the counselling of their wards and continuous communication about the progress of their wards.

File Description	Documents
Best practices in the Institutional website	<a href="http://www.becbapatla.ac.in/pages/best-practices">http://www.becbapatla.ac.in/pages/best-practices</a>
Any other relevant information	Nil

### 7.3 - Institutional Distinctiveness

7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

The rise in global temperatures year after year poses an existential threat to the planet. The global leaders and the United Nations (UN) have been showing great concerns in various summits and conferences about measures, international laws, and agreements to sustainable development and environmental conservation. No wonder, ignorance of this may result in fatal natural disasters, economic bottlenecks resulting in endangered inhabitation. The management and the administration of Bapatla Engineering College in pursuance of "Going

green" have established a Grid-tied solar project to meet the electrical power requirement needs of the college and to preserve natural resources for current and future generations. The total capacity of the installation is 400 kWp (kilowatt 'peak' power output) which was established with an initial cost of 1.92 Crore. A total of 1232 multi-crystalline panels each with 325 Wp were installed on rooftops of various buildings. The inverter network comprises 8 units with 50 kVA capacity.

The number of units generated and exported to the grid till dates are shown in the following table.

S.No

Year

Total No of Units generated

Total No of Units exported to the Grid

1

2021(td)

4,63,768

1,84,066

2

2020

5,07,151

2,52,141

3

2019

5,21,793

1,67,862

4

2018

1,67,862

File Description	Documents
Appropriate link in the institutional website	<a href="http://www.becbapatla.ac.in/">http://www.becbapatla.ac.in/</a>
Any other relevant information	No File Uploaded

## 7.3.2 - Plan of action for the next academic year

- Focus on National Education Policy (NEP) 2020. In line with NEP, Webinars/Seminars/Workshops will be organized for promoting quality education.
- Improvement of Industry - Institute interactions.
- Improving the research excellence by planning to strengthen R&D with various International Journals publication and providing seed money.
- Innovation, Incubation and Entrepreneurship activities to be increased.
- Conduction of more training programs to impart quality education.
- Skill Development Courses are to include in the curriculum
- Participation of NPTEL, MOOCs and other online certifications has to increased.
- Reaching to the neighbourhood through outreach activities in the Covid Pandemic
- Preparation of NBA, NIRF Documentation.