



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

AJAY BINAY INSTITUTE OF TECHNOLOGY

AJAY BINAY INSTITUTE OF TECHNOLOGY, SECTOR-1,CDA, CUTTACK,
ODISHA-753014
753014
www.abit.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

September 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Inaugurated in 1998 by a group of committed philanthropists, Ajay Binay Institute of Technology was established with the mission of nurturing skilled engineers in the underdeveloped state of Odisha. Initially commencing with four fields - Mechanical Engineering, Electrical Engineering, Electronics and Telecommunication Engineering, and Computer Science and Engineering - the institution has since expanded its offerings. It now provides a total of six engineering courses, encompassing Civil Engineering and Electrical & Computer Engineering. Furthermore, the institute extends its academic portfolio to include three Post Graduate Programs: Master of Business Administration, Master of Computer Applications, and Master of Computer Science & Engineering.

Presently, the institute accommodates 360 students across its six Under Graduate Programs, while the MBA and MCA programs admit 60 students each. Additionally, the M.Tech program in Computer Science & Engineering accepts 18 students. The institute prides itself on its comprehensive facilities, which encompass contemporary buildings, fully furnished classrooms, fully equipped laboratories, workshops, an advanced computer centre, seminar halls, a language laboratory, and a library building with a centralized reading room. Supplementary amenities like a canteen, M.I. centre, banking services, and separate hostels for male and female students contribute to the holistic student experience. In support of the students' all-round growth, sporting provisions such as volleyball, badminton, and basketball courts are also made available.

The administration nurtures a broader vision and mission of elevating the institute to top-tier status, dedicated to serving students from rural backgrounds. They are committed to providing state-of-the-art amenities to deliver top-notch technical education that remains economically accessible to all students. Their enduring goals include achieving institutional autonomy and, in the long run, attaining the prestigious status of a deemed university.

Vision

OUR VISION

To promote quality teaching, exploration, research and facilitate holistic development of students that would help create capable technical manpower needed for industry and academia.

Mission

OUR MISSION

- To enable efficiency and prosperity in the society through application of technical knowledge and in collaboration with industry and other institutions.
- Ensure effective teaching on contemporary topics and a rational examination system.
- Support and create centers of excellence for exploratory technical and behavioral projects that would promote originality and uniqueness.
- Establish partnerships with local industries for collaborating, understanding, and addressing real-life technical challenges.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Strengths:

1. **Quality Teaching:** The institute boasts a highly dedicated and experienced group of teachers who possess excellent domain knowledge, communication skills, and are student-friendly.
2. **Academic Processes:** The Institute follows well-defined academic processes and employs tracking mechanisms to ensure adequate rigor and course coverage during the semester for students. A sequence of steps, including planning, continuous monitoring, and post-examination performance analysis, is undertaken to ensure continuous improvement in academics.
3. **Examination System:** The institute prioritizes the fair and honest conduct of examinations, both external and internal, which fosters a sense of integrity among students, teachers, and the society.
4. **Location and Infrastructure:** The institute has adequate infrastructure, including nearby hostels, and its laboratories are well-equipped. However, its exceptional location in the town of Cuttack adds to its appeal. The institution is situated at the western tip of the city, where the river Mahanadi bifurcates into the Mahanadi and Kathajodi rivers. The surroundings are beautiful and invigorating. Access to the institution is convenient through the adjacent ring road, which encircles the entire city, providing connectivity to the hinterlands of Cuttack district and all corners of the country.
5. **Holistic Development for Students:** The institution prioritizes the co-curricular and extracurricular development of students to enable them to become successful professionals and responsible citizens. This includes community associations, sports, cultural programs, and technical society-related activities.
6. **Value-Based, Low-Cost Education:** The institute offers education at affordable costs, benefiting lower and middle-class students in the region and providing immense support to both students and parents.
7. **Ragging and Security:** The institution maintains a ragging-free environment, and the town of Cuttack, where students reside, is known for its peaceful atmosphere. Consequently, both male and female students can live happily and safely.

Institutional Weakness

Weakness:

Limited Control on Student's Intake: The students joining in the institute are allocated by the Odisha Joint Entrance Examination. This causes a spectrum of students with diverse background and abilities leading to requirement of multiple mechanisms of student development. So much of diverse planning and effective implementation to ensure inclusive development for all is limited by available hours from faculty and HODs.

Institute Needs to Follow University Mandated Curriculum: The University Guided curriculum does not address the requirements of students coming in from a weak senior secondary school system. The nature of subjects and adjustment time available for students as they join the courses is not adequate and results in poor performance in initial semesters.

Regulatory mechanism along with current admission scenario is leading to Financial constrains, which eventually affects other aspects of the functioning of the Institute.

Institutional Opportunity

1. **Autonomy for Established Institutes:** The institute has been in existence for over 15 years, and the University is considering granting more autonomy to such institutions. This autonomy would alleviate several constraints, including curriculum, timing, and engagement with various development bodies.
2. **Increased Emphasis on Vocational Courses:** Both the Central Government and the State Government have introduced schemes to promote vocational education at various levels. As the only institution providing higher technical education in Cuttack City, the institute is strategically positioned to attract students seeking to enhance their vocational skills. The institute is actively exploring ways to utilize its existing infrastructure and capacity to offer education in these schemes, which would help overcome financial challenges and foster growth.

Institutional Challenge

Making Students Job Worthy:

The Institute receives a major percentage of students from the vernacular medium background and enabling them through technology, language and interaction skills concurrently to make them job-worthy has been a consistent challenge.

The addition of large capacities in Government Technical Institutions is leading to further problems in student quality and the financial viability of the Institution.

The resources for breaking into the upward spiral will be trust, accountability, knowledge, or any asset that will help the institute to thrive.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The institute is affiliated with Biju Patnaik University of Technology, Rourkela. It operates as a self-financing institution governed by the Ajay Binay Institute of Technology and Piloo Mody College of Architecture Society and adheres to the curriculum provided by the University.

The faculty plays a pivotal role in designing the curriculum by undertaking syllabus modifications. This process involves inviting all members of the Board of Studies and senior faculty from various engineering institutes to participate in discussions and contribute their ideas. The institute also permits faculty members to attend similar workshops organized by the University.

Academic flexibility and the bridging of the gap between the academic curriculum and practical application are achieved through the organization of certificate courses, seminars, and collaborations through Memorandums of Understanding (MOUs) with significant industries. The institute places emphasis on promoting self-employability by conducting diverse Entrepreneurship Development Programs.

Furthermore, the institute prioritizes catering to the needs of both slow learners and advanced learners. It fosters communal awareness and community service among students as part of an outcome-based education approach. The processes for syllabus implementation and monitoring have been developed and documented.

The curriculum adopts the Choice Based Credit System (CBCS) pattern and provides elective courses in all six undergraduate and three postgraduate programs offered by the institute. Regular feedback processes are conducted concerning the curriculum and teaching-learning methods. The institute consistently gathers feedback on the curriculum and teaching-learning processes, utilizing the outcomes to implement corrective measures.

Teaching-learning and Evaluation

Achieving excellence in teaching and learning is accomplished by recruiting competent and skilled teaching faculty. To ensure the smooth delivery of instruction, meticulous planning is undertaken before the start of each semester. The institute employs a blend of traditional teaching methods and student-cantered learning practices, including ICT-based learning and project-based learning, among others.

The institution assesses the learning levels of its students through scheduled tests and other activities integrated into the curriculum. These evaluations help identify individual strengths and areas for improvement, allowing for tailored and unique learning experiences based on each student's theoretical capabilities. Gauge comprehension of concepts taught in both classroom and laboratory settings, regular tests and tutorials are conducted to assess learners' aptitude. Implementing a feedback mechanism where students provide input on faculty performance contributes to an ongoing enhancement of the teaching-learning process.

The institute has developed academic plans, course plans, and lesson plans to guide its educational initiatives. Student-centric methods such as experiential learning, group learning, interactive techniques, and flipped classes are employed at various levels – program, course, and lesson – to cater to diverse learning needs. Examples of student-centric methods and innovations are documented in the SSR.

Recognizing the importance of assessment in the learning process, the institute has reformed continuous assessment and project evaluation procedures, emphasizing transparency within the assessment system. This commitment to transparency is maintained throughout all examination processes. Class tests are conducted by the college examination cell in accordance with university regulations. The examination cell assumes responsibility for distributing question papers and answer booklets during exams. Following the examinations, the answer sheets are submitted to the respective faculty members for evaluation. The results are then recorded in the examination section. Evaluated answer sheets are shared with students to clarify the marks awarded to them.

Research, Innovations and Extension

The Research Committee of ABIT comprises a coordinator (R&D), Heads of Departments (HODs), and Department Coordinators who collaborate to promote various research activities. The institute has a unique R&D incentive scheme designed to bolster interdisciplinary research. Faculty members are duly recognized and encouraged to participate in various workshops and conferences to stay updated with the latest knowledge and technological advancements. The institute has allocated financial resources in the budget to support research needs.

Each faculty member is encouraged to publish at least one paper in a UGC-recognized journal annually. Many faculty members pursue Ph.D. degrees and publish their research papers in reputable national and international journals. Workshops and seminars are organized on topics such as Intellectual Property Rights and Industry-Academia innovative practices. The institution has established a code of ethics to prevent research malpractices and plagiarism.

Field trips, industrial visits, and in-plant training opportunities are organized for students. Extension activities encompass blood donation camps, awareness programs, providing food and clothing to orphanages, and engaging in environmental protection initiatives. The institute has taken initiatives to provide relief to individuals affected by cyclones and floods.

Infrastructure and Learning Resources

ABIT is located in the heart of the "Silver City," Cuttack. The college boasts an expansive 5-acre campus featuring well-designed buildings for various departments, connected by well-established roads. The ambiance is inviting, adorned with lush green lawns, plants, and trees. Separate hostels for boys and girls can accommodate approximately 600 boys and 300 girls. The college is easily accessible by road, rail, and air. The nearest railway junction is Cuttack Railway station, and the nearest airport is Bhubaneswar.

The campus comprises 30 well-equipped classrooms with LCD projectors and whiteboards, along with 48 laboratories and 415 computing systems. It also houses a 300-audience capacity auditorium with four air conditioners, an air-conditioned conference hall, and eight non-AC seminar halls.

Infrastructural development receives consistent prioritization, with funds allocated annually. Each department is furnished with office rooms and faculty rooms. Lift facilities cater to the needs of physically challenged individuals. High-speed internet connectivity is provided both in the campus and hostels. Modern laboratory equipment, reputable journals, rare books, and a digital library extensively support students in their research endeavours.

To encourage physical fitness and sportsmanship, the campus features a state-of-the-art gym, badminton courts, a yoga and meditation room, football and cricket grounds, and basketball, kabaddi, and tennis courts. Proper maintenance of all facilities is diligently undertaken by designated personnel.

Student Support and Progression

The institute has an annual intake of 498 students and attracts a substantial number of students from various geographical regions across India. The Institute adheres to a mentoring system to enhance the student-teacher relationship, and this is regarded as one of our best practices. Each mentor is assigned approximately 30 students, whom they guide and oversee in terms of both academic and personal progress. The mentor maintains continuous communication with the parents or local guardians of these 30 students.

The Institute's Training & Placement (T&P) cell offers career guidance and arranges campus recruitment drives for students. To enhance students' career prospects, the Training & Placement cell conducts various

developmental activities, including online tests, soft skills programs, add-on courses, and group discussions. The T&P Cell also strives to motivate students, helping them realize their life goals. The development of entrepreneurial skills is fostered through the Entrepreneurship Development Cell (EDC). Over the past five years, the institute has established Memorandums of Understanding (MoUs) with around 52 industries, further solidifying our commitment to practical skill development and industry collaboration.

Governance, Leadership and Management

The institute is managed by the Ajay Binay Institute of Technology and Piloo Mody College of Architecture Society, with faculty members actively participating in the decision-making process at various levels as part of the management committee. For discussing the institute's development, the management committee maintains consistent communication with the Principal and Deans.

The institution has a well-defined vision and mission, with engagement from all stakeholders in shaping these aspects along with the institution's values. ABIT is governed by specific strategic planning that involves objectives, SWOT analysis, and an action plan. All decisions and actions are taken by the relevant individuals, with an organizational chart in place that guides reporting lines. People are accountable to their reporting heads, and higher authorities oversee administration.

Operations related to development, planning, finance, student support, administration, and examinations are digitized. Various committees are established to assess the effectiveness of different campus activities, with faculty and student members contributing. The institute provides professional technical training as well as training on emerging trends and technologies to students. Financial support is extended to faculty to attend external training programs.

Performance appraisal and student feedback are integral to the annual appraisal process. The institution's finances are generated through tuition fees and alumni contributions. These finances are managed by the society and the Accounts section.

In 2015, the Internal Quality Assurance Cell (IQAC) was established and remains functional in overseeing quality matters within the institution.

Institutional Values and Best Practices

Since its inception, the institution has maintained a student-centric approach, with a strong focus on student welfare. The goal is to nurture students as responsible and valuable citizens of the nation, emphasizing their comprehensive growth as multi-dimensional individuals. Over the past five years, the institute has organized numerous gender equity programs and awareness lectures on various topics.

As part of our commitment to sustainability, we have implemented solar energy as an alternative source of energy. The principle of "Reduce, Reuse, and Recycle" guides our management of waste energy on campus. Rainwater harvesting is employed within the campus premises. Regular maintenance efforts ensure a green and eco-friendly environment. To instill environmentally friendly practices in young minds, various green initiatives are undertaken. Facilities such as lifts and restrooms are available to cater to the needs of differently-abled students and visiting parents. Consistent initiatives are undertaken to uphold human values and professional ethics in society. Various programs are organized to promote mutual respect, universal values, and a sense of humanity, with active involvement of students playing a pivotal role.

The institute has adopted certain unique practices as Best Practices, including experiential learning through ABIT's Centers of Applied Research (CAR) and the ABIT-Performance and Readiness Enhancement Program. Financial support is provided to students excelling academically as well as to those who face financial constraints to ensure their retention in academic pursuits.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	AJAY BINAY INSTITUTE OF TECHNOLOGY
Address	Ajay Binay Institute of Technology, Sector-1,CDA, Cuttack, Odisha-753014
City	CUTTACK
State	Orissa
Pin	753014
Website	www.abit.edu.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	LEENA SAM ANTARAY	0671-2362015	9861181558	0671-2362015	abitew@yahoo.co.in
Professor	Prasant Kumar Pani	0671-2362012	7608007801	-	prasant.pani@abit.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Day

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Orissa	Biju Patnaik University of Technology	View Document

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC		
12B of UGC		

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	02-01-2023	12	Approval for the current academic year

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Ajay Binay Institute of Technology, Sector-1,CDA, Cuttack, Odisha-753014	Urban	2.5	18351

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	BTech,Civil Engineering,	48	Intermediate	English	60	8
UG	BTech,Computer Science And Engineering,	48	Intermediate	English	60	60
UG	BTech,Electrical And Computer Engineering,	48	Intermediate	English	60	60
UG	BTech,Electrical Engineering,	48	Intermediate	English	60	23
UG	BTech,Electronics And Telecommunication Engineering,	48	Intermediate	English	60	13
UG	BTech,Mechanical Engineering,	48	Intermediate	English	60	20
PG	MBA,Mba General Management,	24	Any Graduate	English	60	57
PG	MCA,Master In Computer Application,	24	B.Sc Graduate	English	60	60
PG	Mtech,Mtech In Computer Science And Engineering,	24	B.Tech or equivalent	English	18	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	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	12				11				75			
Recruited	9	3	0	12	8	3	0	11	44	31	0	75
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				57
Recruited	53	4	0	57
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				19
Recruited	17	2	0	19
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.	5	2	0	4	3	0	1	0	0	15
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	4	1	0	4	0	0	43	31	0	83
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	0	0	0	0	0	0	0
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	148	0	0	0	148
	Female	64	0	0	0	64
	Others	0	0	0	0	0
PG	Male	80	0	0	0	80
	Female	55	0	0	0	55
	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	32	60	53	95
	Female	23	39	27	53
	Others	0	0	0	0
ST	Male	6	9	3	7
	Female	1	2	1	3
	Others	0	0	0	0
OBC	Male	107	100	95	72
	Female	45	33	22	28
	Others	0	0	0	0
General	Male	111	152	125	159
	Female	50	68	56	77
	Others	0	0	0	0
Others	Male	32	0	0	0
	Female	11	0	0	0
	Others	0	0	0	0
Total		418	463	382	494

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	<p>? Vision ? To promote quality teaching, exploration, research and facilitate holistic development of students that would help create capable technical manpower needed for industry and academia. ? Plan ? To enable efficiency and prosperity in the society through application of technical knowledge and in collaboration with industry and other institutions. ? Ensure an effective teaching on contemporary topics and a rational examination system. ? Support and create centres of excellence for exploratory technical and behavioural projects that would promote originality and uniqueness. ? Establish partnership with local industries for collaborating, understanding and addressing real life. ? Humanities and science are part of the curriculum at affiliating University (BPUT). ? The credit based system is implemented according to the frame work of affiliated BPUT University ? The institution and its departments encourage students to pursue mini as well as major projects in their areas of interest which is useful to society ? This organisation has set up 7 centres of applied research to encourage the students for inter disciplinary research work.</p>
2. Academic bank of credits (ABC):	<p>Ajay Binay Institute of Technology is affiliated with BPUT, Odisha and has implemented the choice-based credit system (CBCS) starting from the academic year 2018-19. This system includes both Professional and Open elective courses, promoting a multidisciplinary approach to enhance critical thinking. Students have the flexibility to choose elective subjects, and faculty members are encouraged to design their teaching methods aligned with the university's framework. The university defines the assessment structure, while educational approaches include Group Discussions, Quizzes, Role Play, Case Studies, Assignments, Interactive Seminars, Workshops, Guest Lectures, Conferences, and practical demonstrations.</p>
3. Skill development:	<p>Our institution focuses on advancing students' technical skills and social competencies through rigorous standards and continuous improvement of academic programs. We provide thorough career guidance for optimal industryaligned placements, foster entrepreneurial ambitions, and supplement core education with life sciences and humanities, encompassing Environmental Sciences, Gender</p>

	Sensitization, and Professional Ethics.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	ABIT is affiliated to BPUT, Odisha and follows university rules and curriculum. The following subjects are included in the academic curriculum for the students. ? Environment Science ? Constitution of India ? Universal Human Values ? Essence of Indian Knowledge Tradition ? Future Ready Contributor Programme Lab
5. Focus on Outcome based education (OBE):	In 2018, our institution adopted Outcome-Based Education (OBE) and adheres to it diligently. We also meticulously adhere to the Program Outcomes (POs) outlined by the National Board of Accreditation (NBA) for our various programs. Our approach to crafting internal exam question papers aligns with the principles of Bloom's Taxonomy. The Course Outcomes (COs) and Program Specific Outcomes (PSOs) are tailored to each program and are established by the institute, guided by the principles of OBE. This process shapes the curriculum, overseen by the Course Advisory Committee (CAC)
6. Distance education/online education:	Amidst the Covid pandemic, we have embraced a combination of online and in-person learning approaches. This involves utilizing platforms such as Google Meet, Google Classroom, ZOOM, and YouTube.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	The Electoral Literacy Club (ELC) of ABIT is a forum that aims to educate and engage the college community on various aspects of electoral democracy, following the guidelines of the Election Commission of India (ECI) and the Systematic Voters' Education and Electoral Participation (SVEEP) programme.
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?	The ELC organises different activities and games that are devised by the ECI to make the students and staff aware of their electoral rights and duties, and to acquaint them with the process of voter registration and voting. The ELC has a team of three student coordinators and three faculty members from the Humanities Department who are responsible for

	managing the club activities. The ELC holds regular meetings and sessions to stimulate the interest and curiosity of the students on electoral matters.
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.	The ELC has also initiated several creative and innovative programmes and projects to spread electoral literacy and awareness beyond the college campus. Some examples of these are: Voluntary participation by the students in electoral processes, such as creating awareness campaigns, encouraging ethical voting, increasing the involvement of the marginalized sections of society, such as transgender people, sex workers, disabled people, senior citizens etc by conducting special outreach programmes for them.
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.	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. The college also hosts various competitions and events on electoral themes, such as quiz, poster making, slogan writing, essay writing etc.
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.	The college has also taken steps to facilitate the enrolment of eligible students as voters in the electoral roll. It has provided both online and offline facilities for voter registrations in the college premises and motivated and assisted the students to apply for voter ID cards and to check their names in the electoral roll. The college has also tried to impart the knowledge and importance of voting and their role as responsible citizens. We are happy with the achievements of our college in electoral literacy and participation and hope to sustain its efforts in this direction. We believe that electoral literacy is not only a skill but also a value that can enhance democracy and empower citizens.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1398	1460	1451	1388	1260

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 133

File Description	Document
Upload Supporting Document	View Document
Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
94	93	106	108	107

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
591.349	315.908	301.109	387.98	390.735

File Description	Document
Upload Supporting Document	View Document

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

Ajay Binay Institute of Technology is affiliated to Biju Patnaik University of Technology (BPUT) Rourkela. So the institute implements the curriculum recommended by Biju Patnaik University of Technology.

Implementation of BPUT curriculum

Proper implementation of curriculum and monitoring mechanism:

The principal holds meetings with the Deans, Heads of Departments (HODs), and the Internal Quality Assurance Cell (IQAC) to create a strategy for effectively implementing the curriculum and developing the academic calendar, following both the BPUT calendar and the college's own calendar.

The institute adheres to the BPUT Academic calendar as well as its own. Faculty members are assigned subjects based on their expertise, preferences, and previous semester's class performances. Approved teaching methods are employed in line with the IQAC guidelines.

Teaching and lab plans are endorsed by HODs and countersigned by the Dean of Academics before each semester, and students are informed about them by the respective course faculty. Course materials are assessed by the IQAC in collaboration with senior faculty members and HODs.

Regular monitoring by the IQAC ensures adherence to the timetable, academic calendar, and teaching methods. Weekly academic review meetings are scheduled and discrepancies are addressed.

To continually gauge academic progress, students undergo class tests, surprise tests, and practical exams during the semester. Bridge courses are introduced for first-year and lateral entry students to solidify their foundational understanding of Mathematics and Engineering. Various techniques such as coursework, peer education, group debates, brainstorming sessions, NPTEL lectures, case studies, projects, and ICT tools enhance the teaching-learning process.

Each faculty member mentors a group of 30 students, conducting weekly meetings and offering support to underperforming students.

Input from recruiters, industry professionals, academia, and alumni is regularly incorporated into the curriculum. At the end of each semester, faculty members convene to discuss innovative approaches and evaluate outcomes. Industry and alumni feedback heavily influences course and program design.

Faculty members are encouraged to attend orientation, refresher courses, workshops, and seminars to stay updated with modern technologies, thereby improving their teaching skills. Faculty self-evaluation is promoted, aiming to achieve program educational objectives (PEOs) and program objectives (POs) in each branch of study. This ensures that students not only gain strong foundational knowledge but also essential managerial skills for lifelong learning.

Efforts are made to keep the staff's skills up to date. The college offers abundant learning materials, including books, journals, magazines, teaching models, and software to facilitate effective curriculum delivery. The library committee manages procurement decisions for books and e-journals.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 67

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format	View Document
Evidence of course completion, like course completion certificate etc. Apart from the above:	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Other Upload Files

1

[View Document](#)

1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 78.17

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1164	1197	1067	983	1027

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

The institution places a significant emphasis on the integration of crosscutting issues that hold paramount importance in shaping well-rounded and responsible professionals. This commitment is evident through its incorporation of key aspects such as Professional Ethics, Gender Equality, Human Values, Environmental Consciousness, and Sustainability throughout the curriculum. This comprehensive approach aims to nurture not only academically proficient individuals but also socially aware and ethically responsible citizens.

Professional Ethics, a cornerstone of the institution's curriculum, is interwoven into the fabric of every academic program. Students are exposed to real-world scenarios that challenge their ethical reasoning and decision-making capabilities. Case studies, discussions, and workshops delve into ethical dilemmas that professionals may encounter in their careers. By grappling with these issues, students develop a strong ethical compass that guides their actions in an increasingly complex professional landscape.

The institution's commitment to Gender Equality is reflected in its curriculum's design. Gender-sensitive content is embedded across disciplines, fostering an understanding of the importance of equal opportunities and representation. By addressing stereotypes and biases, students are encouraged to challenge and transform societal norms. Workshops and seminars on gender-related topics empower students to become advocates for a more inclusive and equitable world, irrespective of their chosen field. Human Values are at the core of the institution's educational philosophy. Beyond technical expertise, the curriculum instills qualities like empathy, integrity, and social responsibility. Courses that explore the intersections of ethics, philosophy, and humanity encourage students to reflect on their roles as individuals contributing to the betterment of society. The institution recognizes that producing graduates who prioritize human values is integral to building a compassionate and just global community.

Environmental Stewardship is a defining aspect of the institution's curriculum. Sustainability is not just a stand-alone subject; it's a lens through which every discipline is examined. From engineering to arts, students learn to consider the environmental impact of their work. The curriculum promotes a holistic understanding of sustainability by delving into topics such as renewable energy, waste management, and ecological conservation. Graduates emerge not only as proficient professionals but as champions of a healthier planet.

Sustainability Education is seamlessly integrated into the curriculum. Students learn to apply their skills and knowledge to address real-world challenges related to environmental degradation, resource depletion, and climate change. They engage in projects that promote sustainable practices, finding innovative solutions that balance human needs with the preservation of natural resources. This approach equips graduates to be leaders in sustainable development, driving positive change in their workplaces and communities.

In conclusion, the institution's commitment to integrating crosscutting issues into its curriculum underscores its dedication to producing socially responsible, ethically sound, and environmentally conscious professionals. By incorporating Professional Ethics, Gender Equality, Human Values, Environmental Awareness, and Sustainability throughout the learning journey, the institution equips its students with the tools needed to navigate the complexities of the modern world. As these graduates enter the workforce, they carry with them a profound understanding of their roles in shaping a more just, equitable, and sustainable future.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.3.2

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

Response: 72.46

1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1013

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 89.56

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
418	463	382	494	473

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
498	498	498	498	498

File Description

Document

Institutional data in the prescribed format

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 93.13

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
105	160	160	160	160

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

2022-23	2021-22	2020-21	2019-20	2018-19
160	160	160	160	160

File Description	Document
Institutional data in the prescribed format	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio
(Data for the latest completed academic year)

Response: 14.87

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 and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

The institution has transitioned from a traditional teacher-centric approach to a student-centric one, where students play an active and dynamic role in the learning process. The teaching methods are tailored to meet the specific needs of the students, and the institute employs a blended education approach, which fosters a personalized and student-centered learning environment, offering enhanced access to educational content.

Experiential Learning: Faculty members facilitate learning by immersing learners in immersive teaching experiences, involving demonstrations, videos, project development, and student-led seminar presentations.

Lecture Method: The conventional lecture method, widely used by faculty members, is employed to elucidate and enhance the content of educational materials, aiming for improved comprehension of subjects.

Interactive Method: Faculty members employ interactive methods to engage learners, encouraging participation in activities like group discussions, subject quizzes, learning games, as well as fostering dialogues through question and answer sessions related to the subjects.

ICT-Enabled Teaching: The institution leverages technology for teaching, equipping classrooms with Wi-Fi, projectors, and smart tools. This encompasses e-learning resources, online testing, and the use of LCD projectors for classes, seminars, and workshops. Learning materials are also made available to students on the college website.

Group Learning Method: Group learning strategies promote collaborative problem-solving and technical skill development among students. Diverse groups of fast and slow learners are formed, engaging in various tasks that enhance overall learning proficiency.

Project-Based Learning: All academic branches incorporate project-based learning, with faculty members guiding students in project preparation. Project work is typically integrated into the 7th or 8th semester of various departments.

Case Study Analysis and Discussion: The case study approach encourages cooperative learning, fostering skills in critical thinking, problem analysis, and collaborative solution discussions.

Student Seminars: Departmental student seminars provide learners with opportunities to present on contemporary topics, enhancing their knowledge and skills in a public speaking and research context.

Summer Internship: From the second year onward, students can opt for internships that offer valuable on-the-job skills and enriching learning experiences.

E-Resources: The institution provides electronic resources like digital libraries and memberships to organizations such as DEINET, IE(I), IEEMA, and CSI. E-journals from DELNET and IE are accessible to students, enhancing their learning journey. The campus is equipped with Wi-Fi to facilitate online learning.

The institution effectively addresses learner diversity through well-planned strategies. Initial assessment through exams and mentor-guided training is followed by an entry-level test, identifying fast and slow learners. Remedial classes, personalized mentorship, and communication skill enhancement support slow learners. Advanced learners benefit from problem-solving training, specialized courses, competitive exam preparation, and participation in conferences and competitions. Overall, the institution's comprehensive approach caters to learners' varied backgrounds, abilities, and needs.

In conclusion, the institution's pedagogical shift from teacher-centric to student-centric learning methods is evident through various strategies. By embracing experiential learning, interactive techniques, and incorporating technology, the institution creates a dynamic and personalized learning environment. Project-based learning, case study analyses, student seminars, and internships further enrich students' academic journeys.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 100

2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
94	93	106	108	107

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 18.11

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
19	18	18	19	18

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	View Document
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

Response:

ABIT, Cuttack is affiliated with Biju Patnaik University of Technology (BPUT) and adheres to the syllabus prescribed by BPUT. Various methods are employed for continuous internal evaluation within the institution. Faculty inputs play a crucial role in this process.

The performance of students in all subjects is assessed through class tests, assignments, surprise tests, and quizzes conducted by respective faculty members. According to university guidelines, class tests are held twice for each theory subject, with a total combined score of 30 marks. Assignments, surprise tests, and quizzes each carry 5 marks, while 5 marks are allotted for attendance, summing up to a total of 50 marks for the Internal Test.

To maintain transparency and fairness, detailed discussions about syllabus coverage and exam schedules occur during HoDs meetings. Students receive advanced information regarding the syllabus, portions, and test schedules. Faculty-generated question papers undergo scrutiny by the DAC/IQAC to uphold academic standards.

Class tests are organized by the college examination cell in compliance with university rules. They are responsible for providing question papers and answer booklets during exams. Once exams conclude, evaluated answer sheets are handed over to the respective faculty members for centralized evaluation.

Students can review their graded answer sheets within a week, cross-checking with peers and clarifying doubts. Faculty members discuss the question paper, offering correct answers to help students learn from their mistakes and improve their preparations for end-semester exams.

After students sign their answer sheets, they are collected and retained by faculty members. Results are displayed on the notice board and communicated to parents, ensuring transparency and allowing students to verify their marks.

Marks are then submitted to the Head of the Department/IQAC in the provided format for result analysis and entered into the IMS. A faculty meeting convened by the Head of the Department within a week of result declaration focuses on strategies to enhance student performance.

Following BPUT guidelines, the obtained marks are entered into the university's web portal within the stipulated timeframe.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

In an IQAC meeting, it was decided to prepare Program Outcomes (POs) and Course Outcomes (COs). Faculty members were asked to formulate COs for all subjects, while IQAC took responsibility for crafting the POs.

POs represent broad statements encompassing various knowledge and skills developed throughout the program. COs specify what learners will know and do by the end of each course. These outcomes are prominently displayed on notice boards, discussed in classrooms, and available on the institute's website for students to excel. COs are also included in respective course files.

The POs are aligned with the institute's vision and mission, formulated with input from stakeholders. Faculty communicates COs to learners at the start of the academic year, and the Dean of Academics conveys POs during induction. The institute prioritizes a student-centric education approach, focusing on what students should demonstrate by the end of their learning journey.

The teaching-learning process comprises three phases: Planning, Action, and Analysis. In the Planning phase, COs and objectives are set, course files designed, assessment methods established, and schedules and rubrics prepared.

The Action phase involves content delivery, question paper creation, internal assessments, and evaluation. In the Analysis phase, student marks are used to measure COs and POs attainment. This data drives continuous improvement.

Two methods assess outcomes: direct and indirect. The proposed method primarily employs the direct approach, analyzing student marks across the semester for each course.

The process of CO attainment begins with defining COs using action verbs based on Bloom's Taxonomy. Correlations are established between COs and POs on a 1 to 3 scale (1 low, 2 medium, 3 high). A mapping matrix of COs - POs is created for all program courses.

University exams and internal assessments carry weight in CO attainment. POs are achieved through both direct (80%) and indirect (20%) methods. Direct method focuses on CO attainment, with university results (67%), internal tests (20%), surprise tests (3.33%), quizzes (3.33%), and assignments/case studies (6.34%) contributing. Indirect method uses alumni surveys, exit surveys, and employer feedback.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

Assessment of Program Outcomes (POs) involves both direct and indirect methods. Direct assessment relies on students' performance in internal assessments and university exams, weighted at 80%, along with a 20% weight for indirect assessment, which includes alumni surveys, exit surveys, and employer feedback. PO attainment is evaluated for each graduating batch of students using the following formula: PO Attainment = (0.8 * Average PO attainment in direct method) + (0.2 * Average PO attainment in indirect method)

Where X represents points received in a specific PO from the 1st to the 8th semester, and Y is the number of mapped subjects.

- **STEP 1:-** At first the Course Outcomes are prepared (Maximum 6) by the concerned faculties as per the Revised Bloom Taxonomy of Learning.

SUBJECT-EPTD	
COURSE OUTCOMES	
Students will be able to	
CO.1	Describe the Power System Structure, Evolution, Sources of Energy & Generation of Power by Thermal, Hydro & Nuclear Plants
CO.2	Understand the Various Transmission-Line Parameters i.e. R, L & C so as to find Resistance, Inductance and Capacitance for Different Conductors and Circuits.
CO.3	Analyze different types of Transmission-Line and their Performance
CO.4	Understand different types of Insulators, String Efficiency & Mechanical Design of Overhead Lines
CO.5	Analyze balanced & unbalanced faults, different distribution systems and find the Voltage drops
CO.6	Understand the Underground Cable System in Transmission & Distribution and Power System Earthing for designing the Sub-Station

- **STEP 2:-** Program set the Attainment Level for the current academic year. For example for the Academic year **2022-23**

Set Attainment Level 1(LL):	Up to 65% of students score the set target in Internal and External Assessments
Set Attainment Level 2(ML):	Above 65% up to 75% of students score the set target in Internal and External Assessments
Set Attainment Level 3(HL):	Above 75% of students score the set target in Internal and External Assessments

ASSESSMENT TOOL	A1	A2	QT1	QT2	ST1	ST2	CT1	CT2	END SEM
WEIGHTAGE MARKS	2.5	2.5	2.5	2.5	2.5	2.5	15	15	100
AVERAGE OF CURRENT (EXAM)	2.11	2.21	1.93	2.04	2.23	2.09	12.59	12.35	Pass Percentage
TARGET AVERAGE (AVG. OF LAST 3 EXAM)	2	2	2	2	2	2	12.5	12.5	
% ATTAINMENT	90.00%	98%	88%	85%	90%	90%	63%	46%	95%
LEVEL	HL	HL	HL	HL	HL	HL	LL	LL	HL

COURSE OUTCOME CALCULATION

COURSE NAME	COURSE OUTCOME	A1	A2	QT1	QT2	ST1	ST2	CT1	CT2	ATTAINMENT LEVEL (INTERNAL)	END SEM LEVEL (EXTERNAL)	ATTAINMENT LEVEL (INTERNAL)	OVERALL LEVEL (EXTERNAL)
LEVEL		HL	HL	HL	HL	HL	HL	LL	LL		HL		
LEVEL POINT		3	3	3	3	3	3	1	1		3		
EPTD	CO.1	3		3		3		3		2.50	3	3	2.84
	CO.2	2		2		2		3		2.33	3	3	2.78
	CO.3		3		1		2		2	2.50	3	3	2.84
	CO.4		2		3		3	2	3	2.23	3	3	2.75

CO.5	3	3	2	3	2.45	3	3	2.82
CO.6	3	2	2	2	2.56	3	3	2.85

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.6.3**Pass percentage of Students during last five years (excluding backlog students)****Response:** 93.26**2.6.3.1 Number of final year students who passed the university examination year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
311	361	384	262	260

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

2022-23	2021-22	2020-21	2019-20	2018-19
319	366	398	277	332

File Description	Document
Institutional data in the prescribed format	View Document
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.88

File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

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

Response: 52.53

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

2022-23	2021-22	2020-21	2019-20	2018-19
16.46	6.5	16.37	12.2	1

File Description

Document

Upload supporting document

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

In view of this Ajay Binay Institute of Technology has created seven centers of applied research. Such as

- (a) Automation and Robotics
- (b) Composite materials
- (c) Data Science
- (d) Design and Prototype Development
- (e) Energy Efficiency and Sustainability
- (f) Market Research
- (g) Standard and Governance

(a) Automation and Robotics: - The establishment of the Center for Automation and Robotics aims to address the increasing need for skilled engineers specializing in embedded systems, industrial automation, and robotics.

(b) Composite materials: - The center is engaged in extensive research encompassing synthetic and bio-

based composite materials, manufacturing techniques, design principles, analytical methods, and experimental testing, with a particular focus on their industrial applications.

(c) Data Science: - A Data Science and Artificial Intelligence center has been established to equip students with the skills necessary for conducting intelligent data analysis, which constitutes a crucial component in various real-world applications.

(d) Design and Prototype Development: - This platform offers students an opportunity to transform their creative concepts into practical designs. It provides them with a collaborative, interdisciplinary setting where they can bring their ideas to life by creating functional prototypes.

(e) Energy Efficiency and Sustainability: - This platform serves as a hub for students to leverage their creative concepts in addressing pressing national and global challenges through the application of sustainable energy resources. The Energy Efficiency & Sustainable Energy Management program seamlessly integrates managerial expertise with a profound comprehension of responsible energy utilization and the advancement of sustainable energy sources.

(f) Market Research: - The establishment of the Centre for Marketing and Social Research has a clear objective: to empower students with the skills needed to recognize social and marketing challenges, carry out comprehensive research through detailed surveys and analysis, and offer viable solutions for real-world problems.

(g) Standard and Governance: - The Center for Standards, Governance, Risk & Compliance offers a practical educational experience designed to enable students to bridge the gap between engineering theories and their practical applications in the real world. It empowers students to grasp the principles of Software Development Life Cycle (SDLC) and educates them about standards, governance, and risk management.

Students from ABIT have the opportunity to join any of the research centers listed above by filling out an online form and specifying their reasons for selecting a particular center. A panel of experts in the respective focus areas will assess the submissions and confirm students' acceptance into the chosen research center. Once accepted, the center's leader will organize a meeting with mentors and faculty members associated with the center to outline the annual activity plan and resource requirements. This plan is then submitted for approval to the management. Periodic reviews of all activities are conducted by a leadership team to provide input for continuous improvement.

The definition of Centers of Applied Research (CAR) has been collaboratively developed through brainstorming sessions involving industry mentors, academic management from Ajay Binay Institute of Technology, and department heads.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.2.2

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

Response: 77

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

2022-23	2021-22	2020-21	2019-20	2018-19
18	10	11	20	18

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards

3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.97

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
44	28	21	15	21

File Description	Document
Link to the uploaded papers, the first page/full paper(with author and affiliation details)on the institutional website	View Document
Link to re-directing to journal source-cite website in case of digital journals	View Document
Links to the papers published in journals listed in UGC CARE list or	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.3.2

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

Response: 0.51

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

2022-23	2021-22	2020-21	2019-20	2018-19
20	4	14	14	16

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Extension Activities**3.4.1**

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

ABIT recognizes its moral & civic responsibility towards the society and continuously trying its best for a noteworthy impact for the betterment of the society & environment. The institute encourages its faculty members, staffs & its students to participate in various community development works through its social activity & community connect cell "CARE A-BIT". Exposure to extension and outreach activities helps the students to

- Implement the engineering knowledge to help society
- Face challenges of the real life problems
- Work in a team

- Develop leadership qualities
- Building positive attitude
- Work for bigger vision than individual ambition
- Reduce stress level
- Improve physical & psychological health
- Boost self esteem

It is not only a social activity cell which takes part in solving various social problems but also aims for a social harmony by integrating the individuals with the help of education, training and by creating awareness. In view of fulfilling its moral & civic responsibility towards society, the Social activity & community connectCell carried out the following activities:

- Plantation
- Swachh Bharat Abhiyan
- Blood Donation
- Fund generation for orphanage
- Road Safety awareness
- Awareness on cyclone management
- Solar light distribution
- International Yoga Day Celebration
- Awareness on drug abuse & illicit trafficking
- Feeding stray animals
- Gender Equality Awareness
- Awareness program on World Water Day
- Awareness on World No Tobacco Day
- Developing Library in School
- Computer Literacy Day Observation
- Workshop on Role of Technology in Social Sectors
- Workshop on Essence of Coding

All of these activities have a positive influence on the students, strengthening their community connections, developing their leadership skills, and boosting their confidence. They also help bring out the individual personalities of the students and increase their awareness. Moreover, they promote cleanliness in the neighborhood, proper waste disposal, and create sensitivity to these critical issues among the general public. The implementation of these initiatives has had a significant impact on the personal growth and development of those enrolled in these programs. Blood donation drives have not only encouraged empathy and compassion from donors, but they have also instilled a sense of dedication and moral obligation. A reduction in gender bias and patriarchal attitudes can be seen as a result of women's empowerment programs that educate boys and girls about women's issues and help them understand their rights. All of this results in responsible, well-informed and balanced citizenship.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies**Response:**

Ajay Binay Institute of Technology has received awards and recognitions for its involvement in extension activities from government and government-recognized bodies. The staff and students of this institution have received the following awards and recognition during the latest completed five academic years.

Sl. No.	Name of the activity	Name of the Award/ recognition	Name of the Awarding government/government-recognised bodies	Year of award
1	International Women Day	Letter of Appreciation	Matrubhumi Seva Parisad	2018-19
2	World Computer Literacy Day	Letter of Appreciation	Matrubhumi Seva Parisad	2018-19
3	Promise to Be Decent in Life	Letter of Appreciation	Matrubhumi Seva Parisad	2018-19
4	Swachh Bharat Abhiyan	Letter of Appreciation	Matrubhumi Seva Parisad	2018-19
5	Plantation Drive	Letter of Appreciation	Jeevan Kalyan Foundation	2019-20
6	Serving Cancer Patients	Letter of Appreciation	Matrubhumi Seva Parisad	2019-20
7	Motherhood Programme	Letter of Appreciation	Matrubhumi Seva Parisad	2020-21
8	Children's Day Celebration	Letter of Appreciation	Matrubhumi Seva Parisad	2020-21
9	Blanket Distribution	Letter of Appreciation	Jeevan Kalyan Foundation	2020-21
10	Swachh Bharat Abhiyan	Letter of Appreciation	Matrubhumi Seva Parisad	2020-21
11	National Women Empowerment Day	Letter of Appreciation	Jeevan Kalyan Foundation	2021-22
12	Health Camp	Letter of Appreciation	Jeevan Kalyan Foundation	2021-22
13	National Library Day	Letter of Appreciation	Jeevan Kalyan Foundation	2022-23
14	Establishing Library at Maa Saraswati Sushu Mandir,	Letter of Appreciation	Jeevan Kalyan Foundation	2022-23

	Trisulia				
15	National Girl Child Day	Letter of Appreciation	of Jeevan Foundation	Kalyan	2022-23
16	National Science Day at Saraswati Sishu Vidya Mandir, College Square	Letter of Appreciation	of Jeevan Foundation	Kalyan	2022-23
17	World No Tobacco Day	Letter of Appreciation	of Jeevan Foundation	Kalyan	2022-23
18	Train Accident Relief Effort	Letter of Appreciation	of Jeevan Foundation	Kalyan	2022-23

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 28

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
6	05	04	06	07

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 52

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc.	View Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- **teaching – learning, viz., classrooms, laboratories, computing equipment etc**
- **ICT – enabled facilities such as smart class, LMS etc.**

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

Ajay-Binay Institute of Technology is recognized by AICTE, New Delhi and is affiliated with BPUT, Rourkela. It offers a range of programs including B. Tech, MBA, MCA, and M. Tech. The institute boasts excellent infrastructure for effective teaching and learning, featuring well-furnished and spacious classrooms, smart classrooms, fully equipped laboratories, tutorial rooms, workshops, seminar halls, and an engineering drawing hall. Some classrooms are equipped with audio-visual teaching aids, and CCTV surveillance is in place to maintain a disturbance-free environment. The institute also provides facilities like a conference hall, libraries, and more to encourage student participation in various events, with a focus on skill enhancement.

Before each semester, lab in-charges ensure the availability of necessary equipment and software specific to the program curriculum for smooth lab sessions. Each department is equipped with dedicated computing resources and a departmental library. Additionally, the institute houses a central library with spacious reading halls, a digital library, a language laboratory, and computer centers. Access to content like NPTEL is available through a high-end library server.

The management of the college is dedicated to providing exceptional facilities for recreation, sports, physical fitness, and cultural activities. The institute features a fully air-conditioned auditorium with a seating capacity of 400 and an ICT-based conference hall with seating for 50, used for cultural competitions, workshops, seminars, conferences, and debates. An annual grand function showcases students' artistic talents and distributes prizes for various competitions, concluding with entertainment programs by invited professionals.

For sports enthusiasts, the college provides both indoor and outdoor playgrounds. The indoor facility is equipped for activities such as badminton and basketball, while the outdoor sports facilities include a cricket ground, football ground, basketball court, athletic track, throw ball court, and volleyball court.

Yoga is also encouraged as an essential part of daily life, with separate trainers available weekly for both ladies and gentlemen. Well-maintained green lawns serve as ideal spots for Yoga practice, and certified trainers are invited on special occasions like Yoga Day for mass practice.

The college has established various cells and committees, including the External Connect Cell, Wellness Management Cell, Social Responsibility, and Community Connect Cell, and Event and Competition Cell, which organize cultural competitions and activities regularly. Students actively participate in cultural competitions hosted by other educational institutions.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 25.78

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
148.22	135.57	33.71	102.51	92.23

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

The Institute Management System (IMS), is software designed to facilitate various online activities within our college. It plays a crucial role in managing our library's operations as well. The library's functions are efficiently administered through a computerized system within IMS. This system enables

tasks such as book entry, cataloging newspapers, periodicals, proceedings, manuals, project reports, stock verification, checking membership status, branch-wise book management, author-wise book organization, annual budget preparation, order processing, invoice management, recording library loans, and verifying students' clearance status. Additionally, students have access to an Online Public Access Catalog (OPAC) to browse the library's resources.

One of the primary advantages of this automation system is the hassle-free maintenance of records. Separate modules are in place to monitor all library activities, starting from book cataloging and issuing books to both students and employees. The system sets return due dates at 15 days for students and 30 days for staff, with fines automatically calculated for overdue materials.

To locate a student's information, their registration number can be typed into the system. When an employee or student leaves the Institute, they are required to obtain clearance from the library. The system displays all books registered under their name, which must be returned before clearance is granted.

The library also houses resources from previous semesters, including university questions and study materials prepared by faculty members. Additionally, photocopying and printing services are available within the library for the convenience of students and staff.

This computerized library system greatly simplifies the librarian's responsibilities, ensuring the efficient and seamless management of the library's resources and operations.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

ABIT's IT Infrastructure are in extremely satisfying numbers and in a systematic setup for the students and employees to enhance their knowledge and research. This infrastructure plays a very vital role for our institute around the corners. Our IT facilities offer a complete system security for their users. It is

very important that the colleges have a decent **infrastructure** with advanced well-equipped laboratories for the institute.

The following are the briefings about our IT facilities –

LAN Facility

There are 28 data network switches (Giga byte), 06 POE network switches for access points, CCTV Cameras. 200 Mbps of internet connectivity is shared across the campus, where 100 Mbps is shared for the students.

Server configurations in data center

There 01 server with Xeon 3.1 GHz, 04 GB Ram, 500 GB hard drive with 5KVA Power backup.

Workstation

371 desktops are provided to all department labs with configurations of Pentium dual core i5 and core i3 generation, 8GB/4GB, 256GB HDD and SSD/128 GB SSD with LAN connectivity. 27 desktops with configurations of core i5 and core i3, 8GB/4GB, 256 GB HDD/128 GB SSD are available to carry out different necessary tasks, such as academic and administrative work, or any other necessities of the institution.

Apart from those 22 laptops with configurations of core i7, core i5 and core i3, 8GB/4GB, 256 GB HDD are available for academic and administrative work.

Software

Windows 2003 server and windows 10 with 200 users license (DREAMSPARK) available. We also use open- source operating systems such as (Ubuntu and RedHat) and languages (C, C++, JDK, MySql etc).

MATLAB consists of 2 users for Centre of Excellence LAB.

Printers/Scanners

There are a total of 32 Laser jet printers and 5 Inkjet printers, 3 Xerox centers and 9 scanners are provided across the campus for academic and administrative purposes.

Updates and upgradation

Updates are maintained regularly. In this academic section 11 new computers are installed for both academic and office use only.

Wi-Fi

There are 10 Wi-Fi Routers and 6 Extendable Wi-Fi Repeaters that are placed in various places like Library, Corridors, Labs, canteen and outdoor. Wi-Fi access point is provided to all the students which is monitored and controlled by both windows and Linux servers at the CSE department for secure content access. All access points are routed to a Wi-Fi controller in a centralized style.

IT facilities including Wi-Fi, in 2022-23 can be summarized as follows:		
Sl No	Items	2022-23
1	No. of Computers	408
2	Bandwidth	1500 Mbps(6 no. of APs having each 200 Mbps & 1 APs having 300 Mbps)
3	Desktop Configuration	Core i3 & i5
4	Accessories(Printers)	37
5	Laptops	22

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

4.3.2

Student – Computer ratio (Data for the latest completed academic year)**Response:** 3.77**4.3.2.1 Number of computers available for students usage during the latest completed academic year:**

Response: 371

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure**4.4.1**

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 74.22**4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)**

2022-23	2021-22	2020-21	2019-20	2018-19
443.12576	180.33477	267.39144	285.46746	298.50191

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA for and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 91.26

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1339	1373	1331	1227	1079

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

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. ICT/computing skills

Response: A. All of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 83.99

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

2022-23	2021-22	2020-21	2019-20	2018-19
1266	1368	1102	1197	910

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.1.4

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: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 76.11

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
283	298	254	187	179

5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
311	361	384	262	260

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of students qualifying in state/national/ international level examinations during the last five years

Response: 1.62

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

2022-23	2021-22	2020-21	2019-20	2018-19
0	4	5	0	0

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3 Student Participation and Activities

5.3.1

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

Response: 8

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

2022-23	2021-22	2020-21	2019-20	2018-19
3	0	2	1	2

File Description**Document**

Upload supporting document

[View Document](#)

list and links to e-copies of award letters and certificates

[View Document](#)

Institutional data in the prescribed format

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.3.2

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

Response: 13.4

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
32	12	0	10	13

File Description	Document
Upload supporting document	View Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

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

Response:

The institute has a fully operational Alumni Association that has been active since 2008. Its primary purpose is to strengthen the bonds among former students, foster connections between their families, and ignite social and intellectual interests. The Alumni Association regularly organizes alumni gatherings to maintain contact with its graduates, with these events happening at least once a year. Office bearers within the association are chosen or elected from the alumni themselves. This association serves as a bridge between the industry and the institute, allowing successful alumni to provide valuable input on course design and industry-specific supplementary courses that can benefit current students. Distinguished alumni also visit the campus to share their experiences with students and faculty during Alumni Connect Sessions. These sessions cover contemporary topics, trends, or informal discussions where alumni answer students' questions related to jobs, curriculum, and career

growth. Over the past academic years, fifteen such sessions have been conducted.

Additionally, alumni contribute to the institution's development by donating furniture for the alumni association and presenting valuable books to the college library. The foundation takes immense pride in the achievements of its alumni, many of whom have successful careers in various fields, including jobs, higher education, and entrepreneurship. The institution actively seeks their support through an Annual Alumni meet, where alumni from different batches mentor current students through networking forums and share their accomplishments and success stories.

The institution has a dedicated Alumni Connect cell that conducts online programs, inviting alumni to share their experiences, knowledge, and advice with current students. To maintain alumni engagement, a dedicated portal has been created for this purpose, allowing graduates to create accounts where they can update their professional information and maintain their connection with the college. Through this portal, graduates can share detailed accounts of their professional journeys, including the educational paths they've taken, the challenges they've overcome, and the decisions that have benefited them. They can also freely discuss their work with current students, allowing ongoing batches to learn from their alumni and seek their guidance. Notably, the alumni association of the MBA department was officially registered in the academic year 2021-22, and the institution's alumni association is in the final stages of obtaining government registration status.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

VISION: To promote quality teaching, exploration, research and facilitate holistic development of students that would help to create capable technical man power needed for industry and academia.

MISSION:

- To enable efficiency and prosperity in the society through application of technical knowledge and in collaboration with industry and other institutions.
- Ensure an effective teaching on contemporary topics and a rational examination system.
- Support and create centers of excellence for exploratory technical and behavioral projects that would promote originality and uniqueness.
- Establish partnership with local industries for collaborating, understanding and addressing real life technical challenges.

GOVERNANCE:

The Governing body of the college is the supreme administrative body. It is constituted as per the norms fixed by AICTE, New Delhi, Affiliating University and Government of Odisha.

The GB Provides continuous support for implementing the Vision, Mission and Values of the Institution. Approves plans for introducing new programs, student intake, maintenance and expansion of infrastructure, Chalks out establishment of state of art laboratories by constantly upgrading the technologies. GB meets frequently (at least twice in a year), reviews, approves the academic activities, budgets and all other supporting processes.

The Institution excels in academics for more than 24 years due to the continuous review and improvement of quality policies under the effective leadership of GB and Principal. GB, Principal, Deans and HODs have key roles in design and implementation of the quality policies and plans.

The system is successfully decentralized for an improved governance and performance. The strategy and major decisions related to academic and administrative tasks are thoroughly discussed in the GB meeting. The decisions taken are executed by the Principal, different deans, HODs, IQAC, conveners of

different committees ensure proper implementation of the policy approved in GB.

GB executes the strategy in order to fulfill the Vision and Mission of the institution.

Principal-cum-Member Secretary guides the institute in the line of rules, regulations & policies as decided by the GB. She is responsible in Implementing strategic plans and quality policies to achieve the Vision and Mission. She is authorized to sign MoUs and correspondence to AICTE, state Government, affiliating university.

The system is successfully decentralized for an improved governance and performance. The strategy and major decisions related to academic and administrative tasks are thoroughly discussed in the GB meeting. The decisions taken are executed by the Principal, different deans, HODs, IQAC, conveners of different committees ensure proper implementation of the policy approved in GB.

The formation of institutional committees like Governing Body, Finance Committee, IQAC, HoD council, DAC, DAB, Anti- Ragging Committee, Internal Complaints Cell, Grievance and Redressal Committee, Committee for SC/ST,etc. is the result of decentralization of work and participative management. At the department level, the HODs decentralize administrative/academic activities by assigning responsibilities to faculty members.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

Governing Body:

The Institution's Governing Body is responsible for policymaking and

finalizing reports through the Secretary. The institution adheres to established procedures within its institutional hierarchy. Additionally, statutory bodies such as the IQAC Cell, Grievance Redressal Cell, Anti-Ragging Committee, Discipline Committee, etc., in accordance with university and government guidelines, are integral parts of the institutional structure. The Heads of Department (HoD) council formulates plans for academic audits and ensures their proper execution.

Recruitment/Appointment Policies:

For staff recruitment, the institute follows the norms set by AICTE and advertises job openings in the media. Before the start of each academic session, the respective department HoDs provide their faculty requirements based on teaching loads and submit them to the Principal through the Dean of Academics.

Service Rules:

- 1. New staff members join the institution under a one-year probation period.**
- 2. Service can be extended or terminated based on their performance.**
- 3. A three-month notice period on the faculty's side is required for relief or termination of service. Alternatively, they can opt to pay three months' salary in lieu of notice. Failure to comply with this notice requirement allows the management to recover the requisite amount, either by withholding the faculty member's salary or through other means.**
- 4. Increment eligibility is contingent on completing the probation period, and regular increments are determined through periodic performance appraisals by superiors.**
- 5. Faculty members are expected to carry out duties assigned by their superiors.**

6. Leaving the institution during the academic year is not permitted.
7. Faculty members' services are governed by the institution's Standing Orders, Rules and Regulations, as well as regulatory bodies such as AICTE and the Affiliating University.
8. Faculty members are responsible for preparing placement plans and strategic actions for student placements, subject to prior approval from the Principal.
9. As mentors, faculty members are required to monitor students' progress regularly and maintain their records.
10. Faculty members are expected to participate in tasks assigned to them by the Director/Principal, Head of Department, and Deans, beyond their regular duties.

Promotional Policies:

Promotional policies align with AICTE norms.

Grievance Redressal Mechanism:

The institution has a well-established grievance redressal mechanism. A committee is formed to address cases received in writing or through the college website. Decisions are communicated to the concerned individuals within a reasonable timeframe.

File Description	Document
Upload Additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies**6.3.1**

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

The Institution implements various welfare measures to ensure the well-being of its employees, aiming to keep their motivation levels high.

Staff members receive support in the form of contributions to the Employee Provident Fund and gratuity from the management. There is also a provision for study leave, allowing employees to pursue higher studies after completing a stipulated period of service. Additionally, women staff members are granted maternity leave.

Free transportation is extended to all staff members, and significant fee concessions are offered to the children of employees who express interest. Employees scheduled for overtime work are provided with free refreshments like tea and coffee. An annual staff picnic is organized for recreational purposes, fostering a cordial and employee-friendly environment to enhance job satisfaction. Faculty members are acknowledged with appreciation after completing a PhD, and facilities like study leave are available for faculty pursuing higher education.

Various types of leave, including duty leave, medical leave, and casual leave, are provided to faculty members for different purposes. On-duty leave is granted for research activities as needed. Faculty members receive travel allowances (TA) and daily allowances (DA) for presenting technical papers at national and international conferences. They also have access to a maximum of five books and free online resources, including magazines, journals, and books.

Free 24x7 medical checkups are offered to all staff members on the campus, and they have access to free internet and Wi-Fi facilities. Faculty members are sponsored to attend seminars, conferences, or workshops each academic year, and they may receive full or partial registration fee coverage as well as TA or DA.

The institution employs a robust performance appraisal system for both teaching and non-teaching staff, including:

Student Feedback:

Students provide feedback for each faculty member who conducts their classes or labs, with support from non-teaching staff.

Quantitative and Qualitative Analysis of Classes:

Heads of Departments (HODs) assess the number of classes and faculty quality.

Results of Students in University Examinations:

The Dean of Academics and HODs analyze university examination results.

Individual Improvement Efforts:

The organization acknowledges individual efforts, such as innovative research, product or prototype-based ideas, project grants, publications, patents, consultancy work, and participation in courses through NPTEL for knowledge enhancement.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.3.2

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

Response: 55.31

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

2022-23	2021-22	2020-21	2019-20	2018-19
88	22	12	96	63

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences / workshop s and towards membership fee for professional bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 59.35

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
109	112	116	99	91

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
76	75	79	75	75

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

The accounts of the institute is audited both by internally and externally. The institution has a pre-defined mechanism for internal and external audit. Internal audit conducted by the internal auditor of the Institute. External audit conducted by the chartered accountant. At the end of every academic year stock of every department is verified by the team of faculty members from other departments who act as internal auditors. The qualified remarks if any, given by the auditor are taken into consideration for future course of actions.

External Audit:

Mr SAMEER KUMAR SAMAL (CHARTERED ACCOUNT), FCA Partner bearing MEMBERSHIP No: 056077 conducts audit of accounts of the institute every year. All the financial transactions are verified by the CA and finding is reflected in the audit reports. This audited statement is placed during filing of tax returns to the income tax department every year.

Internal audit:

A team of auditors are appointed in the institute to conduct internal audits before passing bills for payment. Only duly authorized persons can operate the bank account. Cash sheet is matched every day by the accountants. Documentary evidences wherever inadequate in respect of payments, compliances of T.D.S and various reconciliations are recorded and the accounts are regularized once in a week by the

accountant. The weekly report of the accounts are analyzed by the Director and preserved.

Before the starting of new academic session, Principal issues letter to all Department for the tentative budget of the expenditure estimation for new academic session. After collection of the budgets from all concerned Department as well as Library, Examination and Training placement Cell, Principal calls a meeting for the budget Finalization. The Director reviews the budget proposals and approves accordingly. Management decides the final amount of Expenditure.

If any quotation/requisition amount is less than 50,000/ then Principal permitted the amount for the expenditure. If it's more than 10,000/ then Management approval is required.

The purchase will be made strictly following the given budget proposal. If any deviation occurs in the budget, respective HODs have to address the issue and give justification so that subsequently the same will be approved. Following this procedure, unnecessary purchases are avoided and the available funds are effectively utilized.

The institution is having a well-defined and systematic procedure for effective and optimal usage of the available resources, infrastructure, and development of other facilities. The resource utilization and fund mobilization are monitored regularly by the Account section. All the financial resolutions of the institute is regulated and recommended by the different committee.

The final decision is taken in GB meeting. The Institution is being governed by the ABIT-PMCA Society, which is having a sound financial background.

All the expenditures are made, with the due concern from the respective department and the concern from the Management without compromising the quality of education and the resources required for the education.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

The Internal Quality Assurance Cell (IQAC) of the college plays an important role in college governance, contributing significantly to various aspects, Such as

- (a) Establishing departmental vision, mission, and program outcomes**
- (b) Ensuring compliance with curriculum and research standards.**
- (c) Planning and conducting workshops, seminars, and conferences.**
- (d) Organizing guest lectures.**
- (e) Coordinating industrial visits and summer internship**
- (f) Conducting Faculty Development Programs (FDP).**
- (g) Managing alumni connections and placements**
- (h) Facilitating Entrepreneurship Development Programs..**
- .(i) Supporting research and incubation initiatives.**

The IQAC actively implements teaching and learning reforms, starting by preparing the academic calendar at the beginning of each session, aligning it with the affiliating university's academic calendar , and sharing it with all stakeholders. Faculty members upload detailed lesson plans mapped with Course Outcomes through the Institute Management System (IMS) for monitoring by the IQAC.

The Departmental Academic Committee (DAC) for each

branch/department, along with the IQAC, reviews various aspects of the teaching-learning process. This includes assessing course coverage, faculty use of ICT facilities, conducting doubt-clearing classes, monitoring student attendance, maintaining classroom discipline, ensuring faculty punctuality, conducting quizzes, surprise tests, and internal exams with proper invigilation, as well as assessing and publishing results in a timely manner. The maintenance of course files by faculty members, discussion of previous semester exam questions and answers in the classroom, and problem-solving in the classroom are also examined. The findings are consolidated and reported to the management.

In addition to traditional classroom teaching, the IQAC emphasizes innovative and student-centric learning methods. This includes organizing industrial lectures, seminars, workshops, study tours, industry visits, and industrial projects. Skill training, ICT-based learning, and enrollment in NPTEL courses and other MOOCs (Massive Open Online Courses) are encouraged.

Regular feedback is collected from students and other stakeholders through an online feedback system. These feedbacks are analyzed, and appropriate actions are taken to ensure 100% student satisfaction with the teaching-learning process. At the end of each semester, a department-wise result analysis is conducted, and the attainment of Course Outcomes and Program Outcomes is calculated. Action plans are developed to improve attainment in subsequent sessions.

The IQAC also focuses on faculty empowerment, encouraging them to enroll in NPTEL courses, refer to e-journals, publications, and other MOOCs.

In terms of learning outcomes, the college measures progress through various metrics:

- **Improvement in university examination results.**
- **Number of faculty development programs conducted annually.**
- **Increased student success in placement drives.**
- **Enhanced performance in GATE examinations.**
- **Retention of experienced faculty members and Ph.D. holders.**
- **Establishment of industry collaborations.**
- **Activities related to Centers of Excellence.**
- **Number of research publications and patents.**
- **Offering value-added courses.**
- **The number of participants in NPTEL courses.**

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

6.5.2

Quality assurance initiatives of the institution include:

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2.Academic and Administrative Audit (AAA) and follow-up action taken**
- 3.Collaborative quality initiatives with other institution(s)**
- 4.Participation in NIRF and other recognized rankings**
- 5.Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.**

Response: A. Any 4 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

The students of ABIT are known for their self-reliance, cultural sensitivity, social responsibility, and commitment to gender equality, gender sensitivity, and environmental awareness. One of the institution's primary objectives is to promote education that is responsive to the needs of all sections of society, with a special emphasis on gender equality and sensitivity. Both male and female students are provided with equal opportunities to grow into competent and responsible citizens of the future. The college also strives to maintain gender balance among its faculty members.

1. Safety and Security:

Regular awareness programs are conducted to promote gender equality and sensitize students to gender-related issues. Safety measures have been implemented in various areas of the campus, including transportation, the campus itself, the canteen, library, and sports facilities, to monitor student movement and ensure their safety. Emergency contact numbers are prominently displayed throughout the campus, and CCTV surveillance is in place for security purposes. The campus has a robust security system with multiple checkpoints for all individuals and vehicles. Students are required to wear ID cards at all times, and visitors are screened by security personnel before being issued visitor IDs. Female faculty and female students receive ongoing counseling on safety and security.

2. Academic Counseling:

Faculty members in all departments closely monitor their students' progress throughout the year. Formal and informal interactions help identify students' strengths and weaknesses, enabling the faculty to provide guidance accordingly.

3. Personal Counseling:

Faculty members take personal care of students on an individual level. Department heads oversee students' well-being by providing necessary guidance and support. Under the Proctorial system, each faculty member is responsible for overseeing the well-being of 30 students. Faculty members meet with students' parents regularly to identify and address any concerns and provide solutions.

4. Common Room:

Separate common rooms are available for both boys and girls, complete with attached toilets. Magazines and newspapers are provided for students' recreation, and medical amenities like first aid boxes are kept on hand for emergencies. Drinking water facilities are also available.

The institute celebrates various international and national commemorative days, events, and festivals to foster a sense of national pride.

ü Gandhi Jayanti (2nd October): Celebrated with a cleanliness drive in the college campus and nearby villages.

ü Teacher's Day: A day to express gratitude to teachers, celebrated on

Dr. SarvepalliRadhakrishnan's birthday.

ü Children's Day: Celebrated as the birthday of Pandit Jawaharlal Nehru with various cultural programs.

ü International Yoga Day (21st June):Observed with yoga activities on the college campus since 2015.

ü Utkal Divas: Celebrated with colorful cultural performances, paying tribute to Odisha's legendary heroes and reciting the song 'VandeUtkalaJanani.'

ü Engineer's Day (15th September): Honoring the great Indian Engineer, Sir MokshagundamVisvesvarya.

ü MakarSankranti: Celebrated to mark the arrival of spring.

ü Vishwakarma Puja: Observed by Mechanical, Electrical, and Civil departments to honor Lord Vishwakarma, the god of architecture and engineering, with rituals and prayers.

ü Ganesh Puja and Saraswati Puja: Celebrated with cultural programs organized by students and staff.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures**
- 2. Management of the various types of degradable and nondegradable waste**
- 3. Water conservation**
- 4. Green campus initiatives**
- 5. Disabled-friendly, barrier free environment**

Response: A. 4 or All of the above

File Description	Document
Policy document on the green campus/plastic free campus.	View Document
Geo-tagged photographs/videos of the facilities.	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

Response: A. All of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of

students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

The institution firmly upholds its Vision and Mission, ensuring that all stakeholders are treated with equality, regardless of their gender, social class, religious affiliations, or racial backgrounds. Students from various strata of society are admitted to the institution following the university's seat matrix.

The college enforces a uniform dress code for all students, promoting a sense of equality among the student body. To foster communal harmony, the institution conducts various events such as Slogan Writing, Poetry Writing, Essay Writing, Logo Designing, and e-posters on themes related to national integration and religious/racial tolerance. Students are encouraged to celebrate national festivals like Diwali, Holi, Christmas, providing them with a platform to interact freely, transcending their caste and creed. Life in the hostels further encourages students to come together through academic, sports, and cultural activities. Celebrations like Teachers' Day, International Women's Day, Freshers' Day, Independence Day, and Republic Day allow students to collaborate as a team, setting aside their differences. The college maintains a harmonious environment by actively preventing issues such as ragging and sexual harassment among students.

Language and soft skill development programs are organized to cater to students from diverse linguistic backgrounds, enhancing their employability. Peer teaching practices help students overcome language barriers they may encounter, leading to improved learning outcomes. The institution provides ICT-enabled tools and offers guidance on their use to all students. Additionally, the institution conducts Personality Development and gender sensitization programs, along with initiatives aimed at empowering women, on a regular basis.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1

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

Response:

Best Practice-1

1. **Title of the Practice: Experiential learning for the students through ABIT's Centres of Applied Research (CAR)**
 2. **Objectives of the Practice:** The centres identify solution requirements where engineering, computational and management techniques can be applied for resolving longstanding issues in an efficient and cost effective manner. The exercises will involve individual level learning and group level activities involving self-learning through guided online courses, formal classroom sessions, industry mentor sessions and hands on practical sessions.
 3. **The Context:** Experiential learning depends on two major foundation. Learning by doing and doing what learned. The following issues are addressed during planning and implementation.
 - Defining themes of applied research centre: A series of brainstorming exercises have been conducted with Industry Mentors, Academic Management of ABIT and all Head of the Departments to arrive at work definitions of Centres of Applied Research (CAR).
 - Maintaining student interest: Since this mode of learning depends on beyond classroom teaching-learning therefore creating and maintaining interest among the students is addressed properly by forming collaborative groups.
 - Collaboration with Industry mentors regarding specific knowledge, skill and project is implemented through physical and online mode for meaningful learning.
1. **The Practice:** After brainstorming session seven centres of applied research have been selected. These are
- **Automation and Robotics:** The centre for Automation & Robotics is established to meet the growing demand for trained engineers in the field of embedded systems, industrial automation & robotics.
 - **Composite materials:** The centre undertake fundamental, applied and industrially-focused research on synthetic and bio-based composite materials, manufacturing processes, design, analysis and experimental characterization.
 - **Data Science:** Data Science and Artificial Intelligence centre has been established to prepare students with the skills to perform intelligent data analysis which is a key component in numerous

real-world applications.

- **Design and Prototype Development:** This is a platform for students to apply their innovative ideas into feasible design. They will get multidisciplinary working environment to implement the ideas into working prototype.
- **Energy Efficiency and Sustainability:** This is a platform for students to apply their innovative ideas for the use of sustainable energy resources in critical national and global issues. The Energy Efficiency & Sustainable Energy Management program combines management skills with an understanding of responsible energy sources use and the development of sustainable sources of energy.
- **Market Research:** The Centre for Marketing and Social Research has been formed with an aim to equip students with the means to identify social and marketing problems, conduct the necessary research in terms of a detailed survey and analysis and provide a feasible solution for the practical problem.
- **Standard and Governance:** The Centre for Standards, Governance, Risk & Compliances provides application oriented learning that will help students to connect engineering concepts with real world engineering applications.

1. Evidence of Success:

- **Design and Prototype Development:** The student members have demonstrated the concept of circular economy by developing products from traditional wastes like metal, plastic, tyres, etc. They have also developed many educational models to help in pedagogy.
- **Energy Efficiency and Sustainability:** The students have published research papers in international conferences organised by reputed institutions. They have participated in Smart India Hackathon 2022. A number of projects like smart battery monitoring system, energy conservation, renewable energy products, etc. are developed by the students.
- **Automation and Robotics:** Biju Patnaik University of Technology Rourkela, Odisha has approved Centre of Excellence (CoE) in “Automation and Internet of Things (IoT)”. The students have participated in Smart India Hackathon 2022 and have developed many prototypes like home automation system, mining environment status monitoring, smart and precision farming, fatigue driving alert system, auto speed control of vehicle at limiting zone, condition monitoring of a machine/equipment, etc.

1. Problems Encountered and Resources Required:

The programme requires academic & practice skills of faculty members and mobilisation of students as per their interest. The running of programme demands only modest financial resource. The only constraint faced is in- person availability of industry mentors in some cases.

Best Practice 2: PERFORMANCE AND READINESS ENHANCEMENT PROGRAMME (PREP)

1. **Title of the Practice:** Groom the students to orient towards lifelong learning and make them ready for professional career.
2. **Objectives of the Practice:** This umbrella programme is designed to address the skill and practice components of Outcome Based Education. After successful completion of this programme the students should be able to communicate effectively, take leadership role to execute multidisciplinary projects, develop solutions considering societal and environmental needs. They are able to demonstrate professional ethics and practice lifelong learning.
3. **The Context:** The reports given by different industry body had shown low employability level of graduating engineers in our country. Considering sizeable percentage of ABIT students joining from rural areas, there is an apt need to make them industry ready for both IT and core sectors.
4. **The Practice:** The following activities are regularly conducted for the benefit of the students.
 - Bridge course to first year students under induction programme
 - Orientation programme to create awareness on professional learning for first year and lateral entry students
 - Communication Development programme to enhance communication skill through collaborative efforts
 - Community connect programme to create opportunities for students to participate in local society for specific causes
 - Inculcation of leadership quality and skill through Future Ready Contributor Programme
 - Awareness on entrepreneurship to start their own enterprise.
 - Enhancement of proficiency in logical reasoning, arithmetic through extensive pre placement training.
 - Sensitization on engineering practices through interaction with alumni and industry personnel.

1. Evidence of Success

- Large number of students getting jobs in campus placement drives
- The students showing interest for socially relevant projects in final year.
- The students participating in team events like Toyathon, Hackathon, etc.
- They are participating in social and community development activities like feeding of stray animals, helping the destitute, etc.

1. Problems Encountered and Resources Required:

The activity mentioned above require right mind set and focused approach for effective and efficient implementation. The institute has experienced faculty and staff members to motivate and execute relevant programmes.

File Description	Document
Any other relevant information	View Document
Best practices as hosted on the Institutional website	View Document

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:

FINANCIAL SUPPORT TO STUDENTS FOR ACADEMIC EXCELLENCE:

The vision of the institution focuses on the welfare of the society through excellence in technical education. So college provides scholarship to bright students for consistent academic excellence . Students having more than 90% marks in their previous academic year are entitled to get scholarship of Rs 20,000/- per annum. Similarly students having more than 80, 70 and 60% marks are entitled to get Rs10,000/-, Rs 5,000/- and Rs 3,000/- as scholarship per annum respectively.

Engineering is one of the STEM (science, technology, engineering, mathematics) fields in which rural based students are severely under presented. Among those who do enter engineering, they are more likely to drop out. Financial difficulty is the main factor for drop out. So Ajay Binay institute of Technology decides to provide financial benefits to financially weaker students so that they are able to complete their study.

The institution also encourages students to participate in technical skill development program, Entrepreneurship development program, interdisciplinary projects development program and to participate in national and international competitions and provides financial support to students for academic excellence. It is observed that in academic 2022-23, 561 students got financial benefits given by institution out of 1398 students. Similarly 659 out of 1460, 693 out of 1451, 666 out of 1388 and 760 out of 1260 got institutional scholarship in the academic years 2021-22, 2021-21, 2019-20 and 2018-19 respectively.

Staff and students of this institution also visit charitable old age homes and Orphanages in Cuttack and provide financial support and cloths to their residents.

Staff and students of this institution also visit many schools situated in slums in Cuttack and provide study materials to the students and conduct awareness programs on the value of school education.

File Description	Document
Appropriate web in the Institutional website	View Document
Any other relevant information	View Document

5. CONCLUSION

Additional Information :

ABIT's Centers of Applied Research are industry-focused research centers centered around specific themes that address industry needs. These centers identify solution requirements where engineering, computational, and management techniques can be applied to efficiently and cost-effectively resolve longstanding issues.

A series of brainstorming exercises have been conducted with Industry Mentors, the Academic Management of ABIT, and all Heads of Departments to define the scope and purpose of the Centres of Applied Research (CAR). Additionally, a set of project-based learning exercises is associated with these centers.

The focus areas of these centers include technologies and management techniques that are immediately relevant and hold high value, enjoying widespread recognition within the industry. The exercises will involve individual-level learning and group-level activities, including self-learning through guided online courses, formal classroom sessions, industry mentor sessions, and hands-on practical sessions. Students are expected to produce group-level artifacts, such as concept presentations (PPTs), white papers, blog content, as well as working prototypes where applicable. Students are also expected to obtain certifications in the skill areas and participate in seminars, workshops, and competitions related to the field.

Concluding Remarks :

In summary, all activities at AJAY BINAY INSTITUTE OF TECHNOLOGY are centered around the students and are shaped by the feedback received from the institution's stakeholders. The institution has established partnerships with industries to enhance its academic programs, ensuring that students graduate not only with theoretical knowledge but also with the practical skills required to excel in their chosen fields. Continuous efforts are made to enhance the professional competence of the staff.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)</p> <p>Answer before DVV Verification :</p> <p>Answer After DVV Verification :67</p> <p>Remark : As per the revised data and supporting documents provided by HEI, based on that DVV input is recommended.</p>																				
1.2.2	<p>Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</p> <p>1.2.2.1. Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1167</td> <td>1197</td> <td>1067</td> <td>983</td> <td>1027</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1164</td> <td>1197</td> <td>1067</td> <td>983</td> <td>1027</td> </tr> </tbody> </table> <p>Remark : As per clarification received from HEI, DVV input is recommended.</p>	2022-23	2021-22	2020-21	2019-20	2018-19	1167	1197	1067	983	1027	2022-23	2021-22	2020-21	2019-20	2018-19	1164	1197	1067	983	1027
2022-23	2021-22	2020-21	2019-20	2018-19																	
1167	1197	1067	983	1027																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
1164	1197	1067	983	1027																	
1.3.2	<p>Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)</p> <p>1.3.2.1. Number of students undertaking project work/field work / internships</p> <p>Answer before DVV Verification : 1028</p> <p>Answer after DVV Verification: 1013</p> <p>Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.</p>																				
2.1.2	<p>Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years</p> <p>2.1.2.1. Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)</p>																				

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
165	165	165	165	165

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
105	160	160	160	160

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
165	165	165	165	165

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
160	160	160	160	160

Remark : As per the revised data and clarification received from HEI, based on that no. of admitted students in any of the category should not be more than sanction seats of that particular category so DVV input is recommended accordingly.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
16.46	6.5	16.37	14.245	3

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
16.46	6.5	16.37	12.2	1

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
18	12	14	23	22

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
18	10	11	20	18

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

3.3.1 Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

3.3.1.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
44	32	21	15	45

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
44	28	21	15	21

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

3.3.2.1. 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:

2022-23	2021-22	2020-21	2019-20	2018-19
20	4	14	16	22

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
20	4	14	16	22

20	4	14	14	16
----	---	----	----	----

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

3.4.3 ***Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.***

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
14	20	12	17	15

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
6	05	04	06	07

Remark : As per the data and supporting documents provided by HEI, based on that DVV input is recommended.

3.5.1 ***Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.***

Answer before DVV Verification :

Answer After DVV Verification :52

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

5.2.1 **Percentage of placement of outgoing students and students progressing to higher education during the last five years**

5.2.1.1. Number of outgoing students placed and / or progressed to higher education year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
318	325	254	187	254

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19

283	298	254	187	179
-----	-----	-----	-----	-----

5.2.1.2. Number of outgoing students year wise during the last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
451	440	396	280	328

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
311	361	384	262	260

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

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

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

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
3	0	2	9	2

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
3	0	2	1	2

Remark : As per the revised data and clarification received from HEI, based on that only state , national and international level certificates are considered , district and inter college certificates are not considered here so DVV input is recommended accordingly.

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

5.3.2.1. Number of sports and cultural programs in which students of the Institution participated year wise during last five years

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
38	31	0	27	32

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
32	12	0	10	13

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

6.3.2 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:

2022-23	2021-22	2020-21	2019-20	2018-19
88	51	21	104	69

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
88	22	12	96	63

Remark : As per the revised data and clarification received from HEI, based on that DVV input is recommended.

2.Extended Profile Deviations

Extended Profile Deviations

No Deviations