



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

**BASAVESHWAR ENGINEERING COLLEGE,
BAGALKOTE**

**BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE S. NIJALINGAPPA
VIDYANAGAR BAGALKOTE 587 102**

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Since 1963, Basaveshwar Engineering College (BEC), Bagalkot, has undergone an unswerving growth as it started with only three Engineering programs viz. Civil, Mechanical and Electrical Engineering. Today, college offers 9 undergraduate and 9 post graduate programmes in Engineering with 10 departments recognized as R&D centers by VTU, Belagavi. It is a matter of pride for BEC to be placed in the rank band of 250-300 at all India level for the year 2021-2022 by the NIRF.

The growth of institution can be categorized into three phases. During phase-I (1963 to 1983) it was the consolidation and strengthening of basic infrastructure. In phase-II (1983 to 2003,) the emphasis was on expansion of UG and PG programmes along with upgradation of faculty qualifications. The college started 7 new UG and 4 PG programmes, thus enhancing the student's strength from 300 to 2300 and faculty strength from 20 to 140. In phase- III (2004 to till date), as a result of selection under Technical Education Quality Improvement Program, TEQIP-I (2004 to 2009) of MoE, New Delhi was the onset of a new era in the history of College. The TEQIP-I grant of Rs.14.16 crores was effectively utilized for scaling up UG programs and in 2007 the College was granted academic autonomy by VTU, Belagavi and UGC, New Delhi. The performance of College in TEQIP-I led to the selection under TEQIP-II on merit basis. A grant of Rs. 12.50 Crores was sanctioned for scaling up PG programs and R&D activities from 2011 to 2017. Based on its performance during TEQIP-II the College was recognized as one of the best performing colleges by National Project Implementation Unit (NPIU), New Delhi and was granted an additional fund of Rs. 5.00 Crores. In 2017, the College was selected under TEQIP-III and sanctioned a grant of Rs. 7.00 crores. The phenomenal growth during the three phases abetted the college in i) securing NIRF ranking, ii) accreditation by NBA, New Delhi, iii) accreditation by NAAC in 2017 with "A" grade iv) accreditation by QSI-GUAGE.

Vision

To be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development

Mission

- To pursue excellence through student centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change
- To carry out innovative cutting edge research and transfer technology for industrial and societal needs
- To imbibe moral and ethical values and develop compassionate, humane professionals

Values :

Work is Worship	: The core essence of every activity of the college is inspired by the life and say Basaveshwar the visionary of 12th century.
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Student Centric	: Academic and Administrative processes are devised and practiced to be student centric
Innovation	: Encourage innovation and research for betterment of society
Learning Centric	: To inculcate lifelong learning through teaching-learning and research activities
Empathetical Campus Culture	: Cordial and harmonious living on campus through empathy
Indian Ethos	: Nurture modern outlook imbued with Indian ethos in BEC community

Quality Policy :

Teaching-Learning, research, administrative processes are quality driven and embellished with continuous improvements (Kaizen) to meet the global standards by rigorous adherence to set procedures and exhaustive quality audits.

This will be achieved through:

- Continuous up-gradation of qualification/skills of faculty/staff and infrastructure
- Teaching-learning process with enhanced quality management system – internal and external academic audit, stake holder's feedback system to assist curriculum design and enhancing the infrastructure
- Providing multiple study options through perfect blend of academic flexibility and emphasis on research

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- All class rooms/seminar halls are ICT enabled with good ambiance catering to the needs of conventional (chalk and talk), digital and hybrid mode of teaching-learning process.
- All the departments are equipped with State-of-art laboratories to cater to the demands of curricular and co-curricular requirements
- Adequate working space: Faculty cabins with PCs, staff rooms, office, departmental libraries as per the norms of statutory bodies and affiliating university
- Good library facility: Radio Frequency Identification (RFID), Common reading room, access to e-books and online journals throughout the campus
- Research facilities with state-of-art sophisticated instruments/software created with the assistance from reputed funding agencies in all the departments
- Qualified and experienced faculty with 48 % having Ph.D. degree from reputed institutes. Average professional experience of faculty members is 18 years
- As a result of sustained efforts in achieving academic excellence, the college has been ranked in the band of 150-300 by National Institution Ranking Framework (NIRF).

- The College has accredited by NAAC (20017 -2022)
- Six of the UG programs have been accredited by National Board of Accreditation (NBA) and expert committee is awaited for one PG Program five PG programs. NIRF, QS I GUAGE
- Active and clearly defined bodies for institutional functioning - Board of Governors (BOG), Academic Council (AC), Departmental Board of Studies (BOS) and Board of Examination (BOE), Finance Committee, Grievances Redressal Committee, Equivalence Committee etc., as per UGC guidelines.
- Existence of well-established STEP & CED: Science and Technology Entrepreneurship Park established in 1999, received National award for best STEP in 2006-07. Centre for Entrepreneurship Development Cell has been established in 2006
- Student Chapters of Professional bodies: IEEE (Est.1994), IEEE-WIE (Est.2010), PES chapter (Est.2016), ISTE provide platform for academic and professional networking
- Institute Interactions: Collaborative research activities and joint publications with Budapest university, Hungary, IIT Bombay, IIT Madras, NITK Surathkal, NIT Calicut, NIT Rourkela, PSG CET Coimbatore, NAL, Saginaw Valley State University, USA, Michigan Technological University MI, USA
- Industry Interactions: Institute has 25 functional MoUs with industries of repute.

Institutional Weakness

- Need to enhance inter-institute, inter-department research activities and collaborative research with industry/R&D Labs
- Need for knowledge up-gradation by faculty in some specialized areas of their disciplines
- Relatively low ranked students seeking admission in some disciplines
- Inbreeding of faculty
- IPR Competencies are inadequate in the present day context
- Documentation, systems and operational procedures are not of high standards
- Relatively less number of institutional memberships to professional bodies

Institutional Opportunity

- Paradigm shift in education system from imparting knowledge to enhancing learning experience with emphasis on multi-disciplinary skill development
- Information Technology revolution and massive demand for engineering professionals
- Emergence of interdisciplinary research areas and scope for commercialization and patenting of research outcomes
- Scope for consultancy: Demand for technical expertise to offer advanced technological solutions in solving community problems especially energy, ecology and environmental issues
- Globalization: Opportunity to attract students from different states, countries and cultures

Requirement for value added training programmes for unemployed rural youth of the region.

Institutional Challenge

- Mushrooming of engineering colleges and possible entry of foreign institutions/universities
- Students with low rank input

- Declining demand in certain branches of engineering

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Basaveshwar Engineering College (BEC) is one of the prestigious institutions in North Karnataka and received autonomous status in 2007. The institute offers 9 undergraduate (UG), 9 post graduate (PG) and 10 departments recognized as research centers (PhD).

BEC has implemented various activities throughout the year for overall growth of the students as per predefined calendar of events. Each department has board of Studies (BoS) to frame and oversee the scheme and syllabus, which may be revised every year, based on the recent trends in various industries. In the last five years, syllabus revision has been carried out in 43.75% of the total programmes, 15.92% of the courses have focus towards employability, entrepreneurship, and skill development and 6.41% new courses have been introduced. Choice Based Credit System (CBCS) has been implemented for all the programs (100%) offered at the institute. 3 to 4 value added courses are offered per year with an average student enrollment of 21.53%. 52.81% of students have undertaken internships/projects.

A well defined feedback mechanism involving all the stake holders exists for taking periodic inputs with respect to curricular aspects and revision of the curriculum in response to the changing needs of the industries and aspirations of the students.

Apart from regular academic courses, BEC offers value added/life skill courses every year for the overall development of students. IDEA laboratory caters to the learning needs of students and provide a conducive environment to innovative students for providing solution to unique problems catering to industrial and societal needs. To impart hands on learning experience, students are encouraged to undertake the field projects, internships, course projects, etc.

Teaching-learning and Evaluation

At BEC, the annual intake of students is 750. Average students' enrolment is 86.61% and about 73.38% of seats are filled against various reserved category in the last five years.

To monitor curricular and co-curricular activities of the students, a mentor is allotted to a group of every 10-15 students. The mentors address and counsel the students with respect to academics, personal and other problems faced by students, if any. Full time staff to student ratio is 1:17. Number of full time faculty is 106.7% against sanctioned posts. 41.18% of faculty members are qualified with Ph.D. degree with an average teaching experience of 18.16 years.

At BEC, the annual academic calendar is strictly followed. Semester End Examinations (SEE) are conducted on time followed by timely evaluation of the answer scripts and declaration of the results. The conduction of

examinations or announcement of results is done on time. On an average, 9 days are taken for announcement of results after completion of SEE. About 13.92% grievances/complaints are reported with respect to evaluation.

BEC persistently strives for the overall development of students. Various teaching-learning processes are implemented by the faculty members to cater to the needs of diversified interests of students. The performance of students in academics is one of the measures to identify the growth of students. At BEC, 88.62% of students complete BE degree in a stipulated time period of 4 years.

Research, Innovations and Extension

Research advisory committee is in place to promote the research culture in the institute. Dean (Research and Development) along with the members of the research advisory committee frame the policies and guidelines to promote research quality and publications in referred journals and conference proceedings. About 48.02% of the faculty members have Ph.D. degree and 51.98% have M. Tech. degrees. 9.18% faculty have research projects sponsored by various agencies. Also, 29.9% of faculty have been recognized as research guides by the affiliating university and other reputed universities. The institute has received a total research grant of Rs. 704.67 lakhs in last 5 years. About 58.9% of departments have sponsored research projects in the last year. 222 workshops/seminars are conducted on research methodology, IPR, entrepreneurship and skill development. During last 5 years, 19 research scholars have registered for Ph. D. under 15 recognized research guides with an average enrollment of 1.27. 220 Journal publications and 366 books/chapters in edited volumes/conference proceedings have been published with average publication of 1.13 and 1.89 per teacher respectively in the last five years. Average number of citations per publication is 2.95. The college has h-index of 14 and 8 based on Scopus and Web of Science respectively. The revenue generated from consultancy/corporate training, in the last five years is 62.67 lakhs. 119 awards and recognitions have been received by the institute during the last five years. Number of extension and outreach activities conducted by the college in the last five years is 287 with an average student participation of 48.26%. The number of collaborative activities per year (average across five years) for research, faculty and student exchange and internship is 335.2. The college has 25 functional MoUs with academic institutions and industries.

BEC received a financial grant of Rs. 1.10 crores for setting up of AICTE-IDEA laboratory. The students can convert his/her idea into prototype model or into a product through this IDEA laboratory. BEC also supports multi-disciplinary research/projects among faculty and students. 28 patents have been filed and 4 have been granted in the last 5 years.

Infrastructure and Learning Resources

The institute was part of all three phases of Technical Education Quality Improvement Programme (TEQIP), a World Bank assisted project under the Ministry of Education (MoE), and with the management support the infrastructure available in the institute is on par with best of the higher learning institutions. The Infrastructure is as per AICTE and affiliating university norms. The college spends 57.60 % of its total expenditure (excluding salary) on infrastructure augmentation. Classrooms and laboratories are effectively utilized by time sharing: 8:00 am to 12:15 pm and 1:15 pm to 5:30 pm. All the departments are housed in separate buildings with scope for future expansion. For specially abled people, the amenities like ramps, wash rooms and parking spaces are provided separately. ICT enabled facilities are made available in all of classrooms and seminar halls. 5 class rooms are equipped with lecture capture facility for live recording and streaming of classes. To facilitate online/interactive teaching and learning 65” smart digital boards, 13.5” digital pads and Virtue Live

facility for video conferencing and recording of lectures are made available to faculty members.

The college library has text books, e-books, journals /e-journals as per the requirements of statutory and regulatory authorities i.e. AICTE and affiliating university. The average budget of college for library is 51.28 Lakhs. Average percentage of usage of library facility by teachers and students is 8.08. On campus there are 950 computers with 1 Gbps internet connectivity with student : computer ratio of 3:1. The institution has made provision for e-content development by the faculty members through media/audiovisual centre, Lecture Capturing System (LCS) along with mixing equipment and software for editing.

Student Support and Progression

The scholarship facility is extended to economically weaker section of students; through various state and central government schemes. 65.31% of total students get the benefit of scholarship every year. 1.34% students get the scholarship benefits from non-Governmental agencies. To enhance the student skill sets the other programmes related to soft skills, effective communication, life skills and technology trends are organized throughout the year. More than 68.33% of the students have taken benefit of these training programs in the last five years.

Student's centric approach has been incorporated in the college. All the committees such as anti-ragging, grievance redressal and internal complaint committee are in place to support and cater to the needs of students. Anti-ragging committee is comprised of faculty members and senior students as defined by statutory bodies. The committee members visit prominent places on day today basis to ensure that the first year students stay comfortably on campus, especially at the beginning of the academic year. Internal complaint committee handles the issues related to sexual harassment. It is a matter of pride for the institution that no cases of ragging and sexual harassment have been reported so far. Especially the girl students feel secured on the campus and in the hostels. Other students' problems are addressed by the grievance redressal committee. Students can send their grievances through online portal also. Each faculty is assigned a group of 10-15 students to guide and mentor students with respect to academics and also other associated activities. An active and effective training and placement cell exists. The cell assists students to get industrial internships, career guidance and campus placement. On an average 35.11% of the total students get placed through campus drives every year. 3.3% students opt for higher studies. 11.94% of students qualify in state/national level competitive examinations. Gymkhana club caters to the needs of sports and cultural activities of students. The students are encouraged to participate in zonal and inter-zonal sports competition under the guidance of Physical Director and also in cultural events. The college Men's and Woman's team have won trophies both at Zonal and Inter-zonal level in various sports. The students also participate in cultural events and have won medals at state level. During last five years, 71 students have won awards/prizes/medals in sports and cultural activities. The college hosts university level sports activities. In the last 5 years, the college has conducted 7 sports activities per year.

Governance, Leadership and Management

The following committees have been constituted and are in force to ensure proper management of academic, financial and general administrative affairs.

- Board of Governors (BoG)
- Academic Council (AC)
- Board of Studies (BoS)

- Board of Appointments (BoA)
- Library Committee
- Anti-Ragging Committee
- Internal Complaints Committee
- Grievance Redressal Committee
- Institutional Development - office Bearers
- Administration and Financial aspects of the college are looked after by AAO, registrar, accounts officer and office superintendents.

E-governance has been implemented in all areas of administration and governance. 29.69% of teachers have obtained financial support for attending conferences/workshops during last five years for upgrading their skills. During last five years, an average of 4 programmes per year related to professional development and administrative training have been organized by the institution. An average of 30.91% of teachers have attended faculty development programmes (FDP) during last five years. The college has received a grant of Rs. 15.25 Lakhs from non Governmental bodies/individuals/ philanthropists.

Principal and finance officer monitor the utilization of financial resources of the college. Internal and external audits are being conducted by qualified Chartered Accountants. A project evaluation committee is constituted with Principal as the Chairman of the committee, HOD, Principal Investigator and finance officer as members at college level to monitor the effective utilization of financial grants from external agencies.

Internal Quality Assurance Cell (IQAC) has been established and is fully functional in the college. The main objective is to monitor the quality of teaching learning processes, skill development of students and continuous up-gradation of knowledge and skill of faculty in their respective domain areas. The academic and administrative audits have been carried out to review and improve upon the standards at all fronts involving experts from higher learning institute. The college is participating in NIRF ranking process right from beginning and the college is placed in the rank band of 151-200 during 2017 and 2019 and has been placed in the rank band of 201-300 during last 3 years consistently. The college has been awarded with Gold rating by an International agency QS I-GAUGE and also has received E-LEAD certification for academic excellence in digitization. ATAL ranking of institutions for innovation achievement (ARIIA, MoE) has placed the college in Performer band. College has been placed in Gold category in CII survey conducted by AICTE during 2017-19.

Institutional Values and Best Practices

The institute has set its mission and vision in tune with its core values and competencies, viz., imparting quality technical education to develop engineers with moral, ethical and professional values.

The value systems practiced in the institution are:

- **Student Centric Teaching Learning Processes**
- **Women empowerment and respecting women folk**
- **Empathetical Campus Culture**
- **Nurturing Indian Ethos**

Some of the Best Practices on the campus are:

1. Title of the Practice: Governance Reforms

The objective is to bring in transparency in governance by involving students who are important stake holders in all important committees viz. Board of Governors (BoG), Academic Council (AC), Board of studies (BoS) etc.

Two toppers from UG and two toppers from PG programmes are selected as invited members of Board of Governors (BoG) and two more second toppers from UG and PG are selected as invited members of Academic Council (AC). Of these two toppers, one boy and one girl have been chosen to maintain gender equity. From each department, one boy and one girl (toppers) were invited members of the respective Board of Studies (BoS). Apart from this student representatives are included in other committees: anti ragging committee, Internal Complaint Committee, grievance redressal committee etc.

2. Title of the Practice: Industry Academia Conclave (IAC)

The primary objective of organizing ICAs is to bridge the gap between industries and Institute by organizing more collaborative activities beneficial to student community. The institute organized seven industry institute conclaves at different locations in India i.e., Bangalore, Pune, Hyderabad, Panaji, Mumbai and Bagalkot.

During the conclave the strengths and accomplishments of the college was presented and also the industry personals shared the domain areas in which they were working.

The highlights of the conclave are:

- The possible ways of participation of Industry personnel in academics of the institute
- The possibility of establishment of skill laboratories
- The number of internships, projects and placement opportunities to students
- Based on the college strengths the facilities that can be extended to the industries to set up incubation centers
- The modalities of establishing MoUs with reputed industries

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	BASAVESHWAR ENGINEERING COLLEGE, BAGALKOTE
Address	Basaveshwar Engineering College, Bagalkote S. Nijalingappa Vidyanagar Bagalkote 587 102
City	Bagalkot
State	Karnataka
Pin	587102
Website	www.becbgk.edu

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	S. S. Injaganeri	08354-234060	9481228825	08354-23420 4	becprincipal@yaho o.com
IQAC / CIQA coordinator	M. M. Ganga nallimath	08354-809596363	9448693977	08354-23420 4	mmgmath@gmail. com

Status of the Institution	
Institution Status	Grant-in-aid and Self Financing

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

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
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Date of Establishment, Prior to the Grant of 'Autonomy'	01-08-1963
Date of grant of 'Autonomy' to the College by UGC	12-10-2009

University to which the college is affiliated

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	23-04-1992	View Document
12B of UGC	23-04-1992	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	12-07-2022	12	

Recognitions

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	TEQIP NPIU MoE New Delhi
Date of recognition	24-10-2021

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Basaveshwar Engineering College, Bagalkote S. Nijalingappa Vidyanagar Bagalkote 587 102	Urban	93.81	60551

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	PUC XII	English	120	91
UG	BE,Mechanical Engineering	48	PUC XII	English	120	44
UG	BE,Electrical And Electronics Engineering	48	PUC XII	English	60	54
UG	BE,Computer Science And Engineering	48	PUC XII	English	120	119
UG	BE,Industrial Production Engineering	48	PUC XII	English	30	2
UG	BE,Electronics And Communication Engineering	48	PUC XII	English	120	119
UG	BE,Information Science And Engineering	48	PUC XII	English	120	118
UG	BE,Biotechn	48	PUC XII	English	30	16

	ology					
UG	BE,Artificial Intelligence And Machine Learning	48	PUC XII	English	60	48
PG	Mtech,Civil Engineering	24	B E	English	18	0
PG	Mtech,Civil Engineering	24	B E	English	18	0
PG	Mtech,Civil Engineering	24	B E	English	18	0
PG	Mtech,Mechanical Engineering	24	B E	English	18	0
PG	Mtech,Computer Science And Engineering	24	B E	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	B E	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	B E	English	24	0
PG	Mtech,Biotechnology	24	B E	English	18	0
PG	MBA,Master Of Business Administration	24	BSc BCom BA BE BBA	English	60	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	36	M Tech	English	21	0
Doctoral (Ph.D)	PhD or DPhil,Mechanical	36	M Tech	English	36	0

	Engineering					
Doctoral (Ph.D)	PhD or DPhil, Electrical And Electronics Engineering	36	M Tech	English	12	0
Doctoral (Ph.D)	PhD or DPhil, Computer Science And Engineering	36	M Tech	English	18	0
Doctoral (Ph.D)	PhD or DPhil, Industrial Production Engineering	36	M Tech	English	12	0
Doctoral (Ph.D)	PhD or DPhil, Electronics And Communication Engineering	36	M Tech	English	30	0
Doctoral (Ph.D)	PhD or DPhil, Information Science And Engineering	36	M Tech	English	9	0
Doctoral (Ph.D)	PhD or DPhil, Biotechnology	36	M Tech	English	9	0
Doctoral (Ph.D)	PhD or DPhil, Master Of Business Administration	36	MBA	English	6	0
Doctoral (Ph.D)	PhD or DPhil, Physics	36	MSc M Tech	English	6	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	30				48				110			
Recruited	18	6	0	24	30	15	0	45	72	36	0	108
Yet to Recruit	6				3				2			
Sanctioned by the Management/Society or Other Authorized Bodies	0				1				1			
Recruited	0	0	0	0	1	0	0	1	0	1	0	1
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				95
Recruited	70	18	0	88
Yet to Recruit				7
Sanctioned by the Management/Society or Other Authorized Bodies				115
Recruited	89	21	0	110
Yet to Recruit				5

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				36
Recruited	32	2	0	34
Yet to Recruit				2
Sanctioned by the Management/Society or Other Authorized Bodies				45
Recruited	42	3	0	45
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	18	6	0	21	8	0	24	8	0	85
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	9	7	0	48	28	0	92
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	1	0	0	0	1	0	2
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	0	0	0	0

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	1567	19	0	0	1586
	Female	1200	2	0	0	1202
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	173	192	207	216
	Female	156	155	136	147
	Others	0	0	0	0
ST	Male	49	37	41	44
	Female	28	33	34	28
	Others	0	0	0	0
OBC	Male	1212	1220	1178	1229
	Female	859	869	853	904
	Others	0	0	0	0
General	Male	355	362	376	387
	Female	247	270	331	363
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		3079	3138	3156	3318

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Artificial Intelligence And Machine Learning	View Document
Biotechnology	View Document
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Industrial Production Engineering	View Document
Information Science And Engineering	View Document
Master Of Business Administration	View Document
Mechanical Engineering	View Document
Physics	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	The college has organized/conducted seminars and workshops to create awareness on NEP amongst faculty and students. Faculty members have been deputed to workshops and seminars in multidisciplinary subjects. The discussions and deliberations on the design and development of the curriculum have been carried out, accordingly, the scheme has been prepared in line with the guidelines from AICTE and affiliating University. The requisite laboratories required for multi-disciplinary/inter-disciplinary projects/research have been set up on the campus. The NEP has been implemented from 2021-22 itself.
2. Academic bank of credits (ABC):	Controller of Examinations and senior faculty have attended the meetings (online) organized by AICTE. The Academic Bank of Credit (ABC) will digitally store the academic credits earned by the students on the platform developed by National e-Governance division (NeGD) of the Ministry of Electronics and Information Technology (MeitY) under Digi Loker Framework. The college has registered on National Academic Depository (NAD) portal and the data entry of credits earned by the students is in progress.

3. Skill development:	In order to enhance the skill the college has set up the multi-disciplinary skill laboratories like Bosch Rexroth, Biofuel technology and IC engine testing, additive manufacturing, CNC programming, SCADA for distribution and automation, Electronic circuit simulation, PCB design and prototyping, Neurocetics and food testing. In addition to these the college has established IDEA laboratory in association with AICTE and is equipped with all the relevant prototyping tools and machines. Professional skill development programmes are being conducted through this laboratory. Students are encouraged to carry out innovative interdisciplinary projects.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Faculty are involved in translation of technical books in regional languages (Kannada). The college is planning to start one programme in regional language to facilitate the students seeking admission from rural background. Based on the success of this pilot programme the other programmes will be planned.
5. Focus on Outcome based education (OBE):	Workshops on OBE have been conducted with emphasis on the design of curriculum and evaluation based on Bloom's taxonomy. Faculty members are trained to properly articulate the Course Outcomes in line with Programme Outcomes. To assess the attainment of COs and POs, a centralized automated procedure is developed. The college has implemented OBE scheme since 2007. The scheme and curriculum has been designed as per OBE requirements. For proper implementation of OBE framework, a committee was set up and draft guidelines have been prepared in conformity with the AICTE Examination Reform Policy. To normalize the evaluation of non quantifiable courses like seminars, projects, term papers, internships etc., the rubrics have been proposed in the guidelines.
6. Distance education/online education:	NPTEL Local chapter has been established in the college in 2019 to promote the lifelong learning through online courses. During the last three years, 92 faculty members and 576 students have successfully completed the online courses and were given certificates. 50 students/faculty have topped in their respective courses. The college faculty and students have received 06 Elite+Gold, 165 Elite+silver, 352 Elite, and 145 successfully completed certificates during the last three years. Provision has been made to engage 10% of the

	<p>curriculum through online mode by industry personal and alumni. As a part of curriculum, student has a flexibility to learn courses through online mode of his /her choice as approved by the BoS. If a student earns additional 18 credits through online courses (MOOCs) is entitled to earn Honors degree. 20 classrooms are equipped with 65" digital boards and all the classrooms are equipped with audio-visual facilities and also internet. Five classrooms are enabled with lecture capture facilities to create e-content and are made available to students.</p>
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Institutional Initiatives for Electoral Literacy

<p>1. Whether Electoral Literacy Club (ELC) has been set up in the College?</p>	<p>Yes.</p>
<p>2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?</p>	<p>Yes. ELCs are functional. ELCs are representatives in character.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>Awareness programmes have been conducted regularly by members of ELCs to educate the students about the importance of voting for electing Government which in turn affects the career of the students. As responsible citizen, students are administered the oath to exercise their voting power in order to elect their representatives.</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>Awareness drives have been conducted regarding democracy.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>The college has conducted awareness programmes to students residing in hostels (boys and girls) and emphasized the significance of exercising their rights and casting their votes for the development of the nation. Efforts have been made to register the eligible students on the voter list.</p>

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
19	20	17	20	20
File Description		Document		
Institutional data in prescribed format		View Document		

1.2

Number of departments offering academic programmes

Response: 10

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3079	3138	3156	3318	3359
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
779	809	853	882	852
File Description		Document		
Institutional data in prescribed format		View Document		

2.3**Number of students appeared in the examination conducted by the Institution, year-wise during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
3039	3097	3124	3282	3315
File Description		Document		
Institutional data in prescribed format		View Document		

2.4**Number of revaluation applications year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
524	350	308	489	540

3 Teachers**3.1****Number of courses in all programs year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
832	812	833	764	750
File Description		Document		
Institutional data in prescribed format		View Document		

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

2021-22	2020-21	2019-20	2018-19	2017-18
188	181	181	192	192
File Description		Document		
Institutional data in prescribed format		View Document		

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
188	181	181	192	192
File Description		Document		
Institutional data in prescribed format		View Document		

4 Institution**4.1****Number of eligible applications received for admissions to all the programs year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
883	807	869	951	1003
File Description		Document		
Institutional data in prescribed format		View Document		

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

2021-22	2020-21	2019-20	2018-19	2017-18
383	385	370	420	420
File Description		Document		
Institutional data in prescribed format		View Document		

4.3**Total number of classrooms and seminar halls****Response: 77****4.4****Total number of computers in the campus for academic purpose****Response: 950**

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

2021-22	2020-21	2019-20	2018-19	2017-18
912.24	1348.99	700.70	878.17	976.65

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

Key Factors for Curriculum Design

The Curriculum is designed to ensure that, the students acquire the requisite domain knowledge, skills, moral and ethical values. In order to meet the technological developments at regional, national and international level, the curriculum of various programs offered by the institute is framed taking into consideration (i) AICTE Model curriculum, (ii) Curricular structure of affiliating university (VTU), (iii) Program Specific Criteria of professional bodies, (iv) Feedback from industry experts and alumni, (v) Syllabus of Indian/International higher learning institutions (vi) Syllabus of various competitive exams like GATE, IES etc, and (vii) Recent technological developments in their respective domain.

Addressing POs through the Curriculum

The first step towards ensuring quality education is the appropriate design of the curriculum and in particular, the curricular structure, core courses, number of electives along with complete details of the course title and course contents. The next step is the process of defining the Course Outcomes (COs) for every course and their mapping with the Program Outcomes (POs) and also Program Specific Outcomes (PSOs) defined by respective departments. It is ensured that every PO is addressed by at least two courses in the CO-PO mapping matrix. Thus, an effective curriculum design involves the Curriculum, the courses, COs of various courses, assessment tools to measure the COs, and strength of the CO-PO and CO-PSO mapping. An effective implementation of the Outcome Based Education (OBE) ensures that, the graduating engineers have attributes of all the 12 POs to compete on a global platform. Specific to every program, the Program Educational Objectives (PEOs) are measured through the performance of the alumni after 3-4 years of graduation.

Process for Curriculum Design

Based on the criteria mentioned above and discussions with stakeholders the first draft of the curriculum is prepared. The Board of Studies (BoS) is constituted as per the prevailing norms with representation from experts from higher learning institutions, industries, alumni and students (invited members). The curriculum is placed for discussion and approval by the Board of Studies (BOS) and based on suggestions made by members of BOS the curriculum is revised and submitted to the Academic Council (AC) for review and approval. The curriculum approved by the Academic Council is incorporated. Thus, the academic autonomy provided to the Institution is fully exercised for designing the curriculum based on the changing needs of the society.

File Description	Document
Link for Additional Information	View Document

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 35.42

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 96

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 34

File Description	Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 15.92

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
120	137	110	158	108

File Description	Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility

1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.

Response: 6.41	
1.2.1.1 How many new courses are introduced within the last five years	
Response: 256	
1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.	
Response: 3991	
File Description	Document
Institutional data in prescribed format	View Document
Link for Additional Information	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).	
Response: 100	
1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.	
Response: 19	
File Description	Document
Institutional data in prescribed format	View Document
Link for Additional Information	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates crosscutting issues relevant to Professional Ethics ,Gender, Human Values ,Environment and Sustainability into the Curriculum				
Response:				
To integrate the cross-cutting issues, relevant to gender, environment & sustainability, human values & professional ethics, the institution has included various subjects as a part of curriculum that enhance the professional competencies and sensitize students towards social, ethical and human values. These issues are incorporated even in extracurricular activities like Student Induction Program (SIP), Student Development Program (SDP) and Awareness programs organized through National Social Service (NSS) and all department associations.				
Cross-cutting issues addressed by the different subjects in the curriculum				
Program	Title of the Course	Nature of the	Relevant	Description

		Course	to Issue	
B.E.	Constitution of India	Mandatory	Gender discrimination	Students are exposed to the various provisions of constitution which ensures various directive principles of state policy to prevent gender discrimination. The provisions meant for women empowerment. The course also brings awareness to students about the use of legal provisions for developing solutions to such discrimination issues.
	Constitution of India and Professional Ethics	Credit	Professional Ethics	Along with the awareness about the provisions, students are also introduced to the concepts of professional ethics such as responsibility, accountability, discipline in engineering profession.
	Universal Human Values-2	Mandatory	Human Values/ Professional Ethics	Course emphasizes on understanding the relationship between Human Beings - Harmonious relationship with Family, Society, Nature and Environment. Implications of the above understanding of Harmony and Ethics.
B.E.	Environmental Studies	Mandatory/ Credit	Environmental Awareness	The Curriculum is designed to build awareness on the current environmental problems and possible solutions.
	Soft Skills	Credit	Employability skills	The aim is to develop and enhance communication skills, a deep understanding towards solving problems, to handle quantitative data analysis and interpersonal & leadership skills.
	Management and Entrepreneurship	Credit	Professional Ethics	To make the students familiar with various aspects of industrial and organizational psychology such as attitude and behavior of employees and employers, industrial relationships at work.

Other activities addressing the cutting-edge issues

1. Gender Sensitization:

- The college has Internal Complaint Committee to provide counseling to students, promote gender equity among students and also deal with related issues of safety and security of girl students, ladies staff and faculty.
- The college campus is secured with CCTV surveillance cameras along with security personnel
- Encouraging both male and female students to participate in co-curricular and extra-curricular activities both individual and team events.
- Every year college celebrates International Women's Day
- Self-defense training to girl students
- College has conducted many programs like SDP, FDP, Technical Talk, etc. under Equity Assurance Plan (EAP)

2. Environmental Awareness:

- The NSS team has organised several environmental and health care activities like Swatch Bharat Abhiyan, World Water Day, Plantation & watering of plants on the Environmental day
- World Environment day is celebrated every year covering activities to address the issues related to environment, air and water pollution
- The college has Rain water harvesting system and solar energy park (green energy initiative)
- Established air quality monitoring system in association with Pollution Control Board, Govt. of Karnataka

3. Professional Ethics:

- IEEE conducts leadership training activities regularly
- Placement Cell conducts training program to build profession ethics
- Talks by experts from industries and higher learning institutions

File Description	Document
Link for Additional Information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.**Response:** 17**1.3.2.1 How many new value-added courses are added within the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
03	08	02	02	02

File Description	Document
List of value added courses (Data Template)	View Document
Link for Additional Information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.**Response:** 21.58**1.3.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
627	991	577	647	610

File Description	Document
List of students enrolled	View Document
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 52.81

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 1626

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Link for Additional Information	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: B. Any 3 of the above

File Description	Document
URL for stakeholder feedback report	View Document

1.4.2 The feedback system of the Institution comprises of the following :

Response: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document
URL for stakeholder feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 78.48

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

2021-22	2020-21	2019-20	2018-19	2017-18
742	712	727	777	820

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
978	984	888	984	984

File Description

Document

Institutional data in prescribed format (Data Template)

[View Document](#)

Link for Additional Information

[View Document](#)

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

Response: 71.96

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

2021-22	2020-21	2019-20	2018-19	2017-18
270	237	270	324	326

File Description

Document

Institutional data in prescribed format

[View Document](#)

Link for Additional Information

[View Document](#)

2.2 Catering to Student Diversity

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

Response:

The institution is practicing Outcome-Based Education (OBE) since 2007. As a part of OBE, the institute emphasizes on learning levels and learning outcomes of the students. Learning, being subjective in nature, it has to be assessed through performance i.e., what students can *do* with the learning. Assessing students' performance can involve assessments that are formal or informal, high or low-stakes, anonymous or public, individual or collective. Course outcomes are the narrower statements that describe what students are expected to know and can do at the end of each course. These relate to the skills, knowledge, and behaviour that students acquire in their progress through the course. The course outcomes are based on Bloom's taxonomy. Bloom's Taxonomy provides an important framework to not only design curriculum and teaching methodologies but also to design appropriate assessment questions/quizzes belonging to various cognitive levels. The examination questions are designed in such a way that they assess the different cognitive levels of the students.

The learning levels of the students are assessed through the attainment level of the students at the course outcome. This will help in assessing the learning levels and in turn, will help in designing the various strategies to develop different training and evaluation methods.

The students admitted to the first year will have to undergo the diagnostic test in basic science subjects like Physics, Chemistry, and Mathematics. The scores obtained by the students are used to chalk out strategies for additional training required to bridge the gaps.

After the results of every semester, based on the student's performance, slow learners are identified, and special remedial classes are conducted without charging any additional fees. Faculty advisors are assigned for each student in-order to assist slow learners and also to decide the number of courses to be registered for that semester.

For advanced learners, special training programs are designed and conducted by the internal faculty and need-based Student Development Programs (SDP) are designed and conducted. Students can register for extra courses so that they can complete the required number of credits at an early stage and can carry out internships of their interest in the final semester of the course. Students are permitted to undergo industrial internships.

The students are also deputed to IITs and NITs for special training programs in their areas of interest. They are also deputed to attend various co-curricular activities like paper presentations, tech-fests, Hackathon etc.

On an average, 2-3 remedial classes and 8-10 student development programs (SDP) are conducted every year.

Year-wise details are shown in the table below

Academic Year	Remedial classes	SDP	Deputation to IITs and NITs	Deputation to paper presentations, tech-fests, etc.	Training/workshops Attended by students	EAP Programs
2017-18	03	01	02	06	18	00
2018-19	02	01	01	13	45	04
2019-20	03	02	0	14	107	16
2020-21	03	05	0	05	04	12

A	11 Industrial visits attended by faculty and students
B	Internship fees paid to 185 students
C	Internship for 100 students in 2 batches (39+61) of REC Bijnor at BEC
D	NPTEL exam fees paid to 155 students and 39 faculty members
E	Future skill training Programmes conducted for 406 students

File Description	Document
Link for Additional Information	View Document

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

Response: 16.38

2.3 Teaching- Learning Process

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

Response:

Power point presentations are used in the classrooms to enhance the quality of teaching and learning. Video lectures/simulation models are used for better understanding of concepts wherever required. Live demo of programming/modeling & simulations are used in the classroom for better visualization and understanding of the concepts. Quizzes are conducted regularly. Assignments are given to the students for experiential learning and also to assess their problem solving abilities. Lecture capturing platform is used to provide E-Learning solution in order to cater to the different learning curves of the students and also assist faculty to improve upon the lecture delivery modes. The project allocation, monitoring and evaluation system is carried out as per AICTE exam reforms policy and with well defined Rubrics covering all the quality criteria. The regular laboratory courses consist of both the conventional and also open ended experiments. These experiments enhance the students' critical thinking, analysis and design capabilities. The students are also trained on virtual labs and modern simulation tools. The industry visits/site visits/survey camps, guest lectures are conducted regularly on the latest topics and trends of the industry. Some elective courses are offered in association with the experts from industry.

Audit courses /value added programs are conducted on various topics. Along with soft skills, the students

are also trained towards abstract writing, technical paper writing and literature survey. The OBE is practiced in true spirit resulting in overall development of students.

Modern Tool Usage: State-of-the-art electronic gadgets including smart boards, *Wacom* digital pads, *Impartus* lecture capture platform are used for recording of live lectures, preparation of digital content and effective content delivery. College also encourages the students to enroll for MOOCs from NPTEL/Swayam/Coursera etc. The institution has been awarded the E-lead certification from QSI-GUAGE as a recognition for effectively utilizing modern tools in pedagogy.

Student Support System: Every department has state-of-art laboratories, upgraded with modern equipments/software with the assistance from TEQIP, a world bank assisted project from Ministry of Education (MoE). The college has well equipped library with adequate learning resources (both print and electronic). Collaborative programs which include conduction of workshops, SDP/FDP and internships are taken up with the support from industry and higher learning institutes. The college conducts annual technical fest for two days during which exhibition of projects of UG/PG students, technical Quizes, paper presentations, idea and design competitions, are organized. To cater to the need of beyond the curriculum learning, college has established BOSCH Rexroth laboratory, SCADA lab, MEMS lab, idea Lab etc.

Remedial Classes for the slow learners and Bridge courses for lateral entry students are conducted regularly. The Institution has established a Technology & Innovation Club (Mind hogs) for students with an aim to inculcate the culture of innovation amongst students and encourage them to generate new ideas. The Institution has recently established AICTE idea lab to provide state-of-art infrastructure to recognize, nurture and develop the idea generation for product development from talented and enthusiastic students. The Institution ensures overall development of students through a participatory learning environment.

File Description	Document
Link for Additional Information	View Document

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

Teachers are using ICT enabled tool “Microsoft Teams” for effective teaching and learning process. Microsoft Teams is a chat-based collaboration platform with document sharing, online meetings and many more extremely useful features for communications.

The features of Microsoft Teams make it stand out from other software’s and are as follows:

- **Teams and channels:** Teams are made up of channels, which are conversation boards between teammates
- **Conversations within channels and teams:** All team members can view and add different conversations in a channel and can use a @ function to invite other members to different conversations, not unlike Slack
- **A chat function:** The basic chat function is commonly found within most collaboration apps and can take place in teams, groups and individuals
- **Document storage in SharePoint:** Every team who uses Microsoft Teams will have a site in SharePoint

contain a default document library folder. All files shared across all conversations will automatically save to the document library. Permissions and security options can also be customized for sensitive information.

- **Online video calling and screen sharing:** Seamless and fast video calls to employees are possible.
- **Online meetings:** This feature can help to enhance communications, company-wide meetings, and even trainings. Online meetings that can host up to 10,000 users. Online meetings can include anyone outside or inside organization.
- **Audio conferencing:** With audio conferencing, anyone can join an online meeting via phone.
- **Full telephony:** Microsoft 365 Business Voice can completely replace existing phone system.

Basaveshwar Engineering College (Autonomous) is using the MS Team for effective teaching and learning process. Below shows the usage of MS Team:



Teachers also use other digital platforms such as *Google meet* and *zoom* platforms along with ICT tools like *Wondershare PDFElement*, *Smart interactive boards*, and *Impartus*, a lecture capturing platform are used to provide an E-Learning solution. The college has developed e-content of the courses on *youtube* channel for access to the students. College provides access to many *QEEE* video lectures to the students.

File Description	Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

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

Response: 20:1

2.3.3.1 Number of mentors ?????????????? ???????

Response: 156

File Description	Document
Link for additional information	View Document

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

Academic Calendar: The academic calendar for each semester is prepared in order to effectively implement the academic activities across all disciplines and to provide space for conduction of co-curricular and extracurricular activities. The calendar is made available to all the stake holders well before the commencement of the semester. For every semester, the schedule and duration of all academic activities are fixed in advance while maintaining a common opening /closing dates in line with the guidelines from the affiliating University/AICTE. Every academic year includes three semesters: two regular semesters (odd and even) with a minimum of 90 working days per semester and a supplementary/fast track semester of 8 weeks. The academic calendar for all the semesters includes scheduling of all important academic activities to assist the students and the faculty to plan and prepare accordingly. This enables the students to be well prepared for CIE, SEE, and also plan other co-curricular and extracurricular activities.

Master time table: Master time table is prepared to normalize the slots across all the programs. The Master time table reduces the manual load involved across all disciplines in preparing it and also facilitates the allocation of common slots to interdisciplinary courses like open electives, mandatory courses etc. Master time table also assists in easy monitoring of classes across all semesters and programs.

Registration of Courses: Each student has to register for the courses which he intends to opt at the beginning of each semester with due consultation with the **Faculty Advisor**. The minimum and maximum number of credits to be chosen by a student is stipulated by regulatory bodies. Normally, one week time is provided for registration process (to seek proctor advice, discuss with the course instructors etc.) at the beginning of each semester.

At the beginning of the academic year, student **Induction Program** of a 3-week duration is conducted to all the newly admitted UG students. The purpose of the Program is to assist the students build bond with other students & faculty members. Also, to expose them to a sense of larger purpose, and self-exploration in the new environment and to inculcate in them the ethos & culture of the institution.

Dropping of Courses: A specific time period is fixed in the academic calendar for this purpose. A student can drop any course from the list of registered courses based on the performance in CIE and self-assessment. However, the dropped courses will not be reflected in the grade card. These courses are to be re-registered and taken up for study in the subsequent semesters.

Withdrawal from Courses: A specific time period is indicated in the academic calendar, at the end of a semester, to help and review the student's performance in CIE. This is followed by withdrawal of course(s) (up to the minimum credits specified for the semester) with a mention in the Grade Card (Grade 'W').

In addition, every department schedules additional professional body activities, industrial visits, value-added programs, conferences, workshops, symposiums, training programs etc. without affecting the

academic calendar prepared at the institutional level.

File Description	Document
Link for Additional Information	View Document

2.4 Teacher Profile and Quality

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

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
Link for Additional Information	View Document

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

Response: 42.59

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit.* year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
85	84	82	76	70

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Link for Additional Information	View Document

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

Response: 16.95

2.4.3.1 Total experience of full-time teachers

Response: 3187

File Description	Document
Institutional data in prescribed format	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms**2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years**

Response: 9

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	19	09	03	04

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Link for Additional Information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 13.92

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
524	350	308	489	540

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

Response:

The success of any autonomous institution depends upon the process from teaching-learning to conduction of examination & evaluation with high degree of integrity and transparency. Basaveshwar Engineering College (Autonomous) with an objective of imparting quality education has adopted a comprehensive and student centered Examination Management System without compromising its credibility and integrity. In order to ensure that, the system is fool proof, the examination system is adaptive to the stake holders' constructive feedback. The institutional reforms in all the activities of the examination system are kept in line with the reforms suggested by the AICTE for both UG and PG programmes. At the beginning of every academic year, the calendar of events is provided to the students and also hosted on college website.

Key Reforms on the Examination Procedures and Processes

- The Examination pattern consists of two components, namely, Continuous Internal Examination (CIE) and Semester End Examination (SEE) with equal weightage (50% each).
- The performance of the students is assessed for 100 marks in each of the courses through the centralized CIE and SEE.
- The driver for reforms in examination system includes OBE-frame work for assessment and evaluation of higher order abilities and professional skills using MOOCs, internship, project work etc.
- Question papers are set covering entire syllabus and are thoroughly scrutinized to ensure the quality, mapping Cos and PI as per AICTE exam reforms and BLOOMS taxonomy.

Following processes related to examination are automated

- Generation of Hall Tickets
- Coding/decoding of answer scripts
- Online entry of marks and publishing of results on institute website
- Block allocation for supervision
- Block and Seating arrangement of students
- The payment of admission and Examination Fee has been upgraded to online mode
- The entire examination and evaluation process is under surveillance

Some of these reforms have had a positive impact on the efficacy of the examination management system:

- All the desk top computers are linked through LAN and the campus is Wi-Fi enabled. Notifications regarding the examinations and the Schedule of the Examinations are displayed on the College Website and also the digital notice boards.
- In order to ensure security and to eliminate duplicity, the grade cards are printed with hologram and the grade cards are featured with photographs of students.
- During COVID, the Semester End Examinations were conducted in online mode (Proctored) and the results were declared on time.

Improvement in Examination Management System

- Indigenously developed software is used for automation of the entire examination process.
- A Squad committee is constituted to curb malpractices.

- Online entry of marks (CIE/SEE) is done through the software after valuation for processing and declaration of results.
- The Academic Council members of the college meet before the announcement of results to review and analyze the students' performance.
- A provision has been made for students to view their answer scripts physically to facilitate for challenge valuation if required, thus making the system completely transparent
- The examination remuneration is directly credited to the individual examiner's bank accounts.

Positive impact:

SL.NO	Reforms	Impact
1	Reforms on the Examination Procedures and Processes	<ul style="list-style-type: none"> • Has induced confidence amongst all the stake holders • The curriculum design and examination pattern has ensured the the entire course content • Enhancement in the quality of question papers • Built-in accountability and Transparency in the system
2	Integration of Information Technology	<ul style="list-style-type: none"> • Indigenously developed software has provided flexibility to incorporate evaluation system ensuring accuracy, efficiency, confidentiality and transparency in the entire process • Declaration of results within the stipulated time
3	Improvement in Examination Management System	<ul style="list-style-type: none"> • Imbibed responsibility and brought in accountability in the evaluation process • Uniformity in the evaluation process • Ensures confidentiality and transparency in the evaluation system • CCTVs at all important locations to curb untoward incidents

File Description	Document
Link for Additional Information	View Document

2.6 Student Performance and Learning Outcomes

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

Response:

The procedure adopted for formulating the Course Outcomes and displaying are,

1. A group of faculty members in a given specialization jointly frame the course outcomes of all the courses in that specialization
2. While framing COs, the attributes sought are enhancement in knowledge and skill competency, that the students are expected exhibit
3. It is ensured that, the COs are measurable, quantifiable and assessable
4. The syllabus includes course articulation matrix viz. CO-PO mapping for all courses with appropriate weights

General guidelines

- There should be a minimum of 6 COs as per the NBA guidelines
- The syllabus for each course has articulation matrix for CO-PO mapping
- The COs are framed using appropriate action words as per **Blooms taxonomy**

The Program Outcomes and Course Outcomes are

- Published on our institution website (www.becbgk.edu) and also included in the syllabus book
- Communicated to students through course files
- Displayed in the laboratories (for laboratory courses)
- Are communicated to Parents, Alumni through meetings scheduled regularly
- Discussed during student and staff meetings and Academic Council meetings

File Description	Document
Link for Additional Information	View Document

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

Program Outcomes (PO) are statements that describe what students are expected to know and be able to do upon g program. These relate to the skills, knowledge, attitude, and behaviour that students acquire through the prog program outcomes for each program and a specific number of Program Specific Outcomes (PSO). For each of t by faculty, a course articulation matrix is prepared which provides the correlation between CO with PO and PSO assessed as 3, 2, or 1 depending on the degree of correlation. The level of attainment for individual PO has been a a ratio of the number of points to be scored for the individual PO to the total number of points to be scored in t achievement level for each PO is calculated by the ratio of set values for a particular PO_i for all subjects for the the obtained value of PO_i using the results of the students in SEE for all subjects for the academic batch.

The set value of PO_i for a particular subject is calculated by the equation

$$PO_{si} = \frac{\sum[(\text{No. of } 3) \times 3 + (\text{No. of } 2) \times 2 + (\text{No. of } 1) \times 1]}{\sum_{i=1}^{12}[(\text{No. of } 3_i) \times 3 + (\text{No. of } 2_i) \times 2 + (\text{No. of } 1_i) \times 1]}$$

The obtained value of PO_i for each subject is calculated from the results of students in that particular course. The students are S grade followed by A, B, C, D, E and F (10, 9, 8, 7, 5, 4 and 0). The multiplication factor to calculate PO_i is obtained from the equation

$$\text{Multiplication factor} = \frac{\text{Actual points obtained in a subject for all students}}{\text{Maximum points that can be obtained in a subject for all students}}$$

$$= \frac{\sum \{(\text{No of students in S grade}) \times 10 + (\text{No of students in A grade}) \times 9 + (\text{No of students in B grade}) \times 8 + (\text{No of students in C grade}) \times 7 + (\text{No of students in D grade}) \times 5 + (\text{No of students in E grade}) \times 4 + (\text{No of students in F grade}) \times 0\}}{S(10) \times \text{No of Students}}$$

The achievement level of PO_{ai} is calculated as the ratio of summation of obtained PO_i values to summation of set of subjects in an academic year as per the equation given below.

$$PO_{ai} = \frac{\sum_{j=1}^n PO_{ij}}{\sum_{j=1}^n PO_{ij}}$$

Where j= 1 to n, where n=number of subjects

The same procedure is adopted for calculation of PSO attainment.

Course Outcomes are narrower statements that describe what students are expected to know and are able to do at the end of a course. These relate to the skills, knowledge, and behaviour that students acquire while undergoing a course. They are measured using both CIE and SEE examination marks for each course separately. For every question in the CIE and SEE, the corresponding CO is mentioned for that subject. The marks allotted for each CO in all CIE examinations and assignments are noted. Also, the marks obtained by the student for that CO is calculated. The attainment of each CO is obtained by dividing the marks obtained by a student to the number of marks allotted for the CO.

$$CO_i = \frac{\text{Total number of marks obtained by a student for a CO in all CIE examinations and assignments}}{\text{Total number of marks allotted for a CO in all CIE examinations and assignments}}$$

$$CO_i = \frac{\sum \text{Marks obtained by a student for CO}_i}{\sum \text{Total number of marks allotted for CO}_i} \times 100$$

File Description	Document
Link for Additional Information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 88.62

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 779

2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 879

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Link for additional information	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.05

File Description	Document
Upload database of all currently enrolled students	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

The college has 177 well qualified faculty with 85 faculty having PhD degrees, most of the faculty have completed Ph.D. from IIT, NITs and are involved in Quality teaching-learning processes. Three departments were recognized as research centers in 2003 and today 10 departments have been recognized by VTU Belagavi as research centers. At present, 136 scholars are pursuing their PhD and 136 scholars have been awarded the doctorate degree till date.

The proactive core research activities have helped the College in securing grants to the tune of Rs. 7.04 Crores in the last five years, apart from 39.79 crores under Technical Education Quality Improvement Programme (TEQIP) of World Bank. The College has effectively utilized the support received under all three phases of TEQIP and has emerged as one of the best performing Institutions in the area in Technical Education and Research. The college also has the privilege of mentoring Rajakiya Engineering College (REC), Bijnor in Uttar Pradesh. The College has initiated several measures to strengthen the infrastructure for research and post graduate education on par with institutes of national importance. The college has advanced research laboratories with sophisticated instrument facility set up at a cost of 208 Lakhs with funding from TEQIP, other funding agencies, and in collaboration with industries. AICTE has funded Rs. 110 Lakhs for setting up Idea lab. The facilities thus created help the researchers to carry out the research in the college and internships are offered to in house as well as students from other colleges.

The research achievements being 800+ publications in National and International peer reviewed journals and 339 (291 papers in UGC listed journals) in national and International conferences during last five years. The Alumni have made significant contributions to the community in their own field of specializations. Thus, the college has made a significant progress in the field of Technical Education and Research.

The college has received several recognitions and awards for the significant contributions made by the faculty and students. To promote research in last few years several measures have been initiated and has led to following accomplishments :

- Established 17 PG laboratories and modernized 45 UG laboratories
- High quality research facilities are created in the areas of Environmental Engg., Structural Engg., Geotechnical Engg., Renewable Energy, Noise Harshness, Modern Machining, Molecular Biology, Bio-Chemical Laboratories
- Laboratories established in association with Industries: Bosch Rexroth center for industrial automation, SCADA laboratory, MEMS design centre, Nokia research center, Intel intelligent systems laboratory, Biodiesel centre etc.
- Collaborative research with IISc., IITs and NITs and Foreign Universities (Saginaw Valley State University, IMFT)

The research contributions in the last 5 years are

1. Peer reviewed journal publications: 551
2. No. of Research Guides: 53
3. PhDs Awarded: 57
4. Research Scholars Registered: 82
5. Patents Published/awarded: 12/4

- Knowledge up gradation - through 90 FDPs & 30 SDPs
- FDP & SDP conducted in collaboration with IITs and IISc, Bangalore
- Established and expanded campus wide networking including wired (1200 nodes) and wireless connectivity (70 access points) – 1.00 Gbps ILL (1:1)
- Set up Digital library: 9 electronic databases, 13,000 e-books (perpetual), 10,000 e-journals subscription
- 2 International Symposiums organized on 24-25 Feb., 2017 and 26-27 Feb., 2017
- The institute has MOUs with 25 industries and higher level institutes
- Managerial Capacity training to 50% of faculty in IIMs
- Financial support by providing Assistantship to M. Tech and PhD scholars
- Financial support for presenting papers in conferences
- Incentives for publications in peer reviewed journals and patenting

File Description	Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 0

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	00	00	00

File Description	Document
List of teachers receiving grant and details of grant received	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 0**3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	00	00	00

File Description	Document
List of teachers and their international fellowship details	View Document

3.2 Resource Mobilization for Research**3.2.1 Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)****Response: 704.67****3.2.1.1 Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)**

2021-22	2020-21	2019-20	2018-19	2017-18
153.81	82.95	222.08	226.79	19.04

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document

3.2.2 Percentage of teachers having research projects during the last five years**Response: 9.53****3.2.2.1 Number of teachers having research projects during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
30	17	18	12	12

File Description	Document
Names of teachers having research projects	View Document

3.2.3 Percentage of teachers recognised as research guides

Response: 28.19

3.2.3.1 Number of teachers recognized as research guides

Response: 53

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 60.91

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

2021-22	2020-21	2019-20	2018-19	2017-18
11	05	06	07	06

3.2.4.2 Number of departments offering academic programmes

2021-22	2020-21	2019-20	2018-19	2017-18
11	12	11	12	12

File Description	Document
List of research projects and funding details	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

The Institution has the following dedicated infrastructure & facilities earmarked to support Innovation & Entrepreneurship.

1. BEC-STEP(Basaveshwar Engineering College – Science & Technology Entrepreneurship Park)

BEC-STEP was established in 1999 to provide **Entrepreneurship skills** for engineering students and educated unemployed youth. The thrust areas identified are Food Processing, Textile Technology and Cost Effective Building Technology. BEC-STEP is involved in

1. Developing New Technologies and technology transfer
2. Promoting entrepreneurship among engineering students and community around
3. Providing Incubation facility to entrepreneurs trained in BEC-STEP

2. New Age Incubation Network (NAIN)

The Incubation facility is run under New Age Incubation Network, an initiative of GoK. Every year up to Rs. 3.00 lakhs has been funded to top 10 innovative ideas from the institution to convert them into prototypes.

Sl. No.	Year	No. of ideas selected	Amount sanctioned (Rs.)	Total prototype developed
1.	2015-16 (Batch – I)	10	23,88,149.00	05
2.	2016-17 (Batch – II)	10	19,14,100.00	06
3.	2017-18 (Batch – III)	10	12,13,500.00	06
4.	2018-19 (Batch – IV)	11	17,31,935.00	Implementation Stage
5.	2019-20 (Batch –V)	15 ideas/proposals uploaded on NAIN Portal. Selection Process is ongoing.		

3. Centre for Entrepreneurship Development Cell (EDC)

This center has been established through AICTE funds in the year 2006. Owing to the increased thrust on innovation and entrepreneurship, it is necessary to create awareness amongst the students about “Entrepreneurship as a Career option”.

4. e-Yantra

The e-Yantra is a sponsored project of Ministry of Education (MoE) facilitated by IIT Bombay. e-Yantra Lab Setup Initiative (eLSI), a part of e-Yantra project @ college level, was to encourage setting up of Robotics lab. It was designed as a scalable and sustainable approach to create an eco-system at the colleges to impart effective Engineering Education. The eLSI provides guidance and support for establishing

Robotics labs.

5. Rural Entrepreneurship Development Cell (REDC)

The Rural Entrepreneurship Development Cell (REDC), an initiative of MoE, has been established to encourage student community to undertake Rural Entrepreneurship as a career. It motivates the students to explore untapped rural resources and opportunities available in the region. It also nurtures the students to become successful rural entrepreneurs for a balanced regional development.

6. BOSCH REXROTH Centre for Industrial Automation

The objective of establishing the center is to train UG/PG students towards Industrial Automation and enhance placement and entrepreneurship opportunities. This centre has been established in collaboration with BOSCH REXROTH at a total investment of 5.00 crores of which the college has invested Rs. 1.25 crores. Till date over 500+ students have been trained through this centre.

7. BEC – Institution's Innovation Council (IIC)

Ministry of Education (MoE), Govt. of India has established 'MoE's Innovation Cell (MIC)' in the College to systematically foster the culture of Innovation amongst all Higher Education Institutions (HEIs). The primary mandate of MIC is to encourage, inspire and nurture young students by supporting them to work with new ideas.

Major focus of IIC:

- To create a vibrant local innovation ecosystem
- Start-up supporting Mechanism in HEIs

File Description	Document
Paste link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 222

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
12	33	80	86	11

File Description	Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.4 Research Publications and Awards

<p>3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee</p> <p>Response: B. 3 of the above</p>	
File Description	Document
Any additional information	View Document
Link for additional information	View Document

<p>3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years</p> <p>Response: 1.55</p>	
<p>3.4.2.1 How many Ph.Ds are registered within last 5 years</p> <p>Response: 82</p>	
<p>3.4.2.2 Number of teachers recognized as guides during the last five years</p> <p>Response: 53</p>	
File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

<p>3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years</p> <p>Response: 1.18</p>	
<p>3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years</p>	

2021-22	2020-21	2019-20	2018-19	2017-18
59	47	46	40	28

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years

Response: 1.51

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

2021-22	2020-21	2019-20	2018-19	2017-18
37	71	62	51	62

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed

Response: 4.17

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution

Response: 15.5

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).											
Response: 62.66											
3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).											
<table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>11.36</td> <td>10.84</td> <td>13.43</td> <td>11.82</td> <td>15.21</td> </tr> </tbody> </table>		2021-22	2020-21	2019-20	2018-19	2017-18	11.36	10.84	13.43	11.82	15.21
2021-22	2020-21	2019-20	2018-19	2017-18							
11.36	10.84	13.43	11.82	15.21							
File Description	Document										
List of consultants and revenue generated by them	View Document										
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document										

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).											
Response: 203.09											
3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)											
<table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>00</td> <td>00</td> <td>196.11</td> <td>6.98</td> <td>00</td> </tr> </tbody> </table>		2021-22	2020-21	2019-20	2018-19	2017-18	00	00	196.11	6.98	00
2021-22	2020-21	2019-20	2018-19	2017-18							
00	00	196.11	6.98	00							
File Description	Document										
List of facilities and staff available for undertaking consultancy	View Document										

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community,-sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

Basaveshwar Engineering College organizes a number of extension activities in the institute-neighborhood community to sensitize the students towards community needs. The students of our college actively participate in social service activities leading to their overall development. The college runs effectively National Service Scheme (NSS) and Unnat Bharat Abhiyan (UBA). Through these units, the college undertakes various extension activities in the neighborhood community. The volunteers of NSS and UBA actively participate in activities organized in and around the campus and also the villages adopted for addressing social issues which include individual hygiene, tree plantation, shramadan, social interaction, environmental awareness, women empowerment, awareness about AIDS, blood donation camps, health check up camps, veterinary guidance, farmers meet, maintenance of Goshalas, Covid-19 awareness programs, Vaccine awareness programs etc. Visit and support physically challenged children rehabilitation centers and old-age homes.

The NSS Unit of the college also celebrates Sadbhavan Day on 20th August and Constitution Day on 26th November every year.

Youth Red Cross (YRC) Unit, the wing of Red Cross Society has been started in the college to inculcate the spirit of social service, friendship and the ideals of peace into the minds of the students. Training in health care, first aid, fire fighting, rescue activities, personality development are some of the activities of YRC. It also lends helping hand in maintaining the campus green & clean.

In addition to the above activities, various departments of the college are conscious about their responsibilities for shaping students into responsible citizens of the country by making students aware of social issues through various programs like Environmental Awareness, Personal Health and Hygiene, Diet awareness, Road Safety, Tree Plantation, Soil and Water Testing, Plastic eradication, No vehicle day, Voters awareness, Blood group identification, Health check -up camps, Blood donation camps, Dental checkup camp, awareness about drugs and their ill effects, stress management etc.

All these activities have positive impact on the students and have helped in developing community relationship, leadership skill and self confidence.

File Description	Document
Paste link for additional information	View Document

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 0

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

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

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

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**Response:** 19**3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
1	8	2	4	4

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

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years**Response:** 9.37**3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
100	632	155	310	310

File Description	Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 101.4

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

2021-22	2020-21	2019-20	2018-19	2017-18
173	55	113	85	81

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 25

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
12	03	02	03	05

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

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

Response:

The campus is spread over 93.81 acres of land as against the specified requirement of 5 acres by AICTE. The institution has excellent infrastructural facilities like spacious classrooms, laboratories, workshops, library, faculty rooms, conference halls, auditoriums, administrative blocks etc. The instructional area includes

- 55 classrooms with a total floor area of 5471 sq.m
- 109 laboratories with a total floor area of 9002 sq.m
- 12 seminar halls with a total floor area of 2027 sq.m
- 2 workshops with a total floor area of 298 sq.m
- 2 drawing halls with a total floor area of 293 sq.m
- 4 research labs with a total floor area of 374 sq.m
- 3 centralized computer labs with a total floor area of 260 sq.m
- 1 library with a total floor area of 4200 sq.m

Department-wise laboratory areas include

- Automobile Engineering: 551 sq.m
- Biotechnology: 518 sq.m
- Civil Engineering: 1381 sq.m
- Computer science : 707 sq.m
- Electrical and Electronics Engineering: 642 sq.m,
- Electronics and Communication Engineering: 1082 sq.m
- Industrial and production Engineering: 270 sq.m
- Instrumentation Engineering: 449 sq.m
- Information science: 449 sq.m
- Mechanical Engineering: 1889 sq.m
- Physics: 165 sq.m,
- Chemistry: 162 sq.m and
- AIML: 438 sq.m
- Language Lab

The college has well equipped and spacious library. The Key features of the library include

- RFID Security System
- WEBOPAC
- Electronic Resource Management package for e-journals
- Federated searching tools to search articles in multiple databases
- NPTEL (1200 videos) and
- QEEE course packs - free downloadable

- No. of Volumes: 1,38,024
 - No. of titles: 42,236
 - International journals: 03
 - National Journals: 160
 - E-journals: 15,300
 - E-books: 34,446
- Our digital infrastructure for teaching learning process includes: Internet Bandwidth - Telexair ILL (1:1) – 1 Gbps, Sophos Firewall for Network Security, 75 Cisco Managed Switches for Reliable Connectivity, 80 Cisco Wireless Access Points for Seamless Wireless Connectivity, 950 Desktop Computers & Laptops for Communication & Networking, 5 Lecture Capture Facility for live classes recording, and 50 Smart Classrooms for Interactive Teaching & Learning

Other Campus Infrastructure

- The entire BEC is a Wi-Fi campus. The campus has both internet & intranet facility in all departments and hostels. The IT infrastructure is maintained exclusively by a separate IT Maintenance Cell (ITMC). The other amenities on the campus include training and placement centre, Health Care Centre, Canteen, Student Counseling Cell, Incubation Centers, Idea Lab, Bosch-Rexroth lab, 5.0 acres of playground with athletic track, Indoor stadium, Auditorium of 1650 capacity, Post office etc.

File Description	Document
Paste link for additional information	View Document

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

Response:

The BEC gives importance to the overall development of the students and organizes various sports, games and cultural activities on campus regularly. The institution provides requisite facilities for both indoor and outdoor sports to all students (Boys and Girls). The students participate in inter-institute, inter-university, state level and national level competitions in sports/cultural events.

The cultural club has been established by the students to promote the participation in the cultural activities. The objective of the club is to conduct activities like audition for dance, music and singing there by identifying the talented students and motivating them for participation in youth festival organized by VTU, Belagavi. The club also organizes the Women's day, constitution day and cultural activities during Kannada Rajyotsava. The institute has also established a separate yoga and meditation center for the benefit of students and staff residing on college campus. Yoga classes are conducted during induction program for first year students. International yoga day is also celebrated to create awareness about healthy life style. The details of outdoor facilities for the sports are given in Table -1.

Table1:Facilities available for the sports

Sl. No	Sports Facility	Number	Area/Size
1	Cricket ground	01	The cricket pitch is of size 3.05 x 20.12 m and located at the center of the ground surrounding an infield with a radius of 90 feet (27.4 m) from the center of each wicket. The ground has an overall area of 14,775 sq.m
2	Hockey ground	01	55.00 x 91.40 m
3	Football ground	01	90.00 x 120.00 m
4	Volley Ball ground	01	9.00 x 18.00 m
5	Basket Ball ground	01	15.00 x 28.00 m
6	Kabaddi ground	01	10.00 x 13.00 m
7	Shuttle Badminton court	02	6.10 x 13.00 m
8	Table Tennis court	01	5.80 x 3.50 m
9	Throw Ball court	01	12.20 x 18.30 m
10	Athletic Track	01 Each for 100 and 400 m	04 lanes each of width 1.22 m
	a. 100 m		
	b. 400 m		

File Description	Document
Paste link for additional information	View Document

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

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 77

File Description	Document
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

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

Response: 57.6

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five

years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
627.62	1077.50	313.32	382.72	498.33

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Link for any additional information	View Document

4.2 Library as a Learning Resource**4.2.1 Library is automated using Integrated Library Management System (ILMS)****Response:**

To realize the dream of Dr. S. R. Ranganathan, the father of Library Science, by following his five laws of library science, Library and Information Centre of Basaveshwar Engineering College strives to provide excellent services to the users since its inception (1963).

The Library is housed in a spacious building having a 4200 sq.m plinth area and has over 1,38,000 volumes and 42,200 titles related to Science and all branches of Engineering. About 3600 bound volumes are available to the users. Resources are updated regularly by adding new collections in diverse formats viz. textbooks, reference books, reports, proceedings, abstracts & indexes, encyclopedias, data books, standards, CDs, educational videos, thesis/reports, etc. The library is having separate book banks for SC/ST and poor and meritorious students. A seating capacity of about 450 has been created for students and faculty in the reference section and reading room.

The library and information centre has a Library committee. The Principal is the chairman, Librarian is the Ex-officio secretary and all the Heads of the department are members of the library committee. The committee is responsible for overall development of the library and information centre including procurement.

The Library and Information Centre is completely automated with Easylib software in the year 2002. At present, Bibliotheca RFID Security Systems is implemented with the financial assistance from TEQIP-III. Open-source library automation software KOHA Version 20.11.04.000 with a free license and free support from the koha community, supports SIP protocols (Session Initiation Protocol), and also RFID tags are applied to all the collections. The software is having the facility of auto-generation of barcode labels. Various reports can be generated in excel format with the help of a simple MySQL query. Our library-enabled auto email service with open source postfix software, which helps to get circulation transactions alert like an issue, return, and overdue to users via mail. With the help of a Handheld scanner, stock verification/inventory control can be completed within a short period.

The users can borrow the Books from Self Check in-Checkout KIOSK. The ILMS software KOHA is an International standard open-source and supports all library activities like cataloguing, acquisition, circulation, etc. The WEB OPAC facility is enabled through which the Books can be searched by Title, Author, any keyword and also reserve the Books by sitting anywhere in the world. With the help of user name and password, users can get the current account status as well as past circulation history.

The Library and Information Centre has subscribed 164 print National journals, 3 print International Journals through an annual subscription, 27 electronic databases under VTU, N-LIST, and DELNET Consortia which covers more than 15300 E-Journals & 6514 Conference Proceedings and have 24351 perpetual access towards science and engineering e-books and Knimbus Remote Access Solution, Knimbus Digital library, and Sententia: An assistive tool for formal writing. A Digital library with 15 multimedia systems, CD services, and a reprographics, scanning facility is made available in the library.

Handbooks, Standards, Manuals, Encyclopedias, Technical Reports, Conference Proceedings, Back volumes, ISTE learning materials, projects reports, Ph.D thesis, etc. are also available for reference.

File Description	Document
Paste Link for additional information	View Document

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

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

Response: 51.28

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

2021-22	2020-21	2019-20	2018-19	2017-18
44.19	37.98	49.15	52.0	73.08

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document

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

Response: 8.05

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

Response: 263

4.3 IT Infrastructure

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

Response:

The proposed IT Policy applies to all systems/electronic gadgets, authorized resident/non-resident visitors' hardware connected to the BEC network. The IT policy is inclusive of central administrative departments (Library, Computer Centers), laboratories, offices, hostels, guest houses, and staff quarters wherever the network facility has been provided. Thus, the Computers connected to the campus network are subjected to the Do's and Don'ts detailed in the IT policy. The violations of IT policy laid down by the BEC may result in disciplinary action against the offender/s by the BEC authorities. If the matter involves illegal activities, law enforcement agencies may also be involved. The IT policies may be classified into the following groups:

- IT Hardware and installation
- Software Installation and Licensing
- Network (Intranet & Internet) Usage
- E-mail Account Usage
- Web Site Hosting
- BEC Database Usage
- Video Surveillance

Updation of IT facilities including Wi-Fi is mentioned in the below table.

Sl. No.	IT Facility	Updation from	Updated to	Da
01	Lecture Capture Facility	---	05 Classrooms with Lecture Capture Facility	10.06.
02	Firewall	Fortigate 1000C	Sophos XG450	22.02.
03	E-mail Server	---	www.becbgk.edu E-mail	16.07.

			Server	
04	IP Phones	---	50 Nos.	31.12.
05	CCTV Cameras	60	90	31.12.
06	Internet Leased Line	500 Mbps	1Gbps	22.03.
07	WiFi Access Points	68	12	31.12.
08	Cisco Managed Switches	114	120	31.12.

A detailed description of BEC IT Policy is uploaded on institution's website under additional information.

File Description	Document
Paste link for additional information	View Document

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

Response: 3:1

4.3.3 Bandwidth of internet connection in the Institution.

Response: <5 MBPS

4.3.4 Institution has the following Facilities for e-content development

1. Media centre
2. Audio visual centre
3. Lecture Capturing System(LCS)
4. Mixing equipments and softwares for editing

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 42.4

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

2021-22	2020-21	2019-20	2018-19	2017-18
284.62	271.49	387.38	495.45	478.32

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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

Response:

BEC campus area is spread over 93.81 acres in which 15 departments are housed. Over a period of time the college has strategically planned to create infrastructure as per the need and the guidelines. With an objective of ensuring the safety of occupants and maintaining the physical resources in good operational conditions following procedure is adapted

- Detailed inspection of buildings is carried out from safety and maintenance view, clearly recording the defects and deficiencies
- Letter to higher authorities seeking permission to carry out the work
- Preparation of detailed estimation of the work as per PWD schedule of rates
- Approval from PWD for the estimation and also Chairman Governing Council of the College
- Call for tenders from PWD licensed contractors
- Work will then be entrusted to lowest bidder as per PWD norms
- Progress and quality of the work will be monitored by Engineers of Development section. After satisfactory completion of the work,, measurements are entered in measurement book and signed by the Engineer in charge. The recorded measurements are cross checked by another Engineer from Development wing and then signed by the Development Officer and the Principal.
- Bill is then sent for approval from the Chairman Governing Council
- Payment will be made either though RTGS or by A/c payee Cheque.

Optimal utilization of resources i.e. class rooms and laboratories and computer centers is achieved by staggered timings of theory classes and laboratory sessions.

Criterion 5 - Student Support and Progression

5.1 Student Support

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

Response: 65.31

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

2021-22	2020-21	2019-20	2018-19	2017-18
1930	2036	2151	2218	2149

File Description

Document

Institutional data in prescribed format

[View Document](#)

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

[View Document](#)

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

Response: 1.34

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

2021-22	2020-21	2019-20	2018-19	2017-18
76	44	30	29	33

File Description

Document

Upload any additional information

[View Document](#)

Institutional data in prescribed format

[View Document](#)

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 68.33

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

2021-22	2020-21	2019-20	2018-19	2017-18
2854	2996	2565	1901	501

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

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies 2. Organisation wide awareness and undertakings on policies with zero tolerance 3. Mechanisms for submission of online/offline students' grievances 4. Timely redressal of the grievances through appropriate committees

Response: D. 1 of the above

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years				
Response: 35.5				
5.2.1.1 Number of outgoing students placed year - wise during the last five years.				
2021-22	2020-21	2019-20	2018-19	2017-18
401	295	174	260	338
File Description	Document			
Upload any additional information	View Document			
Details of student placement during the last five years	View Document			

5.2.2 Percentage of student progression to higher education (previous graduating batch).	
Response: 3.72	
5.2.2.1 Number of outgoing student progressing to higher education.	
Response: 29	
File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document

5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)	
Response: 13.94	
5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government	

examinations, etc.) year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
10	10	11	3	4

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

2021-22	2020-21	2019-20	2018-19	2017-18
68	69	71	20	40

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document

5.3 Student Participation and Activities**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.****Response:** 34**5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
6	4	0	9	15

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

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The college has a gymkhana club headed by Principal and coordinated by gymkhana secretary. The general secretaries (boys and girls representative) and class representatives of different disciplines are selected based on their performance in academics. The gymkhana club organizes several activities such as sports, cultural and technical events at college level. A separate fund is allocated for the Gymkhana activities.

Every department has its own student association consisting of student representatives under the guidance of faculty coordinators. The department associations are completely managed by the students and they conduct seminars/workshops/SDPs along with co-curricular/cultural activities/competitions

Academic bodies such as Board of Studies (BoS), Academic Council (AC) and Board of Governors (BoG) have student representatives as invited members (one boy and one girl from both UG PG levels, selected based on the academic performance). The students participate in all the meetings conducted at department and institute level. The student representatives give inputs about curriculum and examination reforms, organizing various co curricular and extracurricular activities, placement and career guidance trainings. The bottom up process has been adopted for both academic and administrative reforms.

File Description	Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 5.4

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
4	00	3	4	16

File Description	Document
Upload any additional information	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

Basaveshwar Engineering College, Bagalkot has established Alumni association as per the Government of Karnataka society act under the name Basaveshwar Engineering College Alumni Association (BECAA) in the year 2001. Executive body of the association is constituted of 15 members. More than 5,000 Alumni have registered as members of the association. The purpose of BECAA is to encourage student-alumni interactions that would benefit the student community at BEC in terms of learning, through sharing the rich expertise in the field of their specialization. BECAA along with Alumni coordinator's from each department are working together to build a strong relationship between the college, industry and Alumni.

Objectives of BECAA

- To build a strong bond with alumni to enhance the technical know-how of students
- To promote collaborative research work through projects/internships
- To establish laboratories in association with Industry
- To mentor students for achieving their personal and professional goals
- To Assist BEC students for improved placement opportunities

These will enable the students to enhance the quality of life and meet societal needs.

The general administration and development of the Association is vested with the Executive Committee who shall hold office in accordance with the rules and bye laws of BECAA.

BECAA alumni deliver technical talks and share latest technological trends to the students. Alumni are invited to share their success stories and motivate and groom the students holistically. BECAA schedule career guidance sessions and organise lecture and/or counselling of the students.

Alumni helps in providing internships, campus placements, project assistance, employee referrals to our students and facilitate industrial visits. These activities help to increase the employability of the students - and thus assist them to become successful engineers. Our Alumni settled in US, UK and middle East extend support to our students in terms of initial accommodation as a part of their stay during their higher education or employment. Alumni also help our students by providing scholarships to the meritorious students and sponsoring Gold medals/cash prizes to the academic toppers.

Number of Alumni Meets held during last three years

2018-19	2019-2020	2020-2021	
03	03	06 (Online)	
Alumni Status till date 2020 Batch			
University			
Batch			
No. of Graduates			
Karnataka University Dharwad	1963-1997	7,641	
Visvesvaraya Technological University, Belagavi	2001-2010	5,552	
BEC Autonomous	2011-2020	5,515	
Total		18,708	
File Description		Document	
Link for additional information		View Document	

5.4.2 Alumni financial contribution during the last five years (in INR).

Response: E. <2 Lakhs

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

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

Response:

Vision:

To be recognized as a premier technical institute committed to developing exemplary professionals, offering research-based innovative solutions and inspiring inventions for holistic socio-economic development.

Mission:

- **To pursue excellence through student-centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change.**
- **To carry out innovative cutting-edge research and transfer technology for industrial and societal needs.**
- **To imbibe moral and ethical values and develop compassionate, humane professionals.**

The sole purpose of good governance is to support the mission and objectives of the institute. The exemplary leadership at BEC is in line with the objectives of good governance.

BEC with effective leadership, through their governing bodies, is responsive and accountable to the legitimate demands of stakeholders be they government, staff, students, industry, etc.

VISION STATEMENT

Components of Vision statement	Leadership style @ BEC	Governance Practices
Recognition as a premier technical institute	<ul style="list-style-type: none"> • Constantly striving Leadership initiatives to make BEC a premier institute • Autonomy at different hierarchical levels • Maintaining transparency and openness in support of high ethical standards. 	<ul style="list-style-type: none"> • Set up strategic aims • Oversees the implementation of strategic aims and developed processes transparent and honest • Monitoring and measuring performance • Strong human resource management such as appraisal, dealing with performance • Student participation and governance at all levels
Developing Exemplary professionals	<ul style="list-style-type: none"> • Strong leadership and management skills in all the places where needed 	<ul style="list-style-type: none"> • Ensuring accountability and scrutiny • Teachers are part of the process

	<ul style="list-style-type: none"> • Delegation of authority and responsibility at various levels to create exemplary professionals 	<p>governing bodies like monitoring committee, committee, Gymkha etc.</p> <ul style="list-style-type: none"> • Contribution to better accreditation • The leader develops institution's human employment policy
Research-based Innovative Solutions	<ul style="list-style-type: none"> • Promoting interdisciplinary research. • Designing processes that to improve research output • Robust and transparent financial systems 	<ul style="list-style-type: none"> • Promoting quality, transparency in education research activities • Facilitate decision-making organisational efficiency effectiveness.
Holistic Socio-Economic Development	<ul style="list-style-type: none"> • Leadership promotes development of system through Research, Institute Innovative Council 	<ul style="list-style-type: none"> • Approving the financial

MISSION STATEMENT

Components of Mission	Leadership style @ BEC	Governance Practices
To pursue excellence through student-centric dynamic teaching-learning processes, encouraging freedom of inquiry and openness to change.	Leaders develop academic processes which help the students to learn through dynamic teaching-learning processes	OBE is a part of the academic processes which helps in dynamic processes
To carry out innovative cutting-edge research and transfer technology for industrial and societal needs.	Research activities are promoted through Research Promotion schemes	Dean R&D at BEC is drafting research policy effective implementation
To imbibe moral and ethical values and develop compassionate, humane professionals.	Value-based leadership practices incorporated to uphold both moral and ethical values	Creating humane and vibrant culture

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

Decentralization: The decentralization model works on the principle of team work, under the guidance of Principal. All the faculties enjoy the participative management and decentralization framework and a freedom of free will and exerting power with accountability. The deans are given full autonomy in forming and implementing relevant policies. Heads of departments are fully authorized to check on to day to day activities of their respective departments.

Participative Management: The institution practices decentralization and participatory management in keeping with its belief in collective leadership and democratic traditions. The Top management gives

freedom to the Principal to formulate guidelines for all the academic activities of the college. At the beginning of academic year, all faculty members conduct a meeting, under the guidance of the Principal and discuss about the academic and co-curricular activities along with the associated issues and possible solutions. Various committees are constituted and responsibilities are assigned to them. The feedbacks from all the stakeholders of the institution are sought and necessary steps are taken to address the issues. All Heads of the department work under the guidance of the Principal. A particular reflection of this practice may be seen in the extensive delegation of authority to the Heads of the various Departments in the college.

The Head of the Department oversees the teaching learning process. The HoD is empowered to make changes in the routine and to allot teaching assignments and evaluation duties. HoD is at liberty to introduce creative and innovative measures for the benefit of students. HoD in consultation with the department faculty members oversees the paper-setting, moderation, evaluation and submission of marks of all internal examinations of the department. HoD decides on the nature, pattern and duration of special and remedial classes for the students.

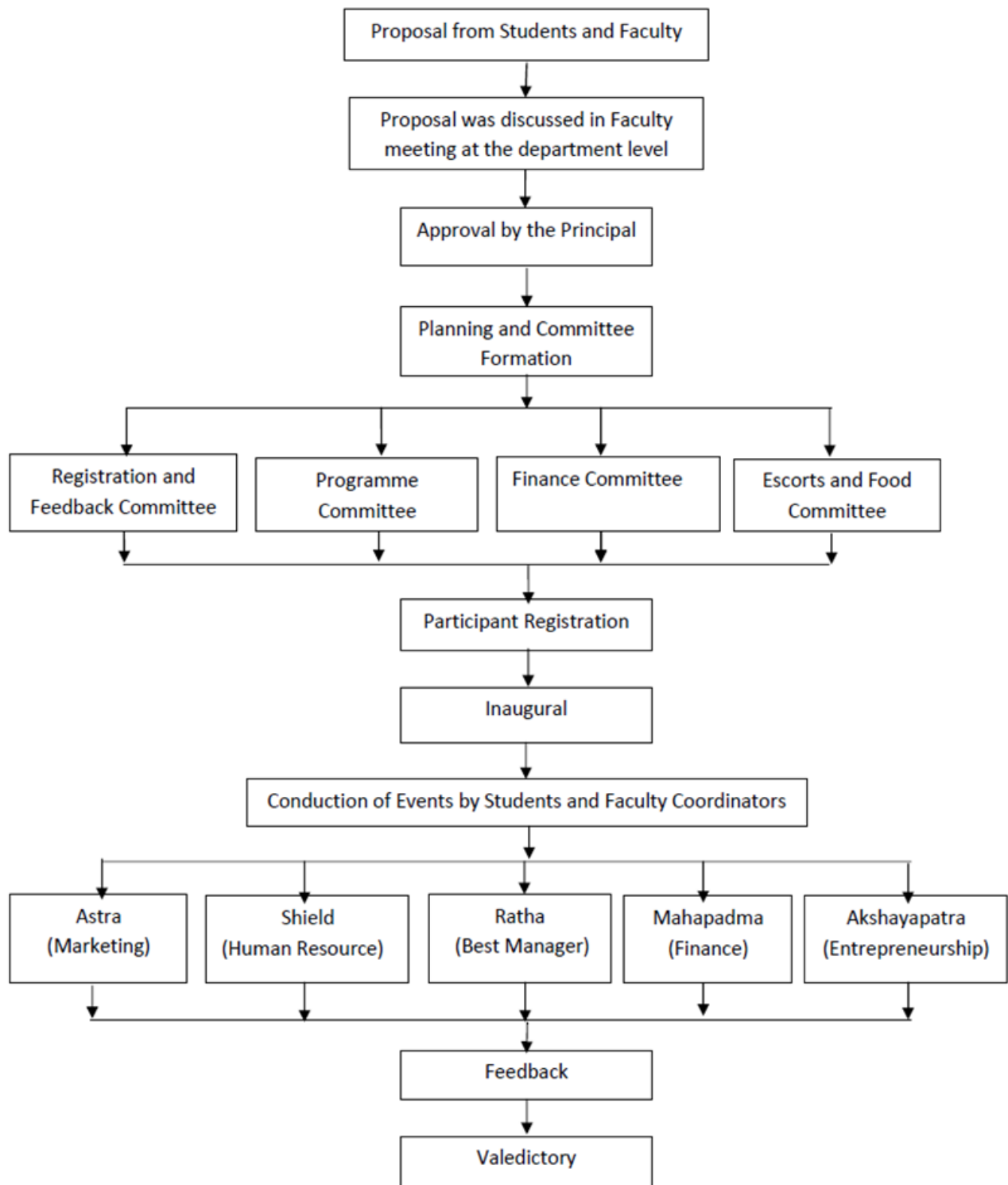
CASE STUDY: Conduction of a State Level Management Fest “Kurukshetra 2K22”

One day management fest for undergraduate students was planned by MBA students. The management fest “Kurukshetra” includes five different competitions, Marketing (Astra), Human Resource (Shield), Best Manager (Ratha), Finance (Mahapadma), and Entrepreneurship (Akshaypatra). Student Coordinator prepared a detailed event plan and the budget with the help of faculty coordinator. The same was discussed with the Head of the department. A department meeting was called and the faculty coordinator discussed about the events. Further, the proposal was presented in front of the Head of the Institute and it was forwarded to the management for the approval and for sanction of the budget. The event was conducted successfully on 2nd July 2022.

Outcome: Students experienced the entire process of organizing a state level competition and overcoming challenges involved in executing the programme. The quantum of learning happened in different areas like event planning, budget preparation, forming committees, delegation of authority, deciding on span of control, raising funds, participative leadership, controlling etc.

This case study is an epic example reflecting the process of participative management and decentralization.

Flow Chart reflecting the practices of Decentralization and Participative Management (Kurukshetra)



6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The college has a strategic plan, which is a roadmap to achieve academic excellence. Strategic plan was strategically developed based on the resource-centric methodology after SWOT/SWOC analysis. The five resources considered in framing IDP are Human, Organizational, Infrastructure, Relational and Financial. Baseline data of the college related to these resources was considered to evolve strategic objectives and key activities. SWOC analysis of BEC was carried out with meticulous efforts from all stakeholders. A core committee consisting of principal, HoDs, three faculty members from each department participated in SWOT/SWOC analysis. Mentoring from the Department of Management Studies, IIT Madras was sought to train the core committee for carrying out BEC-SWOT/SWOC analysis. More than 1000 person-days of the BEC core committee were spent to evolve the IDP. The major points covered in IDP are:

- 1.Improvement in Teaching and learning processes
- 2.To attract quality students by improving the academic performance of students
- 3.Research and development
- 4.To increase the number of research scholars in each research center
- 5.Community engagement

Human resource planning and development

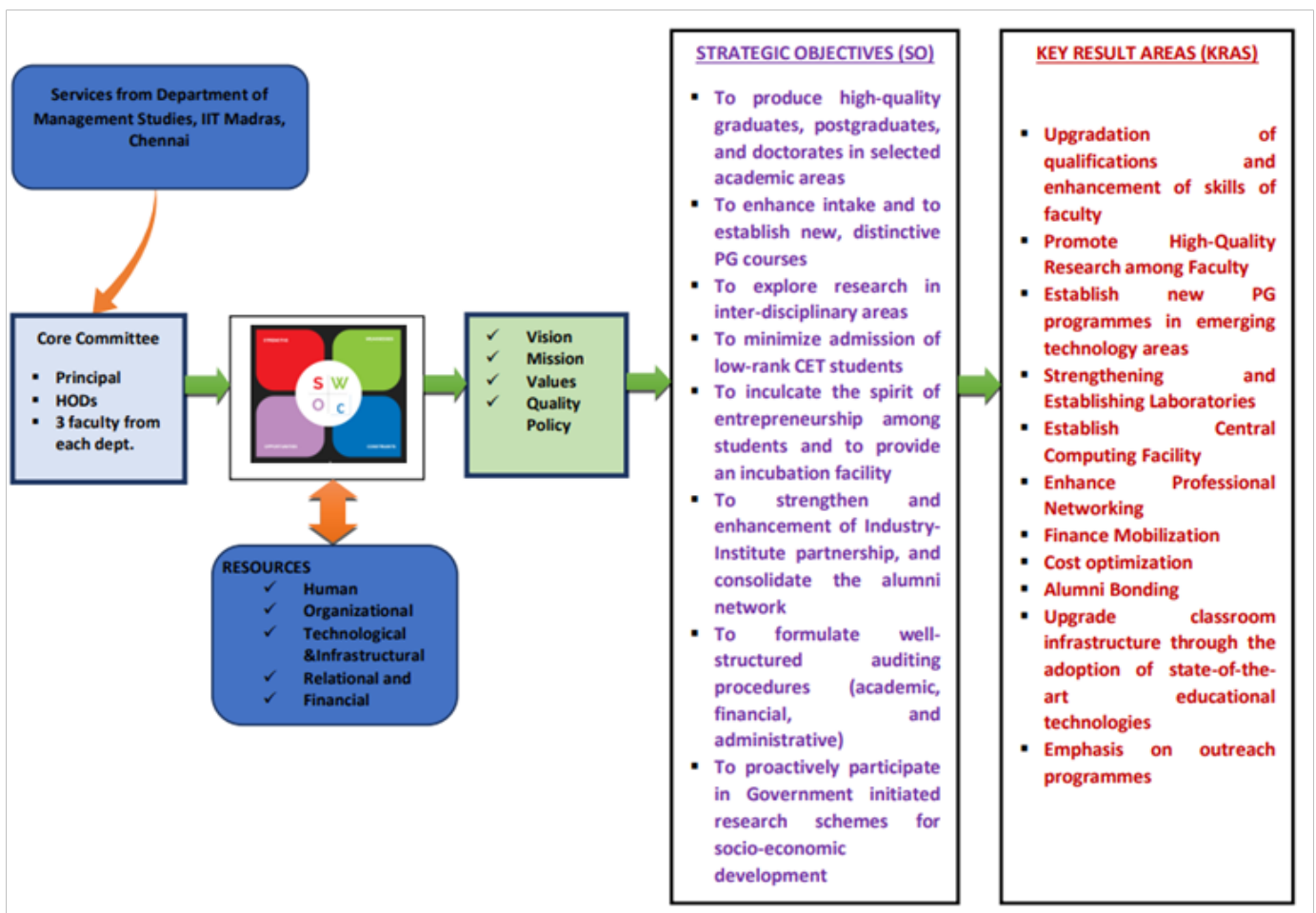


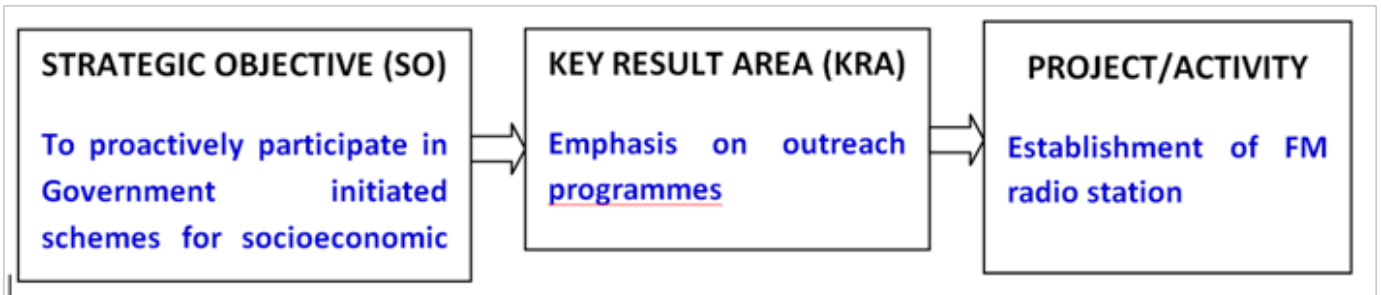
Figure: Road map for strategic management of BEC

- The strategic plan of the institution is approved by the Governing Council (GC) and Board of Governors (BOG).

- Long term development plans are approved for the institution by GC and BOG

Based on the vision, mission, values and quality policy, the strategic objectives and key result areas are identified (KRA). The Key Result Areas will give rise to specific projects.

CASE STUDY 1:



Activity Chart for setting up an FM Radio Station																						
Project In charge: Dr. B.G. Sheeparmatti																						
Project Cost: 36 Lakhs																						
Sl. no	Description of the activity	Time Schedule (in Months)																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	The decision by the management to start an FM radio station																					
2	Application for FM station sent to Ministry of Information and Broadcasting (MIB)																					
3	Clearance from various ministries (MHA, DoT, MoE, MOD)																					
4	Interaction with screening committee at MIB, New Delhi																					
6	Letter of Intent																					
7	Standing Advisory Committee (SACFA) approval																					
8	Grant of Permission Agreement (GOPA)																					
9	Plan for setting up of FM station(Physical Infrastructure)																					
10	Frequency Allocation																					
11	Wireless Operating Licence (WOL)																					
12	Establishment of FM Station and trial run																					
13	Inauguration of FM station																					

It was felt that there is a necessity of FM radio station at Bagalkot with an emphasis to reach the mass public to help them to learn engineering and its applications to real life situations as an outreach or social responsibility venture of BEC.

The activity chart and the resource allocation is shown in the figure below as a case study.



Project Incharge:															
Sl.no	Description of the activity	Time Schedule (in Weeks)													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	The decision by the management to start PG courses in emerging areas														
2	Application to AICTE														
3	Approval by AICTE														

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

Response:

The institution was established by BVV Sangha in 1963. The institute started with 3 undergraduate programmes and taking into consideration the need of the region and also the technological growth, the number of UG programs have been increased to 9, post graduate programs and Doctoral programmes were also introduced. At present there are 9 PG prgrammes and 10 departments recognized as research centres by VTU, Belagavi. The Basaveshwar Engineering College (Autonomous) has its own Governing Council headed by the Chairman and Secretary with nine other Sangha members.

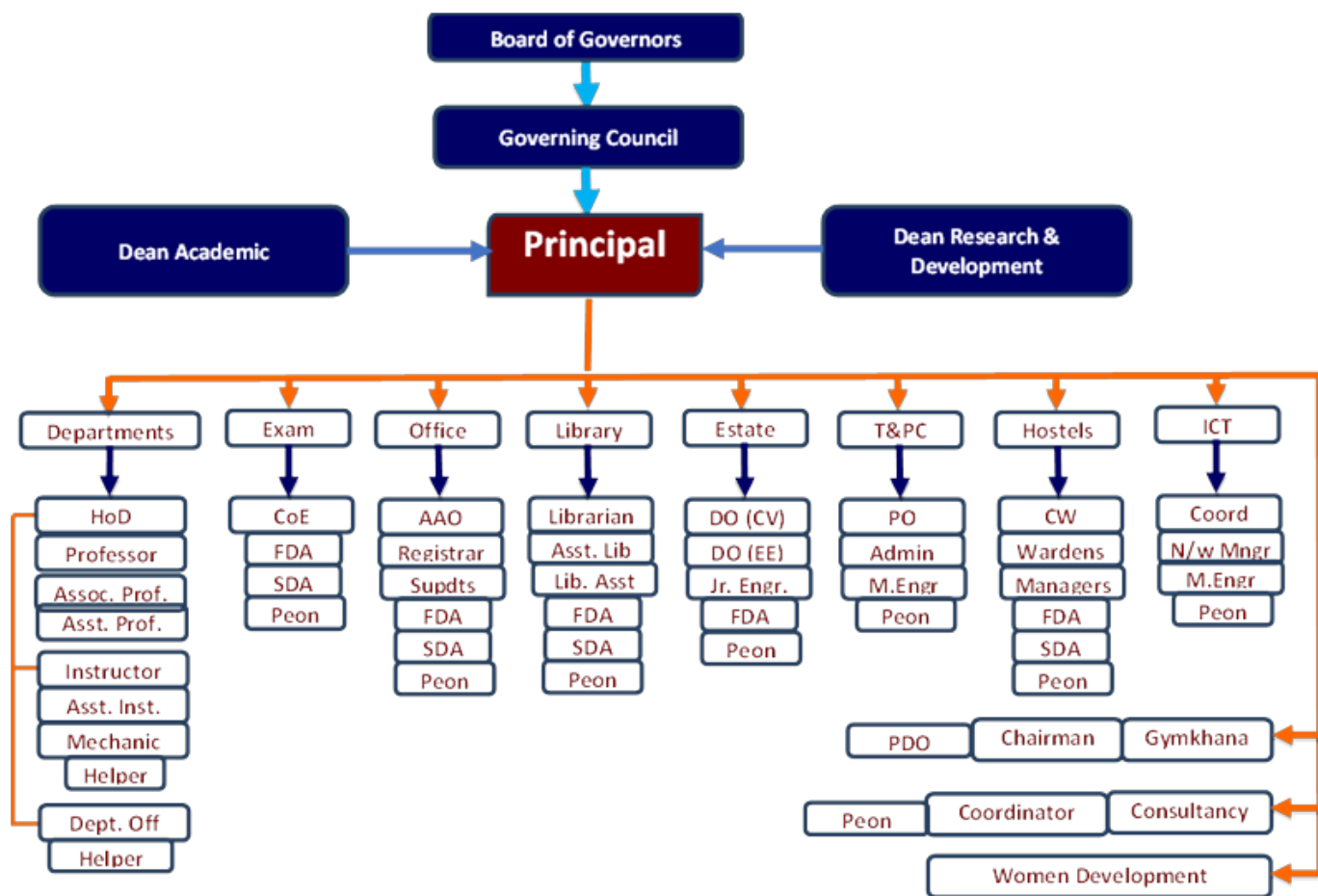


Figure: Organization Chart

The Board of Governors for BEC is constituted as per the provisions of UGC. The Board of Governors consists of Chairman, UGC nominee, nominees of Management, members representing academic excellence, industry and faculty, nominees of affiliating university and State government. The Principal is the Member Secretary for BOG.

The Academic Council (AC) is responsible for policies and procedures on academic matters. The Principal is the Chairman of AC, Deans, all Heads of the Departments, representatives from industry, and university nominees as members. An Academic Committee comprising of Principal and HODs meet regularly for effective implementation of the policies approved by the BOG and AC.

All the departments are headed by a Head of the Department (HoD) who is responsible for administrative and academic activities at department level. However, all the activities at department level will be as per the institute norms in consultation with the Principal. The Board of Studies (BoS) is constituted for all the programs of study and it formulates the curriculum for the undergraduate and post graduate Programs at department level. The composition of BoS includes experts from academia, industry and alumni with HoD as the Chairman.

Other support systems are in place for smooth functioning of the institute, such as Finance, Administration, Computer Centre, Physical Education, Maintenance Cell (both Civil and Electrical) in addition to Security services.

The College also has an **Internal Quality Assurance Cell (IQAC)** which works towards realization of the goals of quality enhancement and sustenance. The IQAC plays an important role of monitoring the internal quality of the institution.

Various committees such as Anti-Ragging Committee, R&D Committee, Finance Committee, Purchase Committee, Library Committee, Professional Bodies Committee, Grievance committee, Internal Complaint Committee, etc., have been constituted at the institute level involving faculty and students for smooth functioning of the institution. All these committees function under the guidance of the Principal.

The Karnataka Civil Service Rules (KCSR) and AICTE/UGC norms are followed for smooth functioning of the institute. These bodies detail the duties and responsibilities for all categories of employees working in the institute such as leave rules, code of conduct, qualifications for recruitment and scales of pay of various categories of employee and Promotion Policy, etc.

As a part of effective feedback mechanism, a link is made available on the college website for all the stake holders, namely, students, faculty, parents, and society at large to give their feedback for improvement, suggestions or grievances, if any.

A meeting with class representatives of students is held once in a semester to elicit feedback on academic as well as non-academic matters.

6.2.3 Implementation of e-governance in areas of operation

1. Administration
2. Finance and Accounts
3. Student Admission and Support
4. Examination

Response: A. All of the above

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

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

Response:

The common welfare measures provided for teaching and supporting staff are as follows

- For aided teaching: Family benefit fund (FBF) facility
- For un-aided staff: Teaching – PF, Employment State Insurance Corporation (ESIC)

- GSLLI- Facility to all the staff members
- Medical facilities – 25 % discount on medical bills to all the employees of the Sangha availing medical facilities at BVV Sangha's Hanagal Shri Kumareshwar Hospital, Bagalkot
- Quarters for faculty and staff
- Maternity leave, Paternity leave provided to all faculty and staff members
- Sports facilities are extended to faculty and staff members
- 25% of the revenue generated through consultancy is provided to the concerned teaching, non-teaching and office staff

Various avenues provided for teaching and Non teaching staff for their career development are as follows:

- Promotions and Career Advancement Scheme (CAS)
- Deputation to higher education through Quality Improvement Programme (QIP) for the faculty members
- Paid leave of 4 months for writing PhD thesis for faculty members pursuing part time Ph.D.
- For teaching staff: Deputation to STTP, FDP, Conferences, Workshops, Trainings, and Symposia.
- For Non-teaching: Skill Up gradation programs and Trainings.

File Description	Document
Link for additional information	View Document

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

Response: 28.5

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

2021-22	2020-21	2019-20	2018-19	2017-18
4	7	68	43	147

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.3.3 Average number of professional development / administrative training Programmes organized

by the institution for teaching and non-teaching staff during the last five years.

Response: 4

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	8	4	5

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

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

Response: 32.57

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
32	75	106	47	41

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

- The Principal and finance officer monitor the utilization of financial resources of the college
- Audits are being conducted regularly by authorized Chartered Accountants (CA)

- Internal audits are conducted each year by CA, Mr. Shivaram Hegde, Mr. Kumar Jigajjinni and Mr. M.N. Tapashetti
- External Auditing is carried out every year by Accounts Officer, Director of Technical Education, Bangalore
- The auditing by Accountant General (AG) office is done by Karnataka state Govt on periodical basis
- TEQIP audit by State Project Funding Unit (SPFU) and internal audit by CA, Mr. M.N. Tapashetti is conducted
- Auditing of utilization of grants received for various research projects by funding agencies such as AICTE, DST, CSIR etc, are done by CA, Mr. M.N. Tapashetti
- Compliance is given for the audit objections with proper documents and explanations and efforts are made to drop the objections raised

File Description	Document
Link for additional information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years (not covered in Criterion III and V) (INR in Lakhs)

Response: 15.25

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

2021-22	2020-21	2019-20	2018-19	2017-18
8.89	1.32	1.32	1.4	2.32

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

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

Response:

The major source of income is through the tuition fees from the students. Following strategies have been adapted by the institute to ensure that all seats are filled along with enhancing the quality of the intake

1. Continuous Quality Improvement in teaching learning processes

- Modern ICT enabled classrooms
- Labs with state-of-art facilities
- Enhancing quality of research by establishing high quality research labs/facility
- Encourage faculty to do PhD at reputed institutions/universities
- Periodic Academic Audit for all departments

2. Brand Building through Quality Audit

- Enhancing NIRF Ranking of the institute
- NBA and NAAC Accreditation
- National awards and recognition

3. Tap funds from various funding agencies

- Continuous efforts are made towards resource mobilization from various funding agencies like AICTE, MHRD, VGST, DST, VTU, NRV, etc. by the faculty members
- Train faculty to write quality research proposals
- Scrutiny of research proposals at the college level before submission
- Encourage faculty to indulge in high-quality collaborative research
- Networking with IITs and reputed institutions within India and abroad

4. Library

- Increasing the learning and research resources, both print and electronic, catering to the needs of teachers, students and researchers.

5. Funding support from Management

The management (BVV Sangha) provides adequate financial support for building infrastructural facilities on the college campus and salary to the unaided staff members.

- The Principal and financial officer monitor the optimal utilization of resources
- Physical resources are optimally utilized by running theory and practical sessions by staggering them
- Library resources: Online access for all e-resources is given to registered faculty and students. Library timings are extended up to 10 pm to optimally utilize the books and print journals and Ph. D. thesis
- Human resources are optimally utilized by sharing interdisciplinary courses across allied departments. The workload of faculty members deputed for higher studies is shared among faculty members within the permissible workload pattern as per prevailing norms.

Financial resources: 57.6% of the funds collected through tuition fees (excluding salary) are used for infrastructure augmentation

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

Two practices that have been institutionalized as a result of IQAC initiatives for incremental improvements with regard to quality are described below:

1. Teaching-Learning process
2. Research and Development

1. Teaching-Learning process:

Faculty members have been using ICT tools optimally to make the teaching-learning process more effective. Use of power point presentations, audios, videos, visual clips, live captured lectures etc are used along with conventional pedagogy. Smart class rooms and Lecture capturing facilities have helped the teacher in effective content delivery along with flexibility of learning for students. The college has enhanced IT infrastructure including modern teaching tools and gadgets. Owing to this, the college has been awarded E-LEAD certification from QS IGAUGE, an international accreditation agency.

The stake holders' feedback is taken to revise the curriculum in accordance to the industrial needs. The College has also adopted AICTE 360 degree feedback mechanism for overall evaluation of teaching learning process which includes i) student's feedback on teaching learning process and ii) Feedback from higher authority on contribution of faculty towards department and institutional development.

All departments conduct academic audit twice in a year, to assess the effective conduction of academic activities and documentation in-line with the requirements of accreditation and affiliating agencies. Academic audit committee comprises of HoD, in-house faculty and experts from higher learning institutions as its members.

2. Research and Development:

Following initiatives have been taken to improve the overall quality of research in the college

1. Encourage staff members to apply for patenting their research findings.
2. Publish the research findings in refereed journals with high indexing and impact factor.
3. To write research proposals for various funding agencies.

The faculty members are encouraged to publish research papers in international journals of repute. Periodic progress of the research work of scholars is strictly monitored. Every research scholar has to mandatorily publish their research findings in refereed journals. Number of papers published and grants received carries significant weightage in Faculty performance appraisal. Faculty/students are motivated to patent their research findings/innovative ideas by providing financial assistance. Research review committee is in place

to monitor the research proposals written by the faculty. Multidisciplinary projects amongst the students and faculty is encouraged.

The aforementioned initiatives have contributed to the development of research culture in the institute. The following table depicts some of major accomplishments in the preceding 5 years:

Year	2021-22	2020-21	2019-20	2018-19	2017-18
Papers Published by Faculty	59	47	46	40	28
Citations of Papers Published	117	90	38	12	2
PhD's awarded	10	17	12	17	11
Patents					
Filed	07	04	01	02	01
Published	06	02	01	02	01
Granted	02	02	00	00	00

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

Response:

Following two strategies are adopted for periodic review of academic processes.

1. Academic Audit: With an objective of assuring quality in all the academic activities viz. curriculum design, pedagogy, continuous and semester end examinations, etc. the college periodically conducts external and internal academic audits both at department and institution levels. Along with in-house faculty members, academicians from higher learning institutions and leading industries. The suggestions made during the audits are discussed in the Board of Studies (at the department level) and Academic council (at the institute level) and suitable resolutions are made for implementation.

The Academic Audit is a ongoing self-driven model of faculty reflection and quality assessment process. It is based on structured conversations/discussions amongst faculty, with a focus on common goal: the continuous improvement of the quality processes in teaching and learning. Faculty members reflect on how they organize their work and use data to make decisions. The faculty may also explore opportunities for improvement and identify appropriate strategies for enhancing teaching-learning process. The Academic Audit involves a review by peers consisting of HoD (Chairman), three internal faculties and one faculty from institute of higher learning, outside the college. The Academic Audit will be conducted twice in an academic year by all the departments, preferably at the end of each semester.

The scope of the audit includes reviewing of:

1. Quality of question papers (Both CIE and SEE)

2. Up-keeping of Course files
3. The actual mode of content delivery
4. Quality Assignments
5. Quality of lab experiments and maintenance of proper lab records
6. Quality of projects and their evaluation as per suggested rubrics
7. Quality of internship and their evaluation as per suggested rubrics
8. Details of workshops/conferences/FDP/SDP organized by the department
9. Details of academic load in the department

Steps followed:

1. The date and time of the academic audit will be informed to the respective faculty in advance
2. Each faculty is expected to keep the necessary documents as per the format for the inspection from the audit committee
3. The members of academic audit interact with each faculty member with regards to subject matter; various concepts of the courses taught and inspect all the records and credentials
4. At the end of the audit, a report is prepared by the committee in the prescribed format along with suggestions for continuous improvement
5. Hard copy of the committee's report is shared to Head of the department
6. Finally, the actions recommended are considered for further improvement

Academic Audit Outcomes:

1. A scientific methodology that reflects on effective implementation of all academic activities
2. Helps in building a Structured documentation process that meets the requirements for assessment/accreditation
3. Self accountable process leading to sustained quality in teaching learning process

2. Stake Holders' feedback on curriculum and teaching learning process

Design of curriculum and effective pedagogy are two important components of any educational institution. Recognizing the significance of these components, the college seeks responses from all the stake holders, namely, students, teachers, alumni, industry personals and employers about the curriculum for all the programs. The responses thus obtained are the valuable inputs for the design of curriculum by the respective BoS. Action taken report on the stake holders' feedback is prepared by all departments along with the impact analysis.

With an objective of assessing the teaching learning performance of teachers, AICTE 360 degree feedback mechanism has been implemented. The periodic feedback from the students are analyzed and remedial measures are initiated to improve the effectiveness of teaching learning process.

6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. Any other quality audit recognized by state, national or international agencies (ISO Certification)

Response: 3 of the above

File Description	Document
Institutional data in prescribed format	View Document
Link for additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

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

Response:

The objective of the Equity Assurance Plan (EAP) is “to ensure that, all faculty members and students in the institution get an equal opportunity to avail the benefits with substantial improvement in the performance of faculty and students who need additional assistance.” The EAP has been instrumental in several ways like to improve learning & performance of students, promoting equity among students, enhancing faculty productivity and motivating to carry out innovative research. All these interventions have resulted in tangible outcomes; enhanced employability skills and better placements, including students from disadvantaged groups.

At Basaveshwar Engineering College many activities have been conducted under Equity Assurance Plan (EAP), such as forming committees & peer groups, appointing faculty advisors and renovation of common spaces.

The college has spent Rs.3, 44, 661/- during 2018-19 and 2019-20 for organizing 20 programs for students (both girls and boys) from socially disadvantaged category. The details of the program organized are presented in Table 1 (Annexure). These programs are basically planned to update knowledge of the students in technical domain, enhance placement opportunities in various fields, motivate for higher studies and skill development. The total number of students participated in these programs during the academic year 2018-2019 is 560. Out of total 560 participants, 64 (11.43%) are boys and 496 (88.57%) are girl students. During the academic year 2019-2020, the total number of students participated are 1581. Out of these, 748 (47.31%) are boys and 833 (52.69%) are girls.

Remedial classes have been conducted for the weaker students during the academic year 2020-21 (3rd-30th Dec., 2020). The total number of students registered was 349. Out of 349 students, 167 girls and 182 boys attended the classes. The details are in Table 2 (Annexure).

For safety and security of women, Internal Complaint Committee (ICC) has been constituted in the year 2016. The objectives of the committee include prevention, prohibition and redressal of sexual harassment to ensure safe and secured working environment for women employees and safe campus to girl students. Every year the college conducts awareness program for women employees and girl students and also student counseling is carried out in every department for sensitizing the boys towards women’s dignity and safety. Because of these initiatives, no cases of sexual harassment and eve teasing have been reported.

A common Ladies room has been provided for girl students in the main building (54.45 sq mt) along with separate girl’s room in ECE (57.96 sq mt.), CSE (54 sq mt.), EEE (17.63 sq mt.), Civil Engineering (11.02 sq mt.), BT (12.86 sq mt.) departments. To maintain girl’s dignity, sanitary pad disbursement and disposal facility is available in the college and in girls’ hostels. To provide greater safety and security, surveillance cameras are installed at prime locations in the college premises.

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

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

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document

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

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

Response:

Solid waste management: The solid waste produced in the campus, which includes garden trimmings, is collected by the campus workers. Garden trimmings are used to convert vermin composting in the campus. Part of hostel/canteen food waste is used along with garden trimmings for vermin composting. Cow dung is used to expedite the decomposition process and as a nutrient. Part of hostel mess waste and college campus canteen waste is used for biogas unit which is installed in science department. The biogas produced is used for the lab purpose.

Liquid waste management: Waste water generated from departments is connected to municipal sewage collection system.

Biomedical waste management: Biomedical waste is not produced in the campus. In the department of Biotechnology, contaminated materials are autoclaved for 15-20 minutes at 15-20 psi, diluted and then collected in the designated container at the campus. Vials used are soaked in the liquid soap for at least 30 minutes before cleaning.

E-waste management: E-waste is disposed off through authorized vendor periodically following the due procedure.

Waste recycling system: It will be initiated in the coming years as already planning for the recycling of the paper and envelopes is under process.

Hazardous chemicals and radioactive waste management: Hazardous chemicals and radioactive elements are not present in the campus.

File Description	Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document
Any other relevant information	View Document

7.1.4 Water conservation facilities available in the Institution:

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

Response: C. 2 of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document

7.1.5 Green campus initiatives include:

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

Response: C. 2 of the above

File Description	Document
Geotagged photos / videos of the facilities	View Document

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

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

Response: C. 2 of the above

File Description	Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: C. 2 of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document

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

Response:

BVV Sangha was started in 1906 by His Holiness Sri. Guru BasavaMahaswamiji of Biluru and inclusiveness is the foundation & part of our Culture. The College is named after Lord Basaveshwara, a philosopher and a social reformer of 12th century, who strongly advocated equality across all the castes and creeds. In line with the ethos of BVV Sangha, Basaveshwar Engineering College, Bagalkot, being a premier technical Institute in the state of Karnataka, is known for its harmonious and inclusive academic environment amongst staff and students. The college has taken adequate care so that all the stake holders across different castes, gender, region, and culture get due representation.

The institute is conducting many programs under Equity Assurance Plan (EAP) for both students and faculty members to ensure inclusiveness across gender and socio-economic status. Some of the programs, such as Student Development Programmes (SDPs), Faculty Development Programmes (FDPs), technical talks, seminars, workshops conducted under EAP are provided to all students irrespective of caste and creed.

To acknowledge the diversity in culture, caste/region, the college is organizing ethnic day function every year where students and staff are dressed in traditional outfits to represent their culture and region. Student associations of all departments also conduct similar programs to celebrate the rich cultural heritage of India and bring awareness about cultural diversity of India among students.

In all of our Hostels, where students of different states reside harmoniously, the college authorities encourage the celebration of different festivals across all communities and region to provide an inclusive

atmosphere to the inmates.

The institute takes pride of the fact that, no untoward incidents have happened on the campus either due to regional or communal or linguistic discrimination among students/staff members.

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

Response:

Basaveshwar Engineering College has taken various initiatives to shape the students as responsible citizens of the country. Following are some of the initiatives taken by the college:

- **Introduced mandatory subject for B.E. Program**

A mandatory course on “Constitution of India” is introduced for all the students. The objectives of this course are:

1. To introduce the basic principles of constitution of India
2. To understand the importance of fundamental rights as well as fundamental duties enshrined in the constitution
3. To undertake a field survey by visiting at least 10 families in their neighborhood and find whether citizens are aware of their Fundamental Rights and Civic responsibilities.

- **Celebration of the Constitution day**

Every year college Gymkhana and NSS team celebrates constitution day. On this day Pledge is taken in the name of Preamble of Constitution of India.

- **Celebration of National and Regional Festivals:**

Every year college celebrates Independence day on August 15th and Republic Day on 26th January and also Birthdays of great personalities like Mahatma Gandhi, Lal Bahadur Shastri, Dr. B. R. Ambedkar, Swami Vivekananda, Lord Basaveshwara, Sir. M. Vishweswaraya etc. Activities are conducted with an objective of highlighting the values, ethics and sense of duty that these great personalities (embedded in their lives) practiced. Students, faculty and staff participate harmoniously.

- **NSS Activities**

The students are motivated to take part in various activities of the college.

- The authorities encourage the students to take part in blood donation camps.
- The students take up cleanliness drives both inside the campus and nearby villages.
- The students take up plantation drives to provide a clean and green environment

File Description	Document
<ul style="list-style-type: none"> • Details of activities that inculcate values; necessary to render students in to responsible citizens 	View Document

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

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

Response: D. 1 of the above

File Description	Document
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View Document

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

Response:

India is a multicultural and diverse country, and the National festivals in India are celebrated with enthusiasm and purpose. On the day of National festivals, we rejoice the rich heritage and glorious history of our country and also commemorate the milestones of India's achievements in various fields.

The National Festivals of India – Independence Day and Republic Day are celebrated with enthusiasm. On these days rich tributes are paid to our freedom fighters and great leaders for their sacrifices made during India's struggle for Freedom and highlighted to student community.

National Youth Day, also known as Yuva Diwas, is celebrated on 12th January every year in India. The day marks the birth anniversary of Swami Vivekananda, one of the most popular philosophers and thinkers of India, and is celebrated as the Yuva Diwas to recognise his contributions to the Indian society. This is primarily because he was one of the most prominent leaders of his time to influence the youth of India.

Matrubhasha Divas (Mother Tongue Day) is celebrated on 21st February in the institute every year.

International Women's Day (8th March) is a global day celebrating the social, economic, cultural, and political achievements of women. The day also marks a call to action for accelerating women's equality.

Ambedkar Jayanti or Bhim Jayanti is observed on 14th April to commemorate the memory of Bharata Ratna Dr. B. R. Ambedkar, Indian polymath and civil rights activist and architect of Indian constitution.

International Yoga day is celebrated on 21st June every year. Yoga is an ancient physical, mental and spiritual practice that is originated in India.

Rastriya Ekata Divas is celebrated in India on 31st October. The day is celebrated to mark the birth anniversary of Sardar Vallabai Patel who had a major role in the integration of India.

Constitution Day (Samvidh?na Divasa), also known as "National Law Day", is celebrated on 26th November every year to commemorate the adoption of the Constitution of India.

7.2 Best Practices

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

Response:

Best Practice – 1

1. Title of the Practice : Governance Reforms

2. Objectives of the Practice :

- (i) To bring in transparency in governance by involving students who are important stake holders
- (ii) To represent the issues of the student community related to governance (administration, finance etc.) in BoG meetings
- (iii) To represent the issues of the student community related to academic matters in the academic council meetings.
- (iv) To represent the issues related to curriculum development, modification and introduction of new courses etc. in BoS meetings.

3. The Context : Students are important stake holders and their voice must be heard and their concerns must be addressed so as to run the system efficiently. Generally students are not part of college administration and academic processes. It is very essential to involve students in all aspects of running the institution to understand their problems, grievances and address them for which their presence is important in all important bodies of the college. Hence college decided to include students as members of various bodies.

4. The Practice : Two toppers from UG and two toppers from PG programmes are selected as invited members of Board of Governors (BoG) and two more second toppers from UG and PG are selected as invited members of Academic Council (AC). Of these two toppers, one boy and one girl have been chosen

to maintain gender equity. From each department, one boy and one girl (toppers) were invited members of the respective Board of Studies (BoS). Apart from this student representatives are also included in other important committees such as anti ragging committee, Internal Complaint Committee, grievance redressal committee etc. Student representatives actively participate in the meetings of all the committees and represent the issues related to students which will be addressed by the experts of the committees.

5. Evidence of Success :

(i) Financial support given to students for participating in co-curricular activities as well as sports activities as per the request made by the students.

(ii) As per the request made by the students open elective courses were offered by HAL staff at HAL Academy Bangalore, the course fees of Rs. 15,35,000.00 was borne by the college from TEQIP fund.

(iii) Some special electives viz. a). Naval architecture and piping design for Mechanical department students and b). Industrial safety to students of Biotechnology department were introduced and offered by industrial experts at our college as per the request of the students.

(iv) No ragging cases have been reported so far

(v) No pending grievances.

(vi) No complaints received with regards to sexual harassment by girl students and women employees

6. Problems Encountered and Resources Required :

(i) HAL authorities were offering training programs of short duration, in this regard the College authorities had convince the management of HAL Bangalore to offer electives to BEC students for one complete semester.

(ii) Industrial experts were not involved in teaching learning and evaluation processes and were reluctant to offer electives. Since the college is autonomous it was possible to offer the electives which enhanced the employability of students.

(iii) Students were reluctant to be part of anti-ragging and ICC committees. The heinous crime of ragging and importance of upholding the dignity of women was appraised to the students and by virtue of which the students accepted to be part of these bodies.

(iv) Rs. 15,35,000.00 was required for conducting elective courses at HAL academy Bangalore and the same was provided by the college from TEQIP funds.

(v) All the financial resources required by the industrial experts for completing the classes of the electives were borne by the college.

Best Practice – 2

1. Title of the Practice: Industry Academia Conclave (IAC)

2. Objectives of the Practice:

- 1.To explore possible avenues to strengthen the linkages and expertise between industry and institution for mutual benefit
- 2.To explore the avenues for the benefit of students
- 3.To devise mechanisms to meet the current industry expectations
- 4.To find the domain areas of consultancy services to the industry
- 5.To unearth areas of collaborative research programs
- 6.To explore the possibility of establishing centers of excellence in association with industry
- 7.To chalk out strategies to improve placement opportunities to students
- 8.To explore the possible opportunities for establishing MoUs

3. The Context:

In India, the gap between industry and the institutes is very large as compared to the western countries. This gap has to be minimized for the production of skilled and employable engineering graduates. In this direction, the industry academia conclaves (IAC) play a pivotal role in minimizing the gap. Hence, the institute has taken initiatives and organized Industry Institute Conclaves in spite of the college being located in a geographically remote place. The initiation has opened up a path where both industry and institute are mutually benefitted, more prominently the student community.

4. The Practice:

The institute organized seven industry institute conclaves at different locations in India i.e.,

Bangalore, Pune, Hyderabad, Panaji, Mumbai and Bagalkot.

Sl. No	Date	Venue	No. of Industry Delegates	No. of College Representatives
01	13.03.2016	Bangalore	80	30
02	24.04.2016	Pune	70	28
03	16.07.2016	Hyderabad	40	25
04	17.09.2016	Panaji	25	26
05	17.12.2016	Mumbai	50	28
06	23.12.2016	Bangalore	20	30
07	11.02.2017	Bagalkot	40	26

During the conclave the strengths and accomplishments of the college were presented and also the industry personnel shared the domain areas in which they were associated with.

The highlights of the conclave are:

- The possible ways of participation of Industry personnel in academic institutes viz. designing the curriculum, sharing a course or part of the course, mentoring, organizing workshops/seminars/student development programmes/technical talks etc.,

- The possibility of establishing center of excellence on campus
- The number of internships, projects and placement opportunities to students
- The facilities that can be extended to the industries to set up incubation centers
- The modalities of establishing MoUs with reputed industries
- The industrial visits to students

5. Evidence of Success:

The above IACs organized by the institute have their own impact on many facets of the institute.

1. There has been considerable improvement in placement due to collaboration with industries
2. Increase in number of industrial internships and projects in various industries
3. The enhancement in the number of MoUs with industries
4. The institute is able to establish incubation center to nurture the start-ups
5. Participation of industrial personnel in the Board of Governors (BoG), Academic Council (AC), Board of Studies (BoS)
6. Sharing of the courses by industry personnel
7. Increase in the number of technical talks/workshops/seminars/ student development programmes etc.,
8. Established center of excellence in association with Flexitron and PRDC (SCADA for automation)

6. Problems Encountered and Resources Required:

1. Owing to pre-occupied and time bound schedule, participation of industry experts in IACs was quite difficult
2. It was a challenge to the college authorities in organizing and coordinating the IACs in metropolitan cities
3. Owing to stringent academic schedule it was difficult for the authorities to organize the event without disturbing the routine academic activities
4. The financial component involved in organizing IACs at metropolitan cities
5. The TEQIP funds was effectively utilized by college and a total amount of Rs. 13,46,667 was incurred towards the events

7.3 Institutional Distinctiveness

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

Response:

The vision of the institute is to be recognized as a premier technical institute committed to developing exemplary professionals, offering research based innovative solutions and inspiring inventions for holistic socio-economic development. To produce exemplary professionals, it is essential to have model curriculum, incorporate effective teaching learning processes, equip faculty with modern pedagogical skills, inspire students to take up innovative projects, provide extended learning (certificate courses) and exposure to industry through internships and encourage inter-disciplinary research. The college was started

with a focus on under graduate programmes. After attaining the autonomous status in 2007, the college started focussing on Research and Development (R&D) activities with an emphasis to address socially relevant problems. In order to carry out R and D activities the World bank assisted project, TEQIP assisted in establishing the state of-the-art facilities.

To promote research on campus, the laboratories were equipped with the modern equipment. Some of the laboratories established are Environmental Engg., Structural Engg., Renewable Energy, Materials, Noise Harshness, Geotechnical Engg., Modern Machining, Vision computing, Image processing etc. Apart from this, the laboratories established in association with Industries are Bosch Rexroth centre for industrial automation, Biodiesel centre, IDEA lab, MEMS design centre, SCADA for automation, etc. The faculty members had an opportunity to acquire higher qualifications from renowned higher learning institutions viz. IISc, IITs, NITs. This paved way for establishing collaborations for research with faculty members of higher leaning institutions. Also, efforts have been made to establish the linkages with foreign universities (Saginaw Valley State University, Texas University, Arlington) to carry out collaborative research in the respective domain areas. This has resulted into 220 quality research publications in national and international peer reviewed journals, 366 in national & international conferences, book chapters and books during last five years. The total number of citations in Scopus and Web of Science are 872 and 305 respectively during last 5 years. The research work carried out by the faculty has led to the award of 04 patents and filing of 27 patents.

The significant research contributions made by the institute in last five years are:

- The number of research centers has increased from 7 to 10, recognized by Visvesvaraya Technological University (VTU), Belagavi
- The number of faculty acquiring Ph.D. degree has increased by 22%
- The institute has been recognized as research center under Quality Improvement Programme (QIP), MoE, New Delhi
- The number of faculty recognized as research guides has risen to 53
- A total of 82 research scholars have registered for Ph.D and 80+ scholars have been awarded the doctorate degree
- A total of 89 faculty members are having research projects
- The proactive core research activities have helped the college in securing grants to the tune of Rs. 704.67 Lakhs
- In all 25 functional MoUs have been established with institutions of national & international importance and industries
- Received a grant of Rs. 1.1 Crore from AICTE to establish Idea Development, Evaluation and Application (IDEA) Lab in 2021 with an objective to convert innovative ideas into a prototype
- Established Institution Innovation Council (IIC) and BEC-IIC has been recognized as one of the best three performing institutions Innovation Council from South West Regional Zone (SWRO) during 2019-2020 and top 25 at national level.
- Science and Technology Entrepreneurship Park (STEP) has been established in 1998. The thrust areas of BEC-STEP being Food Processing, Textile (Handloom/Power loom) and Cost Effective Building Technology, based on the local needs. BEC - STEP has been recognized as best STEP in the country by Department of Science and Technology (DST) and received an award from former Hon. President of India Late. Dr. A.P.J. Abdul Kalam
- The college received award from National Institute of Wind Energy (NIWE), New Delhi on 15.06.2022 as Best institute of Higher Learning in Wind Energy with Citation and cash prize of Rs. 1.00 lakh. Also, one of our faculty received an award as Best Researcher in Wind Energy from

NIWE with a Citation and cash prize of Rs. 0.50 lakh

- The total fund generated from consultancy and corporate training is Rs. 62.67 Lakhs

With all these credentials the institute has been placed in the rank band of 201-300 consistently for last four years by the National Institutional Ranking Framework (NIRF), New Delhi and as a mark of quality the college has been accredited by NAAC and QS I-Gauge and NBA (75% of UG programmes).

The authorities of the institute have taken sufficient care to nurture the research environment among faculty and students by starting three incubation centers. The College effectively utilized the support it received in all the three phases of TEQIP and emerged as one of the best performing Institutions in technical education. The College has also initiated several measures to strengthen the infrastructure for research and post graduate education on par with institutes of higher learning. The Alumni have made significant contributions to the community in their own field of specializations. The strengths of the institute have resulted in good academic and research environment. Thus, the college has made a significant progress in the field of technical education during the last 25 years and is thriving to excel itself and reach to the newer zeniths.

5. CONCLUSION

Additional Information :

The College has effectively utilized the support it received from all three phases of the World Bank assisted project Viz. the “Technical Education Quality Improvement Programme (TEQIP)” and utilized 100% of the total grant allocated to it i.e. Rs. 39.79 crores. The College has set its vision and mission in tune with its core activities and competencies, viz., imparting technical education, conducting high impact research, providing need based training and consulting services and contributing to community development. Some of the research achievements are 400+ technical publications in national and international journals and 300+ in national and international conferences during last five years. The College has also initiated several measures to strengthen the infrastructure facilities for Research and PG education on par with institutes of higher learning. Apart from traditional chalk & talk method, other innovative forms of teaching-learning are also practiced and during COVID19 pandemic the digital mode of Teaching learning was incorporated for online teaching and also proctored exams conducted. Acknowledging the efforts made by the college in scaling up the ICT infrastructure for teaching learning process, QS I-GAUGE has been awarded E-LEAD certification for academic excellence in digitization and also the college is placed in GOLD category. Further, additional tools have been augmented like NPTEL reference material and online teaching learning content delivery system. Now, with New National Education Policy (NEP 2020) being introduced by GoI the college has implemented NEP2020 from the academic year 2021-22 itself. The institute has incorporated quality management information system (MIS) for effective governance and implementation. Administrative and Academic bodies have been set for review and follow up. Academic audit is conducted by external auditors at the end of each semester to monitor the quality in teaching and examination process. Also, Internal Quality Assurance Cell (IQAC) has been formulated for quality audit of academic programs and BoG for Governance. The college has been at the forefront when it comes to adopting or implementing new innovative programmes and ideas. BEC has started an UG programme in Artificial Intelligence and Machine Learning (AIML, 2020) and a PG programme in Defence Technology (2021) in association with DRDO.

Apart from its overwhelming performance in academics, we at BEC are performing extremely well in co-curricular and extracurricular activities. The College Alumni have made significant contributions to the community in their own domain. Thus, College has made a significant progress in the field of technical education during the last 60 years and is thriving to excel itself and reach to the newer pinnacle in the coming years.

Concluding Remarks :

Basaveshwar Engineering College, Bagalkote is one of the premier technical education institute in the Northern part of Karnataka imparting quality technical education and serving the rural community for over 6 decades.

Quality teaching-learning processes are emphasized by the qualified faculty with 48% faculty having Ph.D degrees from IITs and NITs. In a short period of 10 years around 200+ scholars have registered for Ph.D programs and 150+ scholars have been awarded the doctorate degree. The proactive core research activities have helped the college in securing grants to the tune of Rs. 5.00 Crores in the past three years. The institute has MOUs with 25 industries and higher level institutes. Library is one of the best in the region with RFID technology and a new central library is set up as learning resource center with OPAC facility. About 950 state-of-the-art computers are networked through 10 Gbps backbone fiber network and the campus is WiFi enabled

with 1000 Mbps Internet Leased Line (ILL 1:1) from Telexair. All the classrooms are ICT enabled with state-of-the-art teaching learning gadgets. All laboratories are equipped with latest equipments/software catering to the needs of laboratories and research infrastructure.

The college has been accredited by NAAC in 2017 with “A” grade (CGPA 3.34) and 75% of BE programmes have been accredited by NBA and 100% of PG programmes have been applied for accreditation by NBA thus indicating the quality of teaching-learning processes of the institution. The grant of autonomy has given substantial academic flexibility in framing curriculum, incorporating Choice Based Credit System (CBCS) adhering to Outcome Based Education (OBE). The grant of autonomy has given rise to many reforms in the field of technical education. There has been a focus on employability and promotion of entrepreneurship development. Academic audit is conducted by external auditors at the end of each semester to monitor the quality in teaching and examination process. Also, Internal Quality Assurance Cell (IQAC) has been formulated for quality audit of academic programs and BoG for Governance. The college has been at the forefront when it comes to adopting or implementing new innovative programmes and ideas. BEC has started an UG programme in Artificial Intelligence and Machine Learning (AIML, 2020) and a PG programme in Defence Technology (2021) in association with DRDO. Apart from its overwhelming performance in academics, we at BEC are performing extremely well in co-curricular and extracurricular activities. The College Alumni have made significant contributions to the community in their own domain. Thus, College has made a significant progress in the field of technical education during the last 59 years and is thriving to excel itself and reach to the newer pinnacle in the coming years.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																																								
1.1.2	<p>Percentage of Programmes where syllabus revision was carried out during the last five years.</p> <p>1.1.2.1. Number of all Programmes offered by the institution during the last five years. Answer before DVV Verification : 96 Answer after DVV Verification: 96</p> <p>1.1.2.2. How many Programmes were revised out of total number of Programmes offered during the last five years Answer before DVV Verification : 42 Answer after DVV Verification: 34</p> <p>Remark : Input edited as per given clarification response.</p>																																								
1.4.1	<p>Structured feedback for design and review of syllabus – semester-wise / year-wise is received from</p> <p>1) Students, 2) Teachers, 3) Employers,</p> <p>4) Alumni</p> <p>Answer before DVV Verification : A. All 4 of the above Answer After DVV Verification: B. Any 3 of the above Remark : Input consider as per given HEI response.</p>																																								
2.1.1	<p>Average Enrolment percentage (Average of last five years)</p> <p>2.1.1.1. Number of students admitted year-wise during last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>3079</td> <td>3138</td> <td>3156</td> <td>3318</td> <td>3359</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>742</td> <td>712</td> <td>727</td> <td>777</td> <td>820</td> </tr> </tbody> </table> <p>2.1.1.2. Number of sanctioned seats year wise during last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>3615</td> <td>3579</td> <td>3579</td> <td>3882</td> <td>3882</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	3079	3138	3156	3318	3359	2021-22	2020-21	2019-20	2018-19	2017-18	742	712	727	777	820	2021-22	2020-21	2019-20	2018-19	2017-18	3615	3579	3579	3882	3882	2021-22	2020-21	2019-20	2018-19	2017-18					
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2021-22	2020-21	2019-20	2018-19	2017-18
978	984	888	984	984

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
274	239	279	330	333

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
270	237	270	324	326

Remark : Input edited as per given clarification documents, others not consider.

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

2.4.3.1. **Total experience of full-time teachers**

Answer before DVV Verification : 3213.82

Answer after DVV Verification: 3187

2.5.2 **Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years**

2.5.2.1. **Number of complaints/grievances about evaluation year wise during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
524	350	308	489	540

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
524	350	308	489	540

Remark : Input edited as per given clarification documents.

3.2.4 **Average percentage of departments having Research projects funded by government and non-**

government agencies during the last five years**3.2.4.1. Number of departments having Research projects funded by government and non-government agencies during the last five years**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
09	05	06	07	06

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
11	05	06	07	06

3.2.4.2. Number of departments offering academic programmes

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	12	11	12	12

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
11	12	11	12	12

Remark : Input edited as per given clarification documents.

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of Ethics committee**
- 3. Plagiarism check through software**
- 4. Research Advisory Committee**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : Input edited as per given clarification documents, HEI not provided any documents not related to the plagiarism check through software

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

3.4.2.1. How many Ph.Ds are registered within last 5 years

Answer before DVV Verification : 19

Answer after DVV Verification: 82

3.4.2.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification : 15

Answer after DVV Verification: 53

3.4.4 **Number of books and chapters in edited volumes / books published per teacher during the last five years**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
49	91	76	69	81

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
37	71	62	51	62

3.5.2 **Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).**

3.5.2.1. **Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)**

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	73.31	2	00

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
00	00	196.11	6.98	00

Remark : Input edited as per given highlighted audited statement.

3.6.2 **Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years**

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
79	20	12	04	04

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
0	0	0	0	0

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
65	72	100	44	06

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
1	8	2	4	4

Remark : Input edited as per given clarification documents.

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

3.6.4.1. Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
2151	1801	2097	1105	480

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
100	632	155	310	310

Remark : Input edited as per given clarification documents.

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

3.7.1.1. Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
832	174	326	199	145

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
173	55	113	85	81

Remark : Input edited as per given data template, considering one collaborative agency once.

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

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

Answer before DVV Verification : 263

Answer after DVV Verification: 263

Remark : As per clarification documents , HEI input is selected.

4.3.3 Bandwidth of internet connection in the Institution.

Answer before DVV Verification : ?50 MBPS

Answer After DVV Verification: <5 MBPS

Remark : As per given documents input not satisfied.

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: D. 1 of the above

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
16	04	10	16	25

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
6	4	0	9	15

Remark : Input edited as per given clarification documents.

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

5.3.3.1. Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
10	00	03	04	18

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
4	00	3	4	16

Remark : Input edited as per given data template, Events cannot be split into activities.

5.4.2 Alumni financial contribution during the last five years (in INR).

Answer before DVV Verification : D. 2 Lakhs - 5 Lakhs

Answer After DVV Verification: E. <2 Lakhs

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

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

Answer before DVV Verification:

2021-22	2020-21	2019-20	2018-19	2017-18
06	09	81	52	151

Answer After DVV Verification :

2021-22	2020-21	2019-20	2018-19	2017-18
4	7	68	43	147

	Remark : Input edited as per given clarification documents.
6.5.3	<p>Quality assurance initiatives of the institution include:</p> <ol style="list-style-type: none"> 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements 2. Collaborative quality initiatives with other institution(s) 3. Participation in NIRF 4. Any other quality audit recognized by state, national or international agencies (ISO Certification) <p>Answer before DVV Verification : All of the above Answer After DVV Verification: 3 of the above</p>
7.1.2	<p>The Institution has facilities for alternate sources of energy and energy conservation measures</p> <ol style="list-style-type: none"> 1. Solar energy 2. Biogas plant 3. Wheeling to the Grid 4. Sensor-based energy conservation 5. Use of LED bulbs/ power efficient equipment <p>Answer before DVV Verification : A. 4 or All of the above Answer After DVV Verification: A. 4 or All of the above Remark : Input edited as per given clarification documents.</p>
7.1.5	<p>Green campus initiatives include:</p> <ol style="list-style-type: none"> 1. Restricted entry of automobiles 2. Use of Bicycles/ Battery powered vehicles 3. Pedestrian Friendly pathways 4. Ban on use of Plastic 5. landscaping with trees and plants <p>Answer before DVV Verification : A. Any 4 or All of the above Answer After DVV Verification: C. 2 of the above</p>
7.1.7	<p>The Institution has disabled-friendly, barrier free environment</p> <ol style="list-style-type: none"> 1. Built environment with ramps/lifts for easy access to classrooms. 2. Divyangjan friendly washrooms 3. Signage including tactile path, lights, display boards and signposts 4. Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

	<p>Answer before DVV Verification : B. 3 of the above Answer After DVV Verification: C. 2 of the above</p>
7.1.10	<p>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</p> <ol style="list-style-type: none"> 1. The Code of Conduct is displayed on the website 2. There is a committee to monitor adherence to the Code of Conduct 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized <p>Answer before DVV Verification : A. All of the above Answer After DVV Verification: D. 1 of the above</p>

2.Extended Profile Deviations

ID	Extended Questions																				
1.2	<p>Number of full time teachers year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>177</td> <td>187</td> <td>200</td> <td>202</td> <td>204</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> </tr> </thead> <tbody> <tr> <td>188</td> <td>181</td> <td>181</td> <td>192</td> <td>192</td> </tr> </tbody> </table>	2021-22	2020-21	2019-20	2018-19	2017-18	177	187	200	202	204	2021-22	2020-21	2019-20	2018-19	2017-18	188	181	181	192	192
2021-22	2020-21	2019-20	2018-19	2017-18																	
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