



Yearly Status Report - 2019-2020

Part A

Data of the Institution

1. Name of the Institution		BAPATLA ENGINEERING COLLEGE
Name of the head of the Institution		V DAMODARA NAIDU
Designation		Principal
Does the Institution function from own campus		Yes
Phone no/Alternate Phone no.		08643-224244
Mobile no.		9440730035
Registered Email		bec_principal@becbapatla.ac.in
Alternate Email		bec_principal@yahoo.com
Address		GBC ROAD, MAHATMAJI PURAM
City/Town		Bapatla
State/UT		Andhra Pradesh
Pincode		522102
2. Institutional Status		

Autonomous Status (Provide date of Conformant of Autonomous Status)	23-Jun-2010
Type of Institution	Co-education
Location	Rural
Financial Status	private
Name of the IQAC co-ordinator/Director	Dr P Sundara Kumar
Phone no/Alternate Phone no.	08643224244
Mobile no.	9182426301
Registered Email	beciqac@gmail.com
Alternate Email	sundarkumar.pitta@becbapatla.ac.in

3. Website Address

Web-link of the AQAR: (Previous Academic Year)	http://www.becbapatla.ac.in/uploads/BCE1568869448166.pdf
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4. Whether Academic Calendar prepared during the year

Yes

if yes, whether it is uploaded in the institutional website:
Weblink :

<http://www.becbapatla.ac.in/pages/academic-calenders>

5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
1	B	2.70	2015	03-Mar-2015	02-Mar-2020
2	B++	2.99	2020	11-Mar-2020	10-Mar-2025

6. Date of Establishment of IQAC

07-Oct-2015

7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries
Internal Academic Audit	23-Mar-2021	15

	2	
NIRF 2019 participation	19-Feb-2021 1	15
To participate in ARIIA	18-Aug-2020 1	15
NAAC Inspection	05-Mar-2020 2	250
ISO certification	28-Jan-2020 1	32
Alumni meet	28-Dec-2019 1	85
Autonomous Inspection	19-Oct-2019 2	250
Regular Meetings of IQAC	22-Jan-2020 1	15
Regular Meetings of IQAC	04-Oct-2019 1	15
Reconstitution of IQAC	15-Jul-2019 1	15
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8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Dr.N.Sudhakar	SPDP	AICTE	2019 1095	1633000
Dr G Ravi Kumar	GOC	AICTE	2020 5	161667
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9. Whether composition of IQAC as per latest NAAC guidelines:

Yes

Upload latest notification of formation of IQAC

[View File](#)

10. Number of IQAC meetings held during the year :

3

The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website

Yes

Upload the minutes of meeting and action taken report

[View File](#)

11. Whether IQAC received funding from any of the funding agency to support its activities

No

during the year?

12. Significant contributions made by IQAC during the current year(maximum five bullets)

Strengthening of Knowledge Dissemination: The IQAC strengthens knowledge dissemination in two ways digitalizing and disseminating. CAMU software is used for this purpose.

To keep upfront with newer technology, all staff/Student members are encouraged to pursue NPTEL (MOOC) online courses.

Programmes like workshops, seminars are organised Faculty members have been motivated and facilitated to attend faculty development training programmes and workshops in reputed organisations with financial support

Through Institutions Innovation Council, Students are motivated to participate in Smart India Hackathn competitions

Initiated and completed the pending syllabus in the even semester of the academic year 2019-20 and conduct internal examinations online mode to handle the pandemic situation.

[View File](#)

13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes
Improved transparency in Answer script evaluation.	More satisfaction from the students and parents.
The faculty recognition at national and international level should be enhanced	Four members were selected as Innovation ambassadors by MHRD - IIC Dr. V Damodara Naidu , Principal has given a talk during the world education summit
Faculty with Ph.D. should only be considered in recruitment	No of Ph.D.'s in the department are improved to meet the quality frameworks mentioned by HEI
MoUs should be initiated	Number of MoUs are increased
Proposal for students placement / GATE coaching	400+ Placements/Higher studies and a good number of GATE qualifiers
Participation in the programmes organised by other Institutions	Nearly 1200 programs were attended by faculty
Encouraging the faculty to publish the research articles and to obtain the patents for their work.	Number of Papers published in journals are substantially increased and good number of patents were published
E - content development	LMS implemented for all the courses

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14. Whether AQAR was placed before statutory body ?	Yes				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Name of Statutory Body</th> <th style="width: 50%; text-align: center;">Meeting Date</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">College Academic Council</td> <td style="text-align: center;">18-Feb-2021</td> </tr> </tbody> </table>		Name of Statutory Body	Meeting Date	College Academic Council	18-Feb-2021
Name of Statutory Body	Meeting Date				
College Academic Council	18-Feb-2021				
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?	Yes				
Date of Visit	05-Mar-2020				
16. Whether institutional data submitted to AISHE:	Yes				
Year of Submission	2021				
Date of Submission	19-Feb-2021				
17. Does the Institution have Management Information System ?	Yes				
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	<p>College Management Information System include following List of modules</p> <ol style="list-style-type: none"> 1. Admissions Schedule and issue Applications Online applications and collection of application fees Record applications 2. Student Record Student record maintenance Transfers/Termination Automatically updated academic records 3. Staff Record Staff record maintenance Printing of statutory staff reports Resignations 4. Fee Management Automatic generation of bills using billing policies Receipts, Credit Notes Cancellations Integration with Tally SAP 5. Internal Examinations Maintenance of Examinations , Results entry, Academic Performance Reports 6. Communication Staff to staff communication using SMS and Android App messages 7. Transport Maintenance of vehicle routes Student and Staff registration for transportation 8. Payments Workflow for creating and approving payments 9. Leave Management Leave application and approvals for staff/students 10. Inventory Maintain Inventory Catalogue Stock Issue/Stock Taking Projection for stock purchase based on student strength 11. Hostel 				

Book Rooms for Students, Staff and Visitors (as Guests) Automatically integrated to Billing 12. Health Record Maintenance of Student Health Record 13. Visitor Management Record time in and time out of visitors 14. Enquiries Record Enquiries manually Dashboard to track Enquiries and Followups 15. Attendance Manual attendance on Android tablet devices Attendance reports 16. Academic Planning Allocation of Staff to subjects Time table creation My timetable view for staff Staff diary 17. Teaching Plan Creation and Maintenance of Teaching Plans Progress Tracking of teaching plans 18. Assignments Schedule assignments Record and rate Assignment Submissions Online submission of Assignments 19. Assessments Online Assessments based on MCQ Automatics scoring of Assessments 20. Question Bank Create and manage Question Banks Question banks with question linked to learning outcomes, blooms taxonomy and rubrics 21. Feedback Record feedback on students/staff 22. Outcome Based Education Define PEO, PO and CO for all Programs and Courses Mapping of Question paper for all Examinations Question Bank with Mapping to Course Outcomes Real time availability of Course and Program Outcome Attainment 23. Choice Based Credit System Fully Flexible Student Study plan Approval for Student Enrolment 24. Payroll Define Salary Structures and policies Leave Management for Staff Generate Pay slips Attendance through Biometric Devices 25. CoE Hall Tickets Exam Scheduling Mark Scanning Re valuation Results Publishing Report Advantages to Parents and Students • Realtime updates can be seen in their personalized mobile app • Instant Communication about their children • Homework Communication in their Mobile App/ SMS/ Portal • Attendance Percentage in the Parent Mobile App/Portal • Online Fee payment can be made by the parents through their mobile app • Student Profile up to date can be viewed and corrected

Part B

CRITERION I – CURRICULAR ASPECTS

1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
MSc	MSc02	MSc- Computer Science	01/07/2019
MCA	MCA01	Master of Computer Applications	01/07/2019

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1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BTech	Computer Science and Engineering	01/07/2019	Industrial Management Entrepreneurship Development Y14ME801	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	Advanced Cyber Security 14CS802	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	ELECTIVE-IV(Software Testing Methodologies) 14CS803(A)	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	ELECTIVE-V(Application Programming using Python) 14CS804(A)	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	PROJECT WORK 14CSPR801	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	Advanced Cyber Security Lab 14CSL801	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	Introduction to Cyber Security 14CS701	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	Object Oriented Analysis and Design 14CS702	01/07/2019
BTech	Computer Science and Engineering	01/07/2019	Advanced Data Analytics 14CS703	01/07/2019
BTech	Computer Science and	01/07/2019	Wireless Networks	01/07/2019

[View File](#)**1.2 – Academic Flexibility**

1.2.1 – New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nil	NIL	Nil
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1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
BTech	CIVIL ENGINEERING	01/07/2019
BTech	COMPUTER SCIENCE AND ENGINEERING	01/07/2019
BTech	ELECTRONICS AND COMMUNICATION ENGINEERING	01/07/2019
BTech	ELECTRICAL AND ELECTRONICS ENGINEERING	01/07/2019
BTech	ELECTRONICS AND INSTRUMENTATION ENGINEERING	01/07/2019
BTech	MECHANICAL ENGINEERING	01/07/2019
BTech	INFORMATION TECHNOLOGY	01/07/2019
MCA	Master of Computer Applications	01/07/2019
MSc	Computer Science	01/07/2019
Mtech	CSE	01/07/2019
Mtech	CAD/CAM	01/07/2019
Mtech	SE	01/07/2019
Mtech	CESP	01/07/2019
MSc	Analytical Chemistry	01/07/2019
MSc	Organic Chemistry	01/07/2019
MSc	Physics	01/07/2019
MSc	Mathematics	01/07/2019

1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Aptitude	15/06/2019	43
Business English and communication skills	15/06/2019	43
Coding	15/06/2019	43
Campus to corporate	15/06/2019	43

Design of Electric vehicle	06/01/2020	126
NPTEL online Certification- Introduction to Smart Grid	01/08/2019	2
SOFT SKILL TRAINING	26/06/2019	145
LAUNGUAGE SKILS	26/06/2019	145
CAMPUS TO CORPORATE	26/06/2019	145
Aptitude	26/06/2019	145
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1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BTech	CIVIL ENGINEERING	13
BTech	COMPUTER SCIENCE AND ENGINEERING	6
BTech	ELECTRICAL AND ELECTRONICS ENGINEERING	38
BTech	MECHANICAL ENGINEERING	2
BTech	ELECTRONICS AND COMMUNICATION ENGINEERING	19
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1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

Feedback Obtained
<p>The college believes in continuous assessment and upgrading of academic standards. Accordingly, the college obtains, at regular intervals, feedback from stakeholders. Feedback is obtained at three levels. i. From students on Graduates' day - an annual event ii. From management at meetings chaired by management representative iii. From teachers at college meetings - held regularly iii. From students on Graduates' day Students feedback would be obtained on the Graduates' Day, which is generally held in the month of November. A well designed feedback form is prepared by the college for the purpose. The feedback form elicit responses from students on a range of issues which include, the usefulness of the course, competency of the teachers and facilities made available to students. The feedback obtained is assessed under SPSS system, which helps the college to plug its weaknesses. ii)From management at meetings chaired by management representative The management makes serious</p>

efforts in improving the quality of education, imparted at the college. Meeting of college Principal and senior teachers would be held regularly at the head quarters and generally the meetings would be chaired by the Executive Secretary. The management gives a patient hearing to the observations of the Principal and senior teachers and come out with valid solutions. iii) From teachers at college meetings General staff meetings would be called at regular intervals or as and when the situation demands to take care of issues arising. The meeting would be attended by the members of both teaching and nonteaching faculty. In these meetings Principal takes stock of the academic progress of the college, which includes completion of syllabus and submission of records by the teachers. Both teachers and nonteaching staff are given freedom to speak about their grievances, which would be recorded and addressed later in consultation with the management. A range of issues like students discipline and other general grievances would be discussed at length. Such frequent staff meetings not only eliminate misconceptions among the members of staff but also contribute to the academic improvement of the college

CRITERION II – TEACHING- LEARNING AND EVALUATION

2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
Mtech	COMPUTER SCIENCE ENGINEERING	18	Nil	Nil
BTech	CIVIL ENGINEERING	180	52	52
BTech	COMPUTER SCIENCE ENGINEERING	180	193	193
BTech	ELECTRONICS AND COMMUNICATIONS ENGINEERING	180	164	164
BTech	ELECTRICAL AND ELECTRONICS ENGINEERING	120	42	42
BTech	ELECTRONICS AND INSTRUMENTATION ENGINEERING	60	Nil	Nil
BTech	INFORMATION TECHNOLOGY	120	114	114
BTech	MECHANICAL ENGINEERING	180	48	48
Mtech	Structural Engineering	18	7	7
Mtech	COMMUNICATION ENGINEERING AND SIGNAL PROCESSING	18	Nil	Nil

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2.2 – Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	3307	254	218	34	252

2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
252	252	17	79	1	5

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

Questions about the learning of individual students, the effectiveness of a single course or program, or even the entire institution. Precision in formulating the questions of interest helps to pinpoint the level of analysis, determine the appropriate methods, and guide data sampling, aggregation, interpretation, and use. Our basic assumption is that evidence of student learning should be used for multiple levels of assessment. We do, of course, also gather and use information, and factor it into complex analyses of the learning environment, especially at the program and institutional levels. The best evidence of learning comes from direct observation of student work rather than from an input inventory (eg, list of courses completed Marks in intermediate) or other summary. The student performance observed is the most valuable data for to assessment. Course embedded assignments provide the most valid evidence for all levels of analysis because they are closely aligned with faculty expectations and with the teaching learning process. The ways of sampling, aggregating, and grouping the evidence for analysis (to make collection more manageable) will depend on the original questions posed. The questions will also determine how the data are interpreted to produce action. Internally, faculty members and staff accomplish aggregation by describing standards, translating them into consistent scoring scales, and anonymously applying the resulting rubrics to the evidence at hand. Formative and summative questions would probe what individual students are learning and how well they are meeting the goals of a course (whether related to disciplinary content or to using transferable intellectual and practical skills). Typical assessment questions at this level: Is the student learning as expected? How well has the student achieved the learning outcomes set for the course? What are the student's strengths and weaknesses? How well is the student exhibiting his skills when demanded? To collect the data we use sometools like: Creating assignments Creating exams Using classroom assessment techniques Creating and using rubrics. Sources of evidence: All student work embedded in the course (for example quizzes and exams, papers, projects, presentations,) can provide evidence. This is the level of assessment at which instructor assigned marks typically provide feedback to students about their progress and success. Aggregation of data: Aggregation is often sequential as evidence is collected for each student during the course to track individual learning and improvement. Typically a final assessment holistically sums up a semester of learning. For under performers we encourage to practice the same questions. We try to bridge the gap that developed between the expectation and the performance by going through the evidence that is already created by class teachers. Our committed institution also encourage the students to attend the remedy classes that will be conducted by the class teachers. By doing this we spread confidence in the students so that they can face the challenges in the exams easily. And for good performers we systematically brush up their performance further and encourage to participate in various competitions and write papers and do projects

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
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3926

252

1:16

2.4 – Teacher Profile and Quality**2.4.1 – Number of full time teachers appointed during the year**

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
252	252	Nil	29	63

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2020	Sri P Uma Maheswara Rao	Assistant Professor	BEST TEACHER AWARD - Department
2020	Dr B Vijaya Krishna	Assistant Professor	BEST TEACHER AWARD - Department
2020	Sri T Chiranjeevi	Assistant Professor	BEST TEACHER AWARD - Department
2020	Dr N Rafi	Assistant Professor	BEST TEACHER AWARD - Department
2020	Sri K Naga Raju	Assistant Professor	BEST TEACHER AWARD - Department
2020	Ms K Bharathi	Assistant Professor	BEST TEACHER AWARD - Department
2020	Sri N Srinivasa Rao	Assistant Professor	BEST TEACHER AWARD - Department
2020	Sri N Sudheer Kumar	Assistant Professor	BEST TEACHER AWARD - Department
2020	Dr S Mohan	Assistant Professor	BEST TEACHER AWARD - Department

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2.5 – Evaluation Process and Reforms**2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year**

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BTech	BT01	VII SEM / NOV 2019	18/11/2019	12/12/2019
BTech	BT01	V SEM / NOV 2019	20/11/2019	10/12/2019
BTech	BT01	III SEM / NOV 2019	25/11/2019	16/12/2019
BTech	BT01	I SEM / DEC 2019	02/01/2020	22/01/2020

BTech	BT01	VIII SEM / SEP 2020	19/09/2020	15/10/2020
BTech	BT01	VI SEM / OCT 2020	11/04/2020	30/11/2020
BTech	BT01	IV SEM / NOV 2020	13/11/2020	13/12/2020
BTech	BT01	II SEM / NOV 2020	21/11/2020	16/12/2020
BTech	BT02	VII SEM / NOV 2019	18/11/2019	12/12/2019
BTech	BT02	V SEM / NOV 2019	20/11/2019	10/12/2019
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2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
155	6715	2.30

2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<http://www.becbapatla.ac.in/pages/co-po-mapping>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
BT01	BTech	Civil Engineering	123	98	80
BT02	BTech	Computer science and Engineering	161	147	91
BT03	BTech	Electronics and Communication Engineering	172	143	83
BT04	BTech	Electrical and Electroncis Engineering	139	114	82
BT05	BTech	Electronics and Instrumntation Engineering	33	21	64
BT06	BTech		73	59	81

		Information Technology			
BT07	BTech	Mechanical Engineering	142	117	82
MT01	BTech	Structural Engineering	7	7	100
MT03	BTech	Communication Engineering and Signal Processing	7	7	100
MT04	BTech	Power Systems Engineering	3	3	100
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2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<http://www.becbapatla.ac.in/pages/students-satisfactory-survey>

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 – Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

Yes
Name of the teacher getting seed money
CH. Subramanyam
View File

3.1.2 – Teachers awarded National/International fellowship for advanced studies/ research during the year

Type	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
National	Dr . G. Ravi Kumar	Certificate of Reviewing from Elsevier	01/06/2020	Elsevier
International	Dr. P Sundara Kumar	Best Research Paper	19/12/2019	SV University College of Engineering, Tirupati
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3.2 – Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Any Other (Specify)	1095	AICTE	16.33	8.16
Any Other (Specify)	5	AICTE	1.61	1.61
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3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

1

3.3 – Innovation Ecosystem

3.3.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
A Seminar on Advanced Machine Intelligence	Computer Science and Engineering	02/07/2019
Guest Lecture on Research Methodology in Multi Level Inverters	Computer Science and Engineering	30/07/2019
A Seminar on Emerging Research Trends in AI and IOT	Computer Science and Engineering	02/08/2019
Guest Lecture on Distributed Energy resources including energy storage and their control	Electrical and Electronics Engineering	24/08/2019
Organise One Day Workshop On "Entrepreneurship And Innovation As Career Opportunity	Centre for Innovation, Incubation and Entrepreneurship	21/08/2019
A Two Day Seminar On Entrepreneurship Development	Centre for Innovation, Incubation and Entrepreneurship	21/08/2019
Three day Live Assisted workshop on Basics of Python	Information Technology	04/09/2019
Guest Lecture on Applications of Advanced DC-DC Power Converter	Electrical and Electronics Engineering	18/09/2019
Guest Lecture on Applications of Solar Energy	Electrical and Electronics Engineering	18/09/2019
Vocational Training on Making and Testing of industrial Electric Apparatus	Electrical and Electronics Engineering	30/09/2019

Student Solar Ambassador workshop on Gandhi Global Solar Yatra in Collaboration with IIT Bombay	Electrical and Electronics Engineering	02/10/2019
Workshop On Robotics Technology (Aroubotics-2k19)	Mechanical Engineering	03/10/2019
Vocational training on total station survey	Civil Engineering	17/10/2019
View File		

3.3.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Innovation Ambassador	Sri M Sunil	MHRD	07/02/2020	Innovation promotion / Technology Transfer
Innovation Ambassador	Sri K Rajendra	MHRD	07/02/2020	Innovation promotion / Technology Transfer
Innovation Ambassador	Sri S Ganapathi Prasad	MHRD	07/02/2020	Innovation promotion / Technology Transfer
Atal Ranking of Institutions on Innovation Achievements (ARIIA)	Bapatla Engineering College [ARI-C-42660]	MHRD	18/08/2020	Band C
Innovation Ambassador	Dr D Sameer Kumar	MHRD	07/02/2020	Innovation promotion / Technology Transfer
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3.3.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start-up	Date of Commencement
NIL	NIL	NIL	NIL	NIL	Nil
View File					

3.4 – Research Publications and Awards

3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Electronics and Communication Engineering	2
Electrical and Electronics Engineering	2

3.4.2 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
International	Chemistry	9	1
National	Chemistry	1	0
International	Mathematics	11	1
International	Computer Science and Engineering	16	0
International	Electronics and Communications Engineering	24	1
International	Electrical and Electronics Engineering	23	0
International	Mechanical Engineering	51	1
International	Information Technology	2	0
International	Physics	10	2
International	EIE	1	0
View File			

3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Information Technology	1
Computer Science and Engineering	1
Electronics and Instrumentation Engineering	1
Mechanical Engineering	7
View File	

3.4.4 – Patents published/awarded during the year

Patent Details	Patent status	Patent Number	Date of Award
V.V. Kondaiah, B. Ratna Sunil, Multi axis rotary stir casting furnace	Published	202041010203	10/03/2020
V. V. Kondaiah, B. Ratna Sunil, Rotary fabric hanging drier	Published	202041011839	19/03/2020
B. Ratna Sunil, N. M. Sarath Kumar, M. Venkataiah, V. U. S. Vara Prasad, G. Suresh, M.	Published	202041015774	11/04/2020

Venu, Solid state deposition process of surface alloy coating

[View File](#)

3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
An analysis of spectroscopic, computational and biological activity studies of L-shaped sulfamoylbenzoic acid derivatives: A third order nonlinear optical material	Krishna Murthy Potla	Journal of Molecular structure	2020	3	Bapatla Engineering College	3
An analysis of structural and spectroscopic signatures, the reactivity study of synthesized 4,6-dichloro-2-(methylsulfonyl)pyrimidine: A potential third-order nonlinear optical material	Krishna Murthy Potla	Journal of Molecular structure	2019	13	Bapatla Engineering College	13
Synthesis and anti-diabetic	K. Prasada Rao	Phosphorus, Sulfur, and	2020	1	Bapatla Engineering College	1

activity evaluation of phosphonates containing thiazolidinedione moiety		Silicon and the Related Elements				
Synthesis, Characterization, Analgesic and Anti-inflammatory activity of new pyrazole derivatives	VallabhaneniMadhavaRao	Arkivoc Journal	2020	1	Bapatla Engineering College	1
Monetization of comat patient and health prediction using machine learning	C H Subramanyam	Journal of Engineering Science	2020	0	Bapatla Engineering College	Nil
Synthesis, spectral characterization and bioactivity evaluation of sulfonamide derivatives of p-nitrobenzenesulfonylchloride,	C H Subramanyam	Indian Journal of Chemistry	2019	0	Bapatla Engineering College	Nil
4-([4-(Dimethylamino) benzylidene]amino)-5-methyl-1,2,4-triazole-3-thiol as Corrosion Inhibitor for 316 Stainless Steel in	Krishna Murthy Potla	Asian Journal of Chemistry	2020	0	Bapatla Engineering College	Nil

2.5 M Sulphuric Acid: An Experimental and Theoretical Investigation						
In silico molecular docking and in vitro anti oxidant activity studies of novel α -Aminophosphonates bearing 6-amino-1,3-dimethyl uracil,	Krishna Murthy Potla	Journal of Receptors and Signal Transduction	2020	3	Bapatla Engineering College	3
Experimental and Theoretical Study of Corrosion Behaviour of Maraging Steel in 1 M HCl in Presence of 5-Methyl-4-[(E)-(thiophen-2-ylmethylidene)amino]-1,2,4-triazole-3-thiol	Krishna Murthy Potla	Asian Journal of Chemistry	2019	0	Bapatla Engineering College	Nil
An analysis of structural, spectroscopic signatures, reactivity and anti-bacterial study of synthesized 4-chloro-3-sulfamoylbenzoic	Krishna Murthy Potla	Journal of Molecular structure	2020	5	Bapatla Engineering College	5

acid

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3.4.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Synthesis, spectral characterization and bioactivity evaluation of sulfonamide derivatives of p-nitrobenzene sulfonylchloride,	C H Subramanyam	Indian Journal of Chemistry	2019	5	Nil	Bapatla Engineering College
Monetization of comat patient and health prediction using machine learning	C H Subramanyam	Journal of Engineering Science	2020	5	Nil	Bapatla Engineering College
Synthesis, Characterization, Analgesic and Anti-inflammatory activity of new pyrazole derivatives	VallabhaneniMadhavaRao	Arkivoc Journal	2020	5	1	Bapatla Engineering College
Synthesis and anti-diabetic activity evaluation of phosphonates containing thiazolidinedione moiety	K. Prasada Rao	Phosphorus, Sulfur, and Silicon and the Related Elements	2020	6	1	Bapatla Engineering College

An analysis of structural and spectroscopic signatures, the reactivity study of synthesized 4,6-dichloro-2-(methylsulfonyl)pyrimidine: A potential third-order nonlinear optical material	Krishna Murthy Potla	Journal of Molecular structure	2019	8	13	Bapatla Engineering College
An analysis of structural, spectroscopic signatures, reactivity and anti-bacterial study of synthesized 4-chloro-3-sulfamoylbenzoic acid	Krishna Murthy Potla	Journal of Molecular structure	2020	8	5	Bapatla Engineering College
Experimental and Theoretical Study of Corrosion Behaviour of Maraging Steel in 1 M HCl in Presence of 5-Methyl-4-[(E)-(thiophen-2-ylmethylene)amino]-4H-1,2,4-triazole-3-thiol	Krishna Murthy Potla	Asian Journal of Chemistry	2020	8	Nil	Bapatla Engineering College

In silico molecular docking and in vitro anti oxidant activity studies of novel α -Aminophosphonates bearing 6-amino-1,3-dimethyl uracil,	Krishna Murthy Potla	Journal of Receptors and Signal Transduction	2020	8	3	Bapatla Engineering College
4-{[4-(Dimethylamino) benzylidene]amino}-5-methyl-4H-1,2,4-triazole-3-thiol as Corrosion Inhibitor for 316 Stainless Steel in 2.5 M Sulphuric Acid: An Experimental and Theoretical Investigation	Krishna Murthy Potla	Asian Journal of Chemistry	2020	8	Nil	Bapatla Engineering College
An analysis of spectroscopic, computational and biological activity studies of L-shaped sulfamoylbenzoic acid derivatives: A third order nonlinear optical material	Krishna Murthy Potla	Journal of Molecular structure	2020	8	3	Bapatla Engineering College

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3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	14	150	25	Nil
Presented papers	23	7	Nil	Nil
Resource persons	1	6	Nil	4

[View File](#)

3.5 – Consultancy

3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
SRI T CHIRANJEEVI	SOIL TEST	KVR Builders, Bapatla	6372
SRI T CHIRANJEEVI	SOIL TEST	G Hari Prasad, Bapatla	6372
SRI P BAPI RAJU	SOIL TEST	Sri Hareram M Nagaraju, Bapatla	6372
SRI Y MURALI KRISHNA	Cubes	Dy Excutive Engineer, APS Police Housing Corporation Ltd., Guntur	3186
SRI T CHIRANJEEVI	SOIL TEST	PVR Infrac, Bhadrupalem Panchayat, Ipuru Mdl, Guntur Dist	236
SRI P BAPI RAJU	SOIL TEST	Gundreddi Gopi, Besthapalem, Bapatla	6372
SRI T CHIRANJEEVI	SOIL TEST	Keethana Cold Storage, Nuthalapadu Village, Parchur Mdl, Prakasam Dist	5900
SRI T CHIRANJEEVI	SOIL TEST	M/S Masterweaver Ethnus Indian Pvt Ltd, Hyderabad	7316
SRI T CHIRANJEEVI	SOIL TEST	M/S SCR Nirman Private Limited, Hyderabad	19824
Dr T CHANDRA SEKHAR RAO	SOIL TEST	Parandhayya Convention Center PVT, Ltd, Ponnur	531

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3.5.2 – Revenue generated from Corporate Training by the institution during the year

Name of the	Title of the	Agency seeking /	Revenue generated	Number of trainees
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Consultan(s) department	programme	training	(amount in rupees)	
Nil	Nil	Nil	0	0
View File				

3.6 – Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Breast Cancer Awarenes Camp	SAC	1	66
Blood Donation Camp	SAC	1	52
Career Guidance	SAC	1	15
Womens Day	SAC	1	86
Beach cleaning	NCC	1	39
Say no to Tobbaco	NCC	1	45
Reducing the plastic usage	NCC	1	40
Harvesting rain water	NCC	1	42
Against use of polythene	NCC	1	43
Save water	NCC	1	39
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3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Blood Donation	Indian Red Cross Society	Indian Red Cross Society	5
Career Guidance	Govt. high School	Govt. high School	8
Covid Awareness	Suryodaya society for Awakening Community	Suryodaya society for Awakening Community	5
Helping Hearts	Suryodaya society for Awakening Community	Suryodaya society for Awakening Community	5
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3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Healthhygiene	BEC NCC,	Bore repairs	1	43

	Bapatla	Structures		
SAC	BEC SAC, Bapatla	Blood Donation Camp	1	52
NGO	BEC SAC, Bapatla	Career Guidance	1	15
Gender Issue	BEC SAC, Bapatla	Womens Day	1	86
swacch bharat	BEC NCC, Bapatla	Beach cleaning	1	39
Healthhygiene	BEC NCC, Bapatla	say no to Tobbaco	1	45
Maintaining Environmental balance	BEC NCC, Bapatla	Reducing the plastic usage	1	40
Improving ground water level	BEC NCC, Bapatla	Harvesting rain water	1	42
promoting hygenic environment	BEC NCC, Bapatla	Against use of polythene	1	43
promoting ecological balance	BEC NCC, Bapatla	Save water	1	39
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3.7 – Collaborations

3.7.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Research Publication	Dr. T. Chandra Sekhar Rao	Institution	120
Patent	B. Ratna Sunil, N. M. Sarath Kumar, M. Venkataiah, V. U. S. Vara Prasad, G. Suresh, M. Venu	Institution	120
Tech Talk	Cognisight, India	Institution	1
Seminar	Assemitica Robotics, USA	Institution	1
Seminar	BT & BT Technologies	Institution	1
Research Publication	Dr. G. Ravi Kumar	Institution	120
FDP	IETE-Vijayawada regional centre	Institution	5
Workshop	Innovians Technologies, Varanasi	Institution	2
National FEST-	IETE-Vijayawada	Institution	1

Techkshetra 2k19	regional centre		
Workshop	Hyderabad Institute of Electrical Engineering	Institution	2
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3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Industrial Training	Technical supervision	PIU SUB DIVISION, REPALLE	06/11/2019	05/04/2020	1
Industrial Training	Technical supervision	PRI SUB DIVISION, CHIRALA	06/11/2019	05/04/2020	1
Industrial Training	Technical supervision	PIU SUB DIVISION, REPALLE	06/11/2019	05/04/2020	1
Internship	Industry Training	CISCO-CCNA TRAINING- BAPATLA ENGINEERING COLLEGE	06/05/2019	24/08/2019	28
INTERNSHIP	Watersupply System, Sanitation and Distribution	Executive Engineer (WRE Chirala)	13/01/2020	27/01/2020	12
Mini Projects	Mini Projects on IOT	SRC e Embedded	24/06/2019	19/07/2019	199
INTERNSHIP	SOFTWARE DEVELOPMENT	VALUE LABS	09/01/2020	08/06/2020	1
INTERNSHIP	SOFTWARE DEVELOPMENT	BNP	09/01/2020	08/06/2020	1
INTERNSHIP	SOFTWARE DEVELOPMENT	HCL	16/03/2020	15/07/2020	4
INTERNSHIP	Construction of New CC Roadway from (Chirala to Repalle)	Project Manager (B-S-C-P-L)	13/01/2020	27/01/2020	7

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3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Sri Lakshmi Ganapathi Engineering Works (Kumar pumps), Tenali	31/08/2019	Exchange of knowledge between SLGEW and BEC to organize collaborative training programs for staff and students, TO provide internship to students of BEC	155
HYDERABAD INSTITUTE OF ELECTRICAL ENGINEERING(HIEE)	25/10/2019	Professional Activities	38
EMMELA DATA ANALYTICS PRIVATE LIMITED, BANGALORE	15/06/2019	Training programs for students to enhance their programming skills	2
ICT Academy , Chennai	01/07/2019	ICT Students and Faculty Development Programmes	33

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CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
500	84.17

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Video Centre	Existing
Classrooms with Wi-Fi OR LAN	Existing

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4.2 – Library as a Learning Resource

4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
SOUL	Fully	2.0	2006

4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
	Text Books	77498	21033000	1086	473000	78584
Journals	90	4708000	Nil	257000	90	4965000
e-Journals	523	8079000	Nil	1691000	523	9770000
e-Books	1648	187000	Nil	13000	1648	200000
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4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Dr. V. V. Kondaiah	Design of Shaft lecture 1	YOUTUBE	06/12/2019
Dr. V. V. Kondaiah	Design of Shaft lecture 2	YOUTUBE	10/12/2019
Dr N Sudhakar	Introduction to BACKTRACKING - Part 2	YOUTUBE	27/04/2020
Dr N Sudhakar	Introduction to BACKTRACKING - Part 3	YOUTUBE	27/04/2020
Dr N Sudhakar	Introduction to BACKTRACKING - Part 4	YOUTUBE	27/04/2020
Dr N Sudhakar	N Queens Problem Coading	YOUTUBE	03/05/2020
Dr N Sudhakar	Sum of Subsets Problem	YOUTUBE	03/05/2020
Dr. V. V. Kondaiah	Design of Shaft lecture 3	YOUTUBE	20/12/2020
Dr.N Sudhakar	Introduction to BACKTRACKING - Part 1	YOUTUBE	27/04/2020
Dr. S Ramakrishna	introduction to Arrays	YOUTUBE	31/03/2020
View File			

4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Type	Total Computers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departments	Available Bandwidth (MBPS/GBPS)	Others
Existin	1400	25	1400	25	12	8	12	240	0

g									
Added	104	0	104	0	0	0	0	0	0
Total	1504	25	1504	25	12	8	12	240	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

240 MBPS/ GBPS

4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
CISCO-DMS	http://www.becbapatla.ac.in/facilities/cisco-dms

4.4 – Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
759.75	649.65	539.57	187.09

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website)

The College adopts a preventive management system for all equipment and devices that are used in the Classrooms, laboratories, and other places. It has established a college Maintenance committee consisting of faculty members and technical staff from the disciplines of Civil engineering, Electrical and electronics engineering, and Mechanical Engineering to take care of the maintenance of College building maintenance, electrical maintenance, and mechanical maintenance such as plumbing, carpentry, etc. The department Heads inform the Convener of the committee and the work is delegated to the appropriate persons. For example, if it is an electrical problem, the issue is taken up by the member from the Electrical engineering and the concerned technician perform the maintenance. This includes electrical or mechanical maintenance in the classrooms, offices, laboratories common places, etc. Maintenance of power systems such as UPS, Electrical Generator, Solar energy systems maintenance is also carried out the Department of Electrical and Electronic engineering. The laboratory equipment maintenance is carried out by the respective departments. Every year preventive maintenance is carried out internally and, if necessary, with external technicians. The ICT equipment maintenance of all the classroom and the Laboratories is the responsibility of the Computer Science and Engineering Department that include internet, computers, both hardware and software, LCD Projectors etc. The Department of Electronics and Communication Department takes care of the communication systems, both internal and external communication systems. The audio systems, amplifiers, speakers, microphones, etc., are taken care of by the Electronics and Instrumentation Department. The building maintenance is coordinated by the member of the Maintenance committee with the Site engineer and construction supervisor. He takes up the identified problems with the construction staff and monitors the completion of the work. A supervisor is made responsible for the general maintenance of the Campus and waste management. The environmental engineering group helps in designing the solid as well as liquid waste disposal systems. The full-time Physical Director and the employees of the sports

Department are responsible for the maintenance of the playgrounds of various games, weight management equipment, other indoor games equipment such as TT Tables, and other play materials. They do the preventive maintenance as per the guidelines for specific equipment to keep them always ready for the students and staff to play. The Librarian guides the library staff for regular maintenance of books, such as replacing them in the appropriate racks, etc. The gadgets such as computers in the digital library, furniture maintenance, etc. are serviced by the respective departments, whereas other equipments such as barcode readers, reprographic equipment, etc. are serviced by the external agencies, mostly with an annual maintenance contract.

http://www.becbapatla.ac.in/uploads/NAAC_DATA/C4/4.4.2_maintenance.pdf

CRITERION V – STUDENT SUPPORT AND PROGRESSION

5.1 – Student Support

5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	BEC- Scholarship	73	1362409
Financial Support from Other Sources			
a) National	Jagananna Vidya Deevena	2905	173305050
b) International	NIL	Nil	0
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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Seminar on Customer Relationship Management	05/12/2019	41	Prem Kiran, Director, Effexoft
Two day workshop on Storage Area Networks	25/11/2019	35	Mr.T.Abhilash, Subject Matter Expert, IBM, Hyderabad
Three day Live Assisted workshop on Basics of Python	04/09/2019	27	FOSSEE Group in Association with IIT, Bombay.
A Tech Talk on Coding Problems in Interviews	22/06/2019	144	Sekhar Muddana, Founder, Cognisight, India
A Seminar on Advanced Machine Intelligence	22/06/2019	139	Dr. Kranthi Kumar, Assemitica Robotics, USA
A Seminar on Emerging Research Trends in AI and IOT	22/08/2019	206	V. Srinivasarao, BT BT Technologies
TEKHACK – 2019 "	12/12/2019	181	SMART BRIDGE

Bootcamp On Internet Of Things And 24 Hours Hackathon "			Mentors (9 members)
Soft Skills	24/06/2019	69	Stanley Davidson Academy
Language and Communication Skills	24/06/2019	69	Stanley Davidson Academy
Campus2Corporate	24/06/2019	69	Stanley Davidson Academy
View File			

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2020	GATE	255	188	15	Nil
2020	GRE	132	125	6	Nil
2020	IELTS	132	125	9	Nil
2020	State government examinations	168	92	34	34
2020	CRT(Reasoning, Aptitude, Arithmetic, Technical, Communication skills.)	650	138	116	116
View File					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
3	3	10

5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
14	858	116	61	1225	241
View File					

5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2020	1	B.Tech	Electrical and Electronics Engineering	University of Northumbria At Newcastle	MS
2020	1	B.Tech	Electrical and Electronics Engineering	ANU College of Engineering, Guntur	M.Tech
2020	1	B.Tech	Electrical and Electronics Engineering	Venu College Of Engineering, Tirupati	M.Tech
2020	1	B.Tech	Electrical and Electronics Engineering	NIT Raipur	M.Tech
2020	1	B.Tech	Electronics Instrumentation Engineering	Andhra University (Vizag)	M.Tech
2020	1	B.Tech	Computer Science and Engineering	Acharya Nagarjuna University	M.Tech
2020	1	B.Tech	Computer Science and Engineering	Akron University, Ohio State, United States.	MS
2020	1	B.Tech	Civil Engineering	Bapatla Engineering College	M.Tech
2020	1	B.Tech	Civil Engineering	IGNO University	PGDUPDL
2020	1	B.Tech	Civil Engineering	NIT-Agartala	M.Tech

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5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
GATE	15
GRE	6
TOFEL	Nil
Any Other	34

Any Other	9
View File	

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Sports	National	23
Cultural	National	56
View File		

5.3 – Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	First Prize	National	1	Nil	Y16ACS479	K Vamsi Krishna
2019	Second Prize	National	1	Nil	Y16ACS479	K Vamsi Krishna
2019	First Prize	National	1	Nil	Y16ACS422, Y16ACS402	B Srikanth, A Prassana Siva Ram
2019	First Prize	National	1	Nil	Y16ACS422	B Srikanth
2019	First Prize	National	1	Nil	Y16ACS422, Y16ACS402	B Srikanth, A Prassana Siva Ram
2019	First Prize	National	1	Nil	Y16ACS422	B Srikanth
2019	Third Prize	National	1	Nil	Y16ACS422, Y16ACS479	B Srikanth, K Vamsi Krishna
2019	First Prize	National	1	Nil	Y16ACS422, Y16ACS402	B Srikanth, A Prassana Siva Ram
2019	Second Prize	National	1	Nil	Y16ACS422	B Srikanth
2019	First Prize	National	Nil	1	Y18ACS429	Sindhuja
View File						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

Bapatla Engineering College encourages democratic functioning of all systems and participation of staff and students in planning, implementing, and decision-making. 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 convenor 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.

5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

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 20years re-union (1994-98) and a 30-year re-union (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.

5.4.2 – No. of registered Alumni:

1350

5.4.3 – Alumni contribution during the year (in Rupees) :

0

5.4.4 – Meetings/activities organized by Alumni Association :

Alumni Meet on 28 - December - 2019

CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

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 tieup 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.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	<p>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 dynamics 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 complete overhaul based the benchmarking, feedback from stakeholders, etc.</p>
Teaching and Learning	<p>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, it is 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</p>

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. a on

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, ake 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 stateofthe 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 industryspecific research and development
- Maximize the impact and international recognition of BEC research.
- Commercialize on BEC intellectual property.

Library, ICT and Physical

The College Library primary goals are

Infrastructure / Instrumentation

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 APSCHE where in merit is given priority. For M. Tech. courses, AP PGCET 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.

6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
<p>Student Admission and Support</p>	<p>Schedule and issue Applications, Online applications and collection of application fees, Record applications, Student Admission, Student Record: Student record maintenance, Transfers/Termination, Automatically updated academic records.</p>

Examination	Maintenance of Examinations, Results in entry, Mark ineligible students, Academic Performance Reports, Invigilation and Seat Allocation Reports, hall ticket generation, seat allocation, etc.,
Planning and Development	All the planning activities are done through CAMU software. It has several modules including scope for Outcome based education, choice based credit system planning, GPS tracking to monitor student bus status, various modules in the examination section, transport planning, feedback from the students, its summarization, hostel management, visitor management, attendance summarization, time table preparation, class allocation, etc.
Administration	Staff record maintenance, Printing of statutory staff reports, Resignations, Staff to staff communication on tablets using SMS and Android App messages, Mass communication through SMS, Mass communication through Android App, Mass communication through email, Mass communication from an Android App on mobile devices, Voice Calls. It also includes transport, hostel, payments, leave management and inventory etc.,
Finance and Accounts	Automatic generation of bills using billing policies, Receipts, Credit Notes cancellations, Integration with Tally SAP, Outstanding bills and cash collection tracking, Student Accounts View

6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	K Manideep	4th International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT) - 2019	NA	9500

2019	Dr.Nazeer Shaik	SENSITIZING HIGHER EDUCATION INSTITUTIONS TO PROMOTE QUALITY ASSURANCE FOR NATION BUILDING- OPPERTUNITIES AND CHALLENGES workshop attended at SV University, Tirupati	NA	4500
2019	Dr B. Chandra Mohan	International Conference on Computing , Communication and networking technologies (ICCCNT)	NA	11880
2019	T Krishna Chaitanya	IISc INCAM Conference	NA	9110
2019	M. Suneel	2 Week FDP on WSN and IOT	NA	2135
2019	N. Pradeep	FDP on Advanced Vibration Analysis and its application in Industry organized by Andhra University	NA	7500
2019	K. Baburao	Two day workshop on Strengthening of civil infrastructure using advanced technologies challanges and opportunities	NA	6000
2019	T. Chiranjeevi	GIAN course on Design and Construction of Sustainable Concrete Pavements organized by IIT Madras	NA	8600
2019	P. Sundara Kumar	International conference on Green Power Technology in Power Gride-	NA	5637

		ICGPTPG-2019		
2019	N P N Moorthy	Advance course on A perspective into Indian codes of practice	NA	14400
View File				

6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2019	Mini Projects on IOT	NA	24/06/2019	13/07/2019	5	Nil
2019	FDP on Data Science and Big Data Analytics	NA	15/07/2019	19/07/2019	10	Nil
2019	Guest Lecture on Research Methodology in Multi Level Inverters	NA	30/07/2019	30/07/2019	5	Nil
2019	Mini Project Expo	NA	31/07/2019	31/07/2019	20	Nil
2019	Seminar on Electronics in Defence	NA	01/08/2019	01/08/2019	10	Nil
2019	Workshop on Hardware and PCB Design	NA	16/08/2019	27/08/2019	10	Nil
2019	Guest Lecture on Distributed Energy resources including energy storage	NA	24/08/2019	24/08/2019	9	Nil

	and their control					
2019	workshop on IOT using TM4C123G Launch Pad	NA	12/09/2019	14/09/2019	10	Nil
2019	Guest Lecture on Applications of Advanced DC-DC Power Converter	NA	18/09/2019	18/09/2019	9	Nil
2019	Guest Lecture on Applications of Solar Energy	NA	18/09/2019	18/09/2019	10	Nil
View File						

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
Webinar on Big data Powering AI Data Stream Processing	1	11/06/2020	12/06/2020	2
RESEARCH APPLICATIONS IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING"	1	15/06/2020	17/06/2020	3
Data Science and Bigdata Analytics conducted by ICT Academy at BEC, Bapatla.	1	15/07/2019	19/07/2019	5
"ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING" Organized by CMR Technical Campus in Association with Black Buck	1	18/05/2020	22/05/2020	5

and Telangana State Government				
Machine Learning and AI using Python	1	27/04/2020	06/05/2020	10
Data Science and Bigdata Analytics conducted by ICT Academy at BEC,Bapatla.	1	15/07/2019	19/07/2019	5
FDP on Big Data Tools by St Martins Engineering College, Hyderabad.	1	18/05/2020	23/05/2020	6
Artificial Intelligence and Machine Learning	1	18/05/2020	22/05/2020	5
Advance Data Structures	1	01/06/2020	11/06/2020	12
Data Science and Bigdata Analytics conducted by ICT Academy at BEC,Bapatla.	1	15/07/2019	19/07/2019	5
View File				

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
29	29	Nil	Nil

6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<p>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</p>	<p>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</p>	<p>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</p>

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.

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.

6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

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.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Koniki Venkata Krishna Memorial Trust	4624	Endowment and Academic Prizes
View File		

6.4.3 – Total corpus fund generated

601320843

6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ISO	Yes	IQAC
Administrative	Yes	M/s MASTANAIAH AND Co	Yes	Governing Body

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

- The Parents are very supportive of the initiatives of the College and maintains contact with the College through the Principal's office as well as class mentors. However, the college doesn't have a registered parent-teacher association.
- Each department in the institution conducts Parent Teacher

meeting in a semester to obtain the feedback of their Wards to improve the quality of education. • Mentor meeting is conducted for the students by the individual faculty to ensure the improvement in academics and cocurricular activities. • Parents are cordially invited for Orientation Programme and Appreciation Ceremony of their wards.

6.5.3 – Development programmes for support staff (at least three)

A three days workshop has been conducted on Office Automation Tools. Supporting Staff is practiced to conduct/schedule classes/exams in Online mode during the Covid 19 pandemic Soft Skills Training Program is conducted A short term program on Stress Management is conducted for support staff.

6.5.4 – Post Accreditation initiative(s) (mention at least three)

The institution was accredited with B? Grade by the NAAC March 03, 2015 . The College strives hard to sustain and enhance the quality in all spheres for the past five years and resulted in a B Plus Plus Grade on 11.03.2020 during the second cycle of accreditation. After Accreditation, IQAC developed templates to streamline the academic and administrative processes and contributed to the fixing of benchmark norms in every aspect. To provide high-quality teaching and research, the institution has recruited faculty with doctoral qualifications from IITs, NITs and premier institutions. Promotion of research was reflected by the quality of publications and patents. The use of ICT (information and communication technologies) tools in education and training has become part and parcel of the Teaching learning process. Complete administration and teaching-learning process is automated with the software CAMU.

6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	Yes
d)NBA or any other quality audit	Yes

6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	Regular Meetings of IQAC	15/07/2019	15/07/2019	15/07/2019	15
2019	Regular Meetings of IQAC	04/10/2019	04/10/2019	04/10/2019	15
2019	Regular Meetings of IQAC	22/01/2020	22/01/2020	22/01/2020	15
2019	Autonomous Inspection	19/10/2019	19/10/2019	20/10/2019	250
2019	Alumni meet	28/12/2019	28/12/2019	28/12/2019	85
2020	ISO certification	28/01/2020	28/01/2020	28/01/2020	30
2020	NAAC Inspection	05/03/2020	05/03/2020	06/03/2020	250

2020	To participate in ARIIA	18/08/2020	18/08/2020	18/08/2020	15
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CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants	
			Female	Male
Pongal Festival	10/01/2020	10/01/2020	46	125
Power Walk-Safe guard of constitutional rights of women	14/02/2020	14/02/2020	75	25
International Women's Day	07/03/2020	07/03/2020	75	25
Stress Management	28/02/2020	28/02/2020	46	145

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
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. percentage of power requirement met by the renewable energy sources is 77.65

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	1
Provision for lift	Yes	1
Ramp/Rails	Yes	1
Braille Software/facilities	Yes	Nil
Rest Rooms	Yes	1
Scribes for examination	Yes	Nil
Special skill development for differently abled students	Yes	1

7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to	Number of initiatives	Date	Duration	Name of initiative	Issues addressed	Number of participating
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	address locational advantages and disadvantages	taken to engage with and contribute to local community					students and staff
2019	1	1	08/09/2019	1	Reducing the plastic usage	Maintaining Environmental balance	40
2019	1	1	13/12/2019	1	Career Guidance	motivating students	15
2019	1	1	08/11/2019	1	Career Guidance	motivating students	12
2020	1	1	05/02/2020	1	Medical camp at Bapatla Engineering College	medicine distribution	76
View File							

7.1.5 – Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)
Professional Ethics and Human Values	15/07/2019	As part of improving Human values in 2018-2019, the administration has initiated and introduced Professional P 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.

7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
Blood donation camp	11/11/2019	11/11/2019	5
Rally against Drugs and Tobacco	22/08/2019	22/08/2019	46
COVID-19 awareness	08/06/2020	08/06/2020	210
Reducing Plastic Wastage	18/09/2019	18/09/2019	42
Food kits for the needy	20/05/2020	20/05/2020	15

7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

1. 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. 2. Plantation: Students participate in campaigns like Plantation Drive and awareness against deforestation. The campus has green landscaping of plants and trees, which covers 40 of the area, having varieties of plants and trees which include Mango, Neem, Coconut, etc. The entire open area has been kept green through heavy foliage of grass, seasonal flowers, and trees and are maintained by the horticulture department of the institute. Pedestrian-friendly roads covering the breadth and width of the campus have been constructed and are timely maintained. 3. Water conservation: The campus is a zero water discharge campus, which means that no water is discharged outside the campus and all the water is treated and recycled for reuse for horticultural activities. Awareness towards minimizing the wastage of water is spread at regular intervals among the students. Soak pits are dug to dispose off the liquid waste generated in the college. The RO Water Plants are audited every year during the internal audit conducted by the institute. The college has an area of 33 acres and 09 blocks, gardens, plantations, playgrounds, lawns etc., and is situated in a more than average rainfall region. It is imperative that a proper rain harvesting system is installed on the campus.. A comprehensive plan for the rainwater harvesting system is being followed and implemented within the campus. Three types of rain harvesting systems are installed on the campus. They are Ferrocement tanks, Soak pits, and Paver blocks. 4. 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.

7.2 – Best Practices

7.2.1 – Describe at least two institutional best practices

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 "reevaluation" 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 reevaluation 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 reevaluation 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 "reevaluation". 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 reevaluation?". Moreover, the reevaluation system exposed many unethical practices in the past as evident from news. A vigilant reevaluation 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 reevaluation and concluded that the practice of reevaluation 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 ex-officio 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.

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Response: The College has taken the most important and distinctive activity to build the Centers of Excellence (CoE) to fulfill the vision statement of the College. "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" It has established a Research Park with three Research Centers: Bosch Rexroth Center of Competence in Automation Technologies The center is first of its kind in Andhra Pradesh and is the hallmark in automation technologies worth 60 million with Pneumatics, Hydraulics, and PLC, Sensorics, modular Mechatronics System (mMS), CNC controller, Motion Logic Drives and Automation Studio modules. Students of all branches master the automation technologies which are otherwise not available in any undergraduate curriculum and get industry-ready. Siemens Center of Excellence The center is an epitome of international standard software for design, modeling, analysis, manufacturing and project management. The students get trained and work on NX 8, Solid Edge, and FEMAP with NASTRAN, CAM Express, Technomatics-RobCAD, Team Centre and ProgeCAD. Qualified students will be listed in Siemens' web site used for international placement. Robotic Technology Centre The Centre has imported a robot from one of the leading manufacturers of robots in the world 'KUKA, Germany' which costs around Rs. 30,00,000/- (Thirty Lakhs) and is the first private engineering college in Andhra Pradesh state to possess a KUKA ROBOT (KR5) which is housed in Robotic Technology Centre in the research park building. Five of the faculty members have undergone training at KUKA Robot Group, Pune for a period of one week and got trained in various applications of using robot. Collaborative Research with Industries: An Industry-Institution-Interaction Cell (I-I-I-C) is established in the College to look at purposeful interaction between Industry and institution to promote collaborative research with industries. The prime objectives of IIIC is facilitating the joint research work, consultancy for faculty and students, conducting industrial exhibitions within the institution, facilitating the professionals from Industry to work as visiting faculty, and short or long period deployment of faculty to Industry for gaining industrial experience and/or work on projects in Industry, It has so far written MOUs with eleven industries and two more are in pipeline. College is collaborating with them for research projects which include development of an automobile accessory design, an IOT design and fabrication, software development for new applications, etc. Our students and teachers take up the project from May this year to May next year which may involve a six to eight week internship, first semester preparation work and the second semester full time work either at the industry or at the College. The faculty in-charge of the project takes the responsibility for deliverables. The Company engineers/executives continuously involve in guiding the student either physically or virtually along with the faculty In-charge.

Provide the weblink of the institution

<http://www.becbapatla.ac.in/pages/institutional-distinctiveness>

8.Future Plans of Actions for Next Academic Year

For the Academic Year 2020-2021, Bapatla Engineering College has the following action plan: 1. Enhance the admissions: For the last two years, the college has taken many quality initiatives which have started giving results. It wishes to see that this reaches the future students through some outreach mechanism to

attract good number of students with better ranks with in the state and from other states. 2. Improve the learning by doing activities: The college has already introduced miniprojects for the students to gain handson experiences by working on them. It is attempting to redesign the laboratory experiments to give the students more skillbased training in the laboratories. The college is also in touch with some manufacturing industries to redesign the laboratory experiments. 3. Improve the internship and industry based projects: The college has made it mandatory the internships to all students and making attempts to get them work on industry projects. 4. Research Activities: The research publications to faculty ratio should reach 1:1 by the end of next academic year. 5. Community Engagement: College wishes is adopting at least three villages for community engagement and carry out comprehensive survey. It wishes to prepare a perspective Plan for development for each village and help them in implementation. It is also taking up to bring environment-friendly awareness in the Bapatla town and its surroundings. It wishes to increase its activities in educating the school children for cleanliness, etc. through the NSS volunteers of the college. 6. Placements and Higher studies improvement The college will make necessary arrangements to improve placement/ Higher Education quality. 7. Improve the faculty strength to satisfy the faculty cadre ratio in all Departments and the number of faculty members with Ph. D. to 80.