

# FOR 1<sup>st</sup> CYCLE OF ACCREDITATION

# GURU NANAK DEV ENGINEERING COLLEGE BIDAR

MAILOOR ROAD, BIDAR , KARNATAKA 585403 585403 https://gndecb.ac.in

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#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Guru Nanak Dev Engineering College,Bidar(GNDEC,Bidar) is a premier educational institution that imparts quality education in Engineering and Management. The College was established in the year 1980 by Pant Ratan Shiromani Sardar Joga Singh Ji, a visionary and philanthropist, under the aegis of Sri Nanak Jhira Saheb Foundation (SNJSF) Trust. Sardar Joga Singh Ji, firmly believed in the transformative power of education to empower individuals and eliminate social barriers. His vision and dedication led to the establishment of GNDEC Bidar, which has become a leading educational institution in the region. Today, SNJSF manages a total of 18 institutions, providing high-quality education to over 10,000 students across various levels, from preschool (LKG) to Ph.D. GNDEC, Bidar is affiliated to Visvesvaraya Technological University (VTU), Belagavi, and is approved by the All India Council for Technical Education (AICTE), New Delhi, and also recognized by the Government of Karnataka.

Situated on a picturesque and spacious 25-acre campus in the northern tip of Karnataka, GNDEC Bidar offers a wide range of undergraduate courses, including Civil Engineering, ISE (Information Science & Engineering), AI&ML (Artificial Intelligence and Machine Learning), ME (Mechanical Engineering), EEE (Electrical & Electronics Engineering), ECE (Electronics & Communication Engineering), and CSE (Computer Science & Engineering), Computer Science & Engineering(Data Science), Computer Science & Engineering(Internet of Things and Cyber Security including Block Chain Technology) At the postgraduate level, the college provides programs such as MBA (Master of Business Administration), MCA (Master of Computer Applications), and M. Tech (Master of Technology). Seven university-approved research centers reflect GNDEC Bidar's emphasis on research and innovation in emerging fields. GNDEC Bidar consistently strives to adopt innovative practices in both academics and administration, aiming to set new standards in engineering and management education. The college's relentless pursuit of excellence aligns with its vision of achieving educational excellence and contributing to the development of society.

The college boast of getting accredited by the NBA for four of its undergraduate programmes viz. Electronics & Communication Engineering, Electrical & Electronics Engineering, Computer Science & Engineering, and Civil Engineering, which highlights its commitment to maintain high-quality standards. This recognition further reiterates to the college's commitment to providing quality education.

#### Vision

To be a premier technological institution that fosters humanity, ethics and excellence in education and research towards inspiring and developing future torch bearers

#### Mission

**M1.** To impart quality educational experience and technical skills to students that enables them to become leaders in their chosen profession.

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M2.To nurture scientific temperament and promote research and development activities.

M3. To inculcate students with an ethical and human values so as to have big picture of societal development in their future career.

**M4.** To provide service to industries and communities through educational, technical, and professional activities.

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

#### **Institutional Strength**

- ACCREDITATION BY NBA: Four Undergraduate programmes in B.E. Civil Engineering, Computer Science and Engineering, Electrical & Electronics Engineering and Electronics & Communication Engineering are accredited by the National Board of Accreditation (NBA)
- EXPERIENCED AND VISIONARY MANAGEMENT: The institution is led by an enlightened and forward-looking management team with extensive experience of over fifty-four years in the field of Education. Their vision is to elevate the institution to the highest level of quality in education and research.
- QUALIFIED AND DEDICATED FACULTY: The institution boasts of a highly qualified, experienced, and committed faculty who prioritize research and student-centered teaching giving thrust to Outcome Based Educational experience
- FACULTY RETENTION: Exceptionally good faculty retention is a hallmark of the institute that implies better working conditions and caring management.
- EXCELLENT INFRASTRUCTURE: The institution has facilities like hi-tech seminar halls, auditorium, and classrooms.
- GOOD GOVERNANCE: Highly transparent Governance and Administration with well-defined decentralization of authority.
- IC & NAIN: MIC(Ministry of Education Innovation Cell) has envisioned encouraging the creation of 'Institution's Innovation Council (IICs). IIC GNDECB is established to promote innovation and entrepreneurship in the Institution through multitudinous modes leading to an innovation promotion ecosystem in the campus. KITS(Karnataka Innovation & Technology Society) in association with Dept. Electronics, IT BT and S&T, Established District Innovation Hub (DIH), NAIN (New Age Innovation Network)
- GREEN CAMPUS: Eco-friendly green campus in a calm and serene environment is highly conducive to learning.
- STATE-OF-ART AND MODERN LABORATORIES to cater to academic requirements
- SPORTS FACILITY: Excellent indoor and outdoor sports facilities are available on the campus.

#### **Institutional Weakness**

- Needs improvement in the research ecosystem in the campus
- Needs to improve placements in the core branches
- Considerable improvements are required to enhance the capabilities of industrial consultancy and intellectual property rights (IPR).
- Limited access to research grants being a self-financed institution.
- Moderate Alumni engagements.
- Skilled staff paucity.

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#### **Institutional Opportunity**

- To become an autonomous institute enabling the design of curriculum as per industry requirements
- Engaging UG and PG students in R&D projects.
- Networking and sharing facilities with other institutions and industries
- Starting new diploma and certificate programmes to meet the increasing demand for skilled personnel
- Developing appropriate Technology for agriculture and empowering the rural people.
- Working towards sustainable development
- Development of implements and systems for agricultural purposes

#### **Institutional Challenge**

- Long term sustainability without compromising standards.
- Inculcation of research culture among students and faculty.
- International students and faculty exchange programs with foreign universities
- Fast-changing technology and pedagogical innovations
- Attracting admissions from other states and countries.
- Variations in the employment market and job placement caused by economic recessions.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

Guru Nanak Dev Engineering College, Bidar is an affiliated Institution under Visvesvaraya Technological University, Belagavi, Karnataka. The Institution follows the syllabus and scheme prescribed by the University. The institute adopts a systematic strategic plan for the effective implementation of the curriculum. Academic planning is done keeping in view the vision, mission of the institute and PSOs of various programs. The academic activities are executed as per the academic planning prepared well in advance before the commencement of the academic year. The college calendar of events is ready as per the University calendar of events by including weekly working days, holidays, internal assessment test dates, practical exam dates, workshops schedules, technical seminars schedules, parent-teacher meeting schedules, and the last working day of the semester. Faculty members do the course planning by incorporating course content and identifying curriculum gaps based on pre-defined POs & COs.

The institute has taken the initiative to start add-on courses to ensure the holistic development of students and elevate their placement opportunities. With the motive of continuous improvement, the Institute collects feedback on curriculum, course content delivery, and infrastructure facility from various stakeholders. Based on the feedback so collected systematic analysis is done and corrective measures are initiated.

Teachers of the Institution are also participating in the design and development of the curriculum, question paper setting, and evaluation process. All programs offered by the Institution follow the Choice Based Credit System (CBCS). The institution strongly believes in integrating cross-cutting issues relevant to professional ethics, gender sensitization, human values, and environmental sustainability with a view to ensure the holistic development of the students. Students' knowledge is enriched through experiential learning, fieldwork, internship, project work, etc. Feedback on the curriculum is collected from various stakeholders like students,

teachers, employers, and alumni of the institution. Further feedback is analyzed and apropriate action has been taken.

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

The quality of the teaching and learning process is adequately maintained from its inception, which is reflected in Granting admissions purely on merit through competitive examinations such as KCET and JEE, A proper matrix of students as per the government's statutory reservation policy is admitted. A progressive improvement in the strength of girl students is observed. Provision is existing to award scholarships to meritorious students.

**Faculty:** A systematic and scientific approach to recruiting faculty members in line with the student-faculty ratio of 20:1. 31 faculty members, i.e., about 22.96% of the total faculty strength, have a Ph.D. Training of faculty on "Pedagogy" and domain knowledge through faculty development programmes from time to time.

**Teaching and Learning:** Use of ICT and Interactive Approaches. Availability of e-materials for self-learning. Strict implementation of the academic calendar and teaching plans There is an excellent mentor-mentee system at the institute to take care of academic stress-related issues.

**Evaluation:** Structured bodies to make the evaluation process transparent. Semester-wise, internal and external assessments are in ratios of 40% and 60% for 18 schemes and 50% and 50% for 21 and 22 schemes, respectively. Distribution of lecture plans and evaluation patterns given on the first day of every semester.

#### Research, Innovations and Extension

The Department of R&D at GNDEC is composed of Chairman (Principal) and 8 members from various research centers including Dean R&D. The institute houses nearly 22.96% doctorates and 48 Ph.D. scholars in various departments. All the research centers work together and are actively involved in the respective research areas. GNDEC Research Promotion Policy is framed to encourage all faculty members to excel in research. As per the policy faculty members are awarded incentives for publishing their research work in peer-reviewed journals. Publishing, Granting of Patents, and securing grants from recognized funding agencies are also provided with incentives for the faculty members.

Drawing on the achievements of R&D, the department has successfully signed MoU with two reputed universities in Malaysia for research and academic collaboration. The institute has published more than 300 papers in journals and conferences. Nearly 10 Million funds are mobilized from various funding agencies. 8 Patents are granted and more than 20 patents are published successfully. The institute follows all the ethics and etiquette in all of the research activities. Drill-Bit software is used to check the plagiarism of research articles and funding proposals before being communicated to the concerned agencies. Additionally, the Institute Innovation Cell and New Age Innovation Network are active in conducting various activities to foster innovation among the student fraternity.

The institute has conducted more than 40 extension activities in the nearby village schools. Most of the extension activities carried out by the NSS cell received appreciation and recognition. Overall the institute strives hard to groom the students in all the fields required to succeed in their future endeavors.

#### **Infrastructure and Learning Resources**

**Infrastructure and Learning Resources:** The Institute maintains a state-of-the-art infrastructure with good ambiance and well-ventilated classrooms along with spacious corridors, well-equipped labs, and a vast well-stocked user-friendly library with excellent resources. The total built-up area of the campus is 35184.50 sq m, out of the total of 26.27 acres of land.

Classrooms and lab infrastructure: The total classroom area of the institute is 2803 sq m., the Tutorial classroom area of the institute is 733.13sq.mts, total lab area of the institute is 6770.68 sq m., seminar halls area of the institute is 810.185 sq m. and workshop lab area is 150.22 sq m., as per the requirement of AICTE Norms. All labs are well-equipped to support both academic work as well as research work. Faculty rooms with all required amenities are available. All the classrooms are spacious and equipped with LCD Projectors, comfortable sitting arrangements comfortable for both students and faculty members. There are 48 classrooms, 57 laboratories, 50 ICT infrastructure classrooms, 4 Additional laboratories, 2 common rooms for girls and boys, along with a facility of incubation center, computer center, and Language laboratory. The institute continuously invests in the development of infrastructure, upgrading teaching-learning facilities, and promotion of research activities.

Administrative infrastructure: The administrative office is well furnished with a reception and waiting area equipped with all the necessary facilities for executing the office work. Library: A well-furnished library with a carpet area of 1608 sq.m. with a seating capacity of 300. The library has a good collection of books and journals with 9585 Titles and 41066 book volumes and 100 journals and magazines. The library is equipped with 20 computers with Wi-Fi and a LAN facility. Institute has 826 computers. Each department is provided with all the necessary required software to support teaching and learning as well as research activities. Hostels: Separate hostel facilities for both boys and girls which are well furnished and well ventilated with the provision of hygienic food and adequate safety measures to safeguard the health and privacy of the students. Playgrounds and sports facilities: The sprawling playgrounds provide sports facilities for track and field.

#### **Student Support and Progression**

Guru Nanak Dev Engineering College, Bidar has always been a student-centric institution. The students are mentored from the time of admission up to the completion of their program at various levels. Every class has a teacher assigned to counsel and mentor the students. Hostellers have access to their hostel officials at any time of the day and night. During their stay, students can avail a number of support systems and services for information, academic and career guidance, financial, co-curricular, and extracurricular activities. The Information Desk in the Administrative Block provides necessary information for students on all aspects of campus life. The academic calendar gives information on the academic schedule and curriculum. All departments have associations under the auspices of which students can interact with eminent academicians and scientists. Students can make use of both the Central and departmental libraries for reference work and computer and internet services for browsing.

The scholarship section provides information on various financial support schemes. The Placement Cell arranges various training and Students development programs for readiness of campus recruitment. Other support services include redressal of Students Grievances through the Online portal (through the college website), in-house language laboratories, Placement Cell, Alumni Associations, and the canteen. Girl students can address their grievances to the Women Grievance Cell (which also addresses sexual harassment cases). Medical treatment in the college hospital is free for students. A medical insurance scheme has been introduced

for the benefit of students. The Physical Education department with the gymnasium, impressive courts and tracks provides avenues for sports and games. Students actively participate in extension activities through NCC, NSS, and Youth Red Cross.

#### Governance, Leadership and Management

Institute has a well-defined vision statement "To be a premier technological institution that fosters humanity, ethics and excellence in education and research towards inspiring and developing future torch bearers". The Principal, Heads, and In-charges of various cells/committees ensure all the planned activities are conducted effectively to achieve the vision of the Institute. In the Bidar district, GNDEC is the first institute to have NBA accreditation for all 04 programs applied. Governing Council, IQAC, and Academic Council keep an eye on the development and growth of the Institute in line with the vision.

Institute has an organizational structure, with clearly defined roles and responsibilities for every individual and provides opportunities for open and healthy communication, which makes the environment transparent and healthy in the institute. The Institute is being driven by various policies like; Purchase Policy, Delegation of Power, and Research Policy.

Different committees are formed with members from different sections to run the administrative and academic activities of the institute with a focus on the overall aim of the stakeholders. The perspective plan is framed with goals in adherence to the Vision and Mission of the Institute.

Institute has implemented e-governance in administration, finance & accounts, student admission & support, and examinations work. Several welfare schemes like EPF, Gratuity, Group Insurance, Duty, Medical, and Maternity leaves are implemented for the benefit of teaching and non-teaching staff.

The Institute gives financial support for the following

- 1. FDP/ Training/ Workshop/ Symposium / Conference etc.
- 2. Quality research papers and patents

Institute has been practicing a comprehensive performance appraisal system to motivate the employees by providing increments and incentives.

Institute is practicing various strategies for mobilizing resources. Optimal utilization is driven through a transparent and participative budget preparation process. The internal and external financial audit has helped to monitor the optimal utilization of financial resources.

Various quality standards are prepared and monitored by IQAC with the help of various institutional committees. As a result, four of our programs are NBA accredited.

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

Guru Nanak Dev Engineering College is committed to provide a safe, secure, and comfortable environment where the students and staff can pursue their academic dreams without any inhibition and also provide facilities

like common rooms for girls and boys. GNDEC organizes various activities for girls and women to bring awareness on safety, gender equality and government schemes/policies for women. Anti-Ragging Committee and Squads ensure no instances of ragging anywhere in a hostel or on campus. A Dispensary facility is available for students and staff on the campus with qualified medical staff. One-to-one counselling is provided to needy students by a professional counsellor. Experts invited from the industry to conduct talks, workshops and various sessions related to women's safety, cyber-crime and health & nutrition. Guru Nanak Hospital doctors conduct regular Health check-ups for students and staff.

GNDEC has set up a rooftop solar power plant that caters to the campus energy needs. The surplus energy is supplied to the utility grid at the agreed-upon tariff. For this purpose, net metering is employed, which gives the net energy consumed by the campus and supplied to the grid. The institution has sufficient dust bins for degradable and biodegradable waste within the campus. The campus has several water recharge pits for Rain Water Harvesting to increase the groundwater table.

To save the environment, plastic bags and other items like polythene bags are banned on campus. Automobiles are not allowed inside to keep the campus free from toxic gases produced by vehicles, safeguarding the health of the inmates.

GNDEC upholds the provisions of the Persons With Disability (PWD) Act, 1995, and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) by providing the ramps at various places.

GNDEC also organizes many National and International Days like Independence Day, Republic Day, Teachers' Day, Engineers Day, Gandhi Jayanthi & Lal Bahadur Shastri Birth Anniversary, Karnataka Rajyothsava Day, International Women's Day, World Aids Day, National Youth Day on the occasion of Swami Vivekananda Jayanthi, etc. to maintain the tradition and culture of India.

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the College			
Name	GURU NANAK DEV ENGINEERING COLLEGE BIDAR		
Address	Mailoor Road, Bidar , Karnataka 585403		
City	BIDAR		
State	Karnataka		
Pin	585403		
Website	https://gndecb.ac.in		

Contacts for Communication						
Designation	Name	Telephone with STD Code	Mobile	Fax	Email	
Principal	Dhananjay M	08482-226949	9448754514	08482-22827 3	principalgndecb@g mail.com	
IQAC / CIQA coordinator	Prasad K K	-	9448426512	-	iqac@gndecb.ac.in	

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

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Recognized Minority institution				
If it is a recognized minroity institution  Yes  Minority institution.pdf				
If Yes, Specify minority status				
Religious	Yes			
Linguistic				
Any Other				

#### **Establishment Details**

State	University name	Document
Karnataka	Visvesvaraya Technological University	View Document

Details of UGC recognition				
<b>Under Section</b>	Date	View Document		
2f of UGC	08-02-2017	View Document		
12B of UGC				

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Recognition/App Regulatory authority Regulatory not programme Recognition/App Pay,Month and year(dd-mm-yyyy) Remarks Pays Pays Pays Pays Pays Pays Pays Pay					
AICTE	View Document	28-06-2022	12		

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Mailoor Road, Bidar , Karnataka 585403	Semi-urban	26.27	35184.5	

# 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	PUC	English	60	32
UG	BE,Mechani cal Engineering	48	PUC	English	60	15
UG	BE,Electrical And Electronics Engineering	48	PUC	English	60	60
UG	BE,Electroni cs And Com munications Engineering	48	PUC	English	120	120
UG	BE,Compute r Science And Engineering	48	PUC	English	120	120
UG	BE,Compute r Science And Engineering	48	PUC	English	60	60
UG	BE,Informati on Science And Engineering	48	PUC	English	60	60
UG	BE,Artificial Intelligence	48	PUC	English	60	60

	And Machine Learning					
PG	Mtech,Electr onics And C ommunicatio ns Engineering	24	BE	English	18	3
PG	Mtech,Comp uter Science And Engineering	24	ВЕ	English	18	3
PG	MBA,Master In Business Administrati on	24	UG	English	60	60

# 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				14				23				98
Recruited	11	3	0	14	17	6	0	23	56	42	0	98
Yet to Recruit				0				0		'	'	0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit			1	0		1		0			1	0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				99				
Recruited	86	13	0	99				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				99				
Recruited	86	13	0	99				
Yet to Recruit				0				

	Technical Staff						
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				38			
Recruited	35	3	0	38			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				38			
Recruited	35	3	0	38			
Yet to Recruit				0			

# Qualification Details of the Teaching Staff

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	Permanent Teachers									
Highest Qualificatio n			Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	11	3	0	10	7	0	4	1	0	36
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	8	0	0	49	42	0	99
UG	0	0	0	0	0	0	0	0	0	0

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

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

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	4	0	0	4		

# 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	301	15	0	0	316
	Female	228	3	0	0	231
	Others	0	0	0	0	0
PG	Male	31	2	0	0	33
	Female	30	3	0	0	33
	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	27	20	36	38
	Female	30	28	22	31
	Others	0	0	0	0
ST	Male	20	16	18	25
	Female	20	10	21	14
	Others	0	0	0	0
OBC	Male	253	203	209	214
	Female	189	160	140	170
	Others	0	0	0	0
General	Male	8	9	14	22
	Female	12	15	10	18
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total	,	559	461	470	532

### Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Guru Nanak Dev Engineering college is affiliated to VTU and it follows the curriculum prescribed by the university, it is mandatory for all branch students to study atleast one inter-disciplinary/multi-disciplinary course to complete their degree. The college promotes inter-disciplinary subjects among the students through various departments, for instance computer science students are encouraged to do a course on Supply Chain Management. As a practice the college has been offering a number of certificates/add on/value based courses such as Cyber Security, JAVA, Python programming etc. of inter-disciplinary nature every year.

2. Academic bank of credits (ABC):

Academic bank credits are a key component of the NEP-2020 that academic institutions must implement. Integrating Higher Educational Institutions in a globalised space is critical and urgent as we move forward. Our college offers credit-based courses and projects as per the curriculum and organizes community engagement and social service activities for the fulfilment of the programs. The college has sufficient collaborations and MOUs with national and foreign institutions testifying to its satisfactory state of internationalization of education. The college has acquainted its faculty with the procedures to offer online MOOCs courses through international platforms like COURSERA, SWAYAM-NPTEL etc. Experience of faculty in curriculum design and pedagogy is enhanced through formulating a curriculum for certificate courses.

3. Skill development:

Guru Nanak Dev Engineering College promotes soft skill development of students through various establishments like the Institutional Innovation Council (IIC), Research Innovation and Incubation Centre for Entrepreneurship. A concept of 'NAIN' has been formed in line with the Skill India Mission which helps in polishing, promoting, and fine-tuning the skills of students to cope with the needs of emerging social and industrial opportunities. During the admission time itself, students enlist their preferred Psychomotor and unique skills and enroll in various certification programs under the NAIN.

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

The promotion of Indian arts and culture is beneficial not only to the country but also to individuals located in a multilingual region. Our college promotes the exchange of linguistic and cultural traits of heterogeneous groups. Students get an opportunity to develop their multilingual capacity in Kannada, Hindi, and English alike. The introduction of SAMSKRUTIKA KANNADA and BALAKE KANNADA as part of value education evidently shows the institution's integrity towards rich Indian culture. The institution, on the other hand, commemorates significant dates and hosts activities in regional languages to instil a sense of regional pride. Republic Day and Independence Day are two examples of celebrations where students are addressed in their native languages. Women's Day is prominent day that are commemorated with cultural events. Sankranti Traditional Day - Rangoli

	competition, Eid festival, Guru Parab Celebrations, Pre Diwali, are the noted festivals that promote the national integrity and awareness of Indian National and Regional languages, as well as the culture associated with them. National commemorative days, such as Constitution Day and Yoga Day, are also observed with same enthusiasm in the college.
5. Focus on Outcome based education (OBE):	All courses are designed with outcomes centred on cognitive abilities namely Remembering, Understanding, Applying, Analysing, Evaluating and Creating. Apart from the domain specific skills, learning outcomes at all levels ensure social responsiveness and ethics, as well as entrepreneurial skills so that student contributes proactively to economic, environmental and social well-being of the nation. GND Engineering has four programs (CSE, ECE, EEE and CIVIL) accredited by NBA, hence our college follows outcome-based education with a customized lesson plan manual which clearly states, course outcome, program specific outcome and program outcome. Students are made aware of the various course outcome, and program outcome through the curriculum and orientation program. Attainment of outcome is analysed and assessed at the end of each batch. The National Service Scheme (NSS) which caters extension activity to community participation and service, environmental education, and value-based education are all part of an innovative curriculum that includes credit-based courses. Projects, Lab experiments and mini projects with a focus on social awareness & promotion are included in the curriculum. Professional Ethics & Human Values, Gender sensitization are value-based education courses that are introduced in Departmental programmes. Environmental Sciences is a course that looks at all areas of environmental sustainability.
6. Distance education/online education:	The institution promotes teaching-learning through virtual platforms. Faculty members have sufficient experience in e-content development and the use of technological tools, ERP tool (CAMU) software for the teaching-learning process. The institution has a learning management system for academic practice and follows innovative teaching methods. GNDEC College is an approved learning support centre of NIT Suratkal.

#### **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?

Yes, An Electoral Literacy Club is set up in GURU NANAK DEV ENGINEERING COLLGE BIDAR which is a platform to engage students through interesting activities and hands —on experience to sensitize them on their electoral rights and familiarise them with the electoral process of registration and voting.

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?

Yes, students co-ordinator and co-ordinating faculty members are appointed by the college. The ELCs are functional and yes, ELCs are representative in character The institution has the ELC functional with the following office bearers SL.No. Name Designation Functional Role 1 Prof.Shivashankar B.C. Associate Professor ELC Coordinator 2 Prof. Harshavardhan Asst.Professor ELC additional Coordinator 3 Mr. Veerendra, ECE Final year student Student Representative 4 Mr. Md. Akif, CSE Final year student Student Representative 5 Miss. Vaishnavi More, ISE Final year student Student Representative

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 Institute conducts a number of activities to create sensitization of students and employees by conducting constitutional activities like constitutional day, youth day, voter's awareness program, legal awareness program and voter's registration drive for adopting the values, rights, duties and responsibilities of citizens. The constitutional day on 26th November has been conducted every year and a pledge is taken by all students and staff members. The college has an Electoral Literacy Club (ELC) in which the institute conducts voter awareness programs. The Institute conducts a special speech on the importance of the value of casting the vote and how it helps in protecting the constitutional obligations under the ELC. Our students participate in Voter Awareness Campaigns aimed in educating the public in the nearby villages, and also created awareness and interest among faculties and students through workshops. They have also eductaed the targeted populations about voter registration, electoral process and related matters through hands on experience.

4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research

• Activity: Ballot Bistro Ballot Bistro would essentially comprise discussion and brainstorming

projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.

sessions in the college canteen and cafes, moderated by ELC members on subjects pertaining to youth inclusion, engagement and involvement in the electoral procedure • Photography Contests, Film Screenings and Short Film making contest These events are conducted in collaboration with Cultural Club of the college. Movies, documentaries and still images convey vivid messages and help generate awareness and build salience for viewers about the subject under consideration i.e. electoral processes, elections, democracies, citizens' rights and duties. They act as persuasive instruments, which, if employed effectively could aid in behaviour change. • A quiz on election and electoral process is conducted among the students by the ELC in association with the college Quiz Club. • The

conducted among the students by the ELC in association with the college Quiz Club. • The National Voters' Day, celebrated on 25 January of every year, which is significant in its purpose to encourage young voters to take part in the electoral process.

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 students above 18 years who are to be enrolled as voters are sensitized about democratic rights which include casting votes in elections. We conduct mock polling activity to give the experience-based learning of the democratic setup. We also conduct poster presentation, debates, mock parliaments, elocution, essay writing and other programmes which create an awareness regarding electoral procedures. Our college make it easy for students to register to vote by providing voter registration information and resources on college websites and in the form of hoardings in the college premises. This information includes the steps on how to register to vote, the deadlines for registration, and the location of the nearest voter registration office. GND Engineering College encourages students to vote by providing information about upcoming elections and by making it easy for students to cast their ballots. This information was sent in student emails, on college websites, and in student publications.

# **Extended Profile**

#### 1 Students

#### 1.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
1943	1939	1855	1982	1983

File Description	Document
Upload Supporting Document	<u>View Document</u>
Institutional data in prescribed format	<u>View Document</u>

### 2 Teachers

# 2.1

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

Response: 181

1	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

2021-22	2020-21	2019-20	2018-19	2017-18
131	137	143	145	134

### 3 Institution

#### 3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
462.37	343.67	364.18	484.42	347.94

File Description	Document
Upload Supporting Document	<u>View Document</u>

# 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:**

Guru Nanak Dev Engineering College is affiliated with Visvesvaraya Technological University (VTU), Belagavi. It believes in imparting quality education and technical skills to UG and PG students in the field of Engineering and Management. Institution has strategic plan in place in tandem with University Regulations.

#### Academic calendar:

The academic calendar contains all the relevant details such as the number of working days, internal tests, Workshops, Value Added Courses, Cultural fest, Sports events, and special events to be conducted, the last working day, the commencement of the examination, etc. are also indicated. The department prepares its own calendar of events that is in line with the institute's academic calendar.

#### **Course Allotment:**

The Program Assessment Committee (PAC) of the department allots the courses to faculty members based on their qualifications, experience, specializations, courses taught earlier, students feedback, current areas of interest and Previous University Semester End Exams (SEE) results.

#### **Course File:**

Curricular gaps are identified based on the feedback of stake holders and activities are conducted to bridge the gap. Course file contains University prescribed syllabus, course objectives, lesson plan with proposed mode of delivery inclusive of innovative methods of teaching, list of textbooks and reference books, journals, websites, online materials, mapping of COs and POs, question bank relating to the course, previous university questions papers with its solutions. The course file execution is monitored by the HoD and PAC.

#### **Preparation of Time Table:**

Time Table is prepared in line with university Regulations and provision is made for tutorial class, remedial class, Makeup class and Library hours.

#### Quality of the course delivery:

The quality of the delivery of the particular course by the faculty members is periodically monitored by getting feedback from the students by the respective Head of the Department. HOD suggest the steps to be taken to improve course delivery if necessary.

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#### **Innovative Teaching Methods.**

To enhance the students learning, the faculty members use various innovative teaching methods such as NPTEL video lecture sessions, Flip class, Experiential learning, model based learning case studies, seminars, group discussions and assignments relevant to the subjects are provided to the students.

#### Continuous Internal Evaluation(CIE) and Semester End Examination (SEE)

CIE tests conducted as per university regulations. Effectiveness of the delivery of course is ascertained through the performance of students in Continuous Internal Evaluation(CIE) and Semester End Examination (SEE). The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 40% of the maximum marks (20 marks). A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each course. The student has to secure not less than 35% (18 Marks out of 50) in the semester-end examination (SEE).

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File Description	Document
Upload Additional information	<u>View Document</u>
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: 105

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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	<u>View Document</u>

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: 93.09

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

2021-22	2020-21	2019-20	2018-19	2017-18
1742	1772	1848	1868	1802

File Description	Document
Upload supporting document	<u>View Document</u>
Institutional data in the prescribed format	<u>View Document</u>

#### 1.3 Curriculum Enrichment

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

#### **Response:**

Institute curriculum effectively integrates cross- cutting issues relevant to Gender, Environment and

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Sustainability, Human Values and Professional Ethics leads to a strong value based holistic development of students. Various activities are organized throughout the year as a part of the curriculum that helps in the students endeavor.

**Course relevant to Professional ethics:** A course on "Constitution of India, Professional ethics and Cyber law (18CPC39/49)" enable the students to

- 1. Understand the Engineering ethics and responsibilities; identify their individual roles and ethical responsibilities towards society.
- 2. Understand the cybercrimes and cyber laws for cyber safety measures.
- 3. Understand the fundamental political codes, structure, procedures, powers, and duties of Indian government institutions, fundamental rights, directive principles, and the duties of citizens.

**Course relevant to Environment**: A course on "Environmental studies (18CIV59)" enables the students to

- 1. Understand the ecology and environmental issues that are relevant to air, land, and water on a global scale.
- 2. Develop critical thinking and/or observation skills, and apply them to analyze problems related to the environment.

**Gender sensitization** includes a positive and gender-intelligent organizational culture, growth and progress of women leaders. The importance of gender equity is integrated in the curriculum through the events organized by Women Empowerment Cell and Equal Opportunities Committee of the institution.

- Women Empowerment Cell of the institution has organized various events and motivational programs to promote gender equality, eliminate Gender Discrimination and Sexual Perversion.
- Induction programs which encompasses sessions on Gender equality and human Values.

Institute curriculum effectively integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics leads to a strong value based holistic development of students. Various activities are organized throughout the year as a part of the curriculum that helps in the students endeavor.

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File Description	Document
Upload Additional information	<u>View Document</u>
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: 49.72

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

Response: 966

File Description

Upload supporting document

View Document

View Document

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:** 69.43

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

2021-22	2020-21	2019-20	2018-19	2017-18
554	462	469	533	567

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

2021-22	2020-21	2019-20	2018-19	2017-18
696	705	774	774	774

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
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: 86.81

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

2021-22	2020-21	2019-20	2018-19	2017-18
110	102	123	126	125

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

2021-22	2020-21	2019-20	2018-19	2017-18
126	129	140	140	140

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
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: 14.83

#### 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:**

For a better understanding of programme learning outcomes, the institution employs a variety of teaching methodologies, incorporating both traditional and innovative methods of training.

The following summarizes the institutional activities connected to experiential learning, participatory learning, and problem-solving approaches.

**Experiential learning:** Strategies for learning, such as simulations, case studies, and so on, are subsequently provided to students who prefer experiential learning. The institution has made investments in the development of well-equipped laboratories and workshops in order to conduct practical sessions to validate theory and practical outcomes. To bridge the gap between academia and industry, the institution organizes industrial visits and internships on a regular basis. Faculty members advise and mentor students in carrying out innovative projects, mini projects, and final-year projects as part of experiential learning.

**Participatory learning:** Students are guided and given financial aid to participate in technical events and work on new ideas. It helps the students to develop and assimilate technical abilities. Students are encouraged to build projects and compete in competitions and publish/ present their project work in journals or conferences. Projects are carried out in groups of 3–4 students as part of participatory learning. The institution's NSS unit and department associations organize social awareness programmes that foster among the students a feeling of societal and civic responsibility.

**Problem solving methodologies:** The tutorial-based learning for a significant portion of the courses focuses on enhancing problem-solving skills. The tutorial sessions allow students to interact one-on-one with faculty members in order to reach better outcomes and solutions to problems. PLC, IOT, Raspberry Pi, Java, C++, Android, and other technical enrichment courses are taught in college to help students expand their skills. Students are guided through the process of developing EVs, software, and apps to tackle real-world problems.

The institution utilizes the following ICT tools: e-Resources, internet, Wi-Fi, digital facilities, and LCD Projectors, seminar halls, and classrooms for enhanced learning experiences. These tools support faculty and students' access to journals and supplementary knowledge and enhance teaching and learning experiences.

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File Description	Document
Upload Additional information	<u>View Document</u>
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: 91.63

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

2021-22	2020-21	2019-20	2018-19	2017-18
139	145	156	160	153

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:** 17.39

# 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

2021-22	2020-21	2019-20	2018-19	2017-18
28	26	23	22	21

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 awareded 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:**

Mechanism of internal/external assessment is transparent and the grievance redressal system is timebound and efficient

The Institution is affiliated to Visvesvaraya Technological University, Belagavi, Karnataka and follows the Rules and Regulations prescribed by the University for Continuous Internal Evaluation (CIE) & Semester End Examination (SEE).

The scheme and distribution of internal marks of the Theory courses are as follows

Table 2.5.1. CIE and SEE of 2017 & 2018

#### **Scheme**

Assessment	Weightage in Marks
CIE -I	30
CIE -II	30
CIE -III	30
Average of all three	30
Assignments/Activity	10
Semester End Examination	60

Total	100

#### Internal Tests Evaluation:

To promote uniform and fair evaluation of internal answer scripts, the course teacher along with course coordinator will set the question paper and provide a standard solution and scheme including step wise marking. This is verified by PAC members of the respective departments & CIE Marks are uploaded in ERP and subsequently in VTU portal.

**Assignments:** Assignments and rubrics are discussed in the class. After the evaluation, results are uploaded in the ERP.

**Project & Seminar Evaluation**: For final year students, Project work and technical seminars are evaluated through regular reviews by department project committee as per the university evaluation guidelines.

*Continuous Assessment in the laboratory:* Continuous Assessment in the laboratory is done by the faculty in during the conduction of every experiment and internal test for awarding CIE marks.

**Grievance redressal system:** In case any Grievance arises regarding evaluation of CIE books. Students can approach the course teacher and the course teacher will verify awarded marks as per scheme of evaluation. If any varience is found, the marks will be awarded as per scheme of evaluation.

**Regular Feedback:** feedback by students on each course is regularly obtained and corrective actions taken if necessary.

Mechanism of internal/external assessment is transparent and the grievance redressal system is timebound and efficient

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**Regular Feedback:** feedback by students on each course is regularly obtained and corrective actions taken if necessary.

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:**

GNDEC Bidar has well-structured process to implement the Outcome Based Education(OBE) to achieve the Vision of institute, which is embedded with graduate attributes defined by accreditation bodies.

#### **Program Outcomes(POs):**

Program Outcomes are statements that describe what students are expected to know and be able to do upon graduating from the program. These relate to the skills, knowledge, attitude and behaviour that students acquire through the program. POs are displayed on the website, HoD office, library and lobby in front of

Principal's office.

#### **Course Outcomes:**

Course Outcomes are statements that describe what students are expected to know and be able to do at the end of each course. These relate to the skills, knowledge, and behaviours that students acquire as they progress through the course. The course coordinator frames the COs as per the guidelines issued by the programme assessment committee (PAC) and subsequently scrutinises and approves them. The course outcomes are printed in the course file planning and are discussed with the students at the beginning of the course.

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File Description	Document
Upload Additional information	<u>View Document</u>
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:**

#### Procedure followed for calculating the PO and PSO attainment:

Attainment of the outcomes are obtained through Direct assessment and Indirect assessment.

#### **Direct Assessment:**

Direct assessment tool is categorised into Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).

#### 1. Direct Assessment (80% weightage):

#### a. Continuous Internal Evaluation:

- CIE tests for theory courses
- Assignments for theory courses
- Internal assessment for laboratories
- Seminar/ Internship / final year project

#### **b.** Semester End Examinations (SEE)

#### 2. Indirect Assessment (20% weightage):

Assessment is done using the feedback by the stake holders (Alumni survey & Graduate Exit survey)

Total attainment = 80% direct attainment + 20 % Indirect attainment

#### Following steps are followed for CO-PO attainment matrix:

#### Direct Method (80% weightage)

- Define Rubrics
- CO & PO attainment for CIE and SEE
- Overall CO attainment with 40% of CIE and 60 % of SEE
- PO attainment mapped with CO (40% of CIE and 60 % of SEE)

#### **Calculation of Direct Attainment:**

- Collection of student CIE and SEE marks scored.
- Mapping of CO, PO, Max Marks, Threshold percentage is decided.
- Percentage of Marks obtained for each CO is calculated for all students.
- Total percentage of students scored more than threshold value is obtained which attainment of a particular Course Outcome. This is based on the rubrics given below.
- Attainment level 1 = More than 50- less than 60 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.
- Attainment level 2 = More than 60 less than 70 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.
- Attainment level 3 = More than 70 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.

From the course articulation matrix and percentage of CO attainment, PO and PSO attainment is calculated and tabulated.

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#### Procedure followed for calculating the PO and PSO attainment:

Attainment of the outcomes are obtained through Direct assessment and Indirect assessment.

#### **Direct Assessment:**

Direct assessment tool is categorised into Continuous Internal Evaluation (CIE) and Semester End Examination (SEE).

#### 1. Direct Assessment (80% weightage):

#### a. Continuous Internal Evaluation:

- CIE tests for theory courses
- Assignments for theory courses
- Internal assessment for laboratories
- Seminar/ Internship / final year project

#### **b.** Semester End Examinations (SEE)

#### 2. Indirect Assessment (20% weightage):

Assessment is done using the feedback by the stake holders (Alumni survey & Graduate Exit survey)

Total attainment = 80% direct attainment + 20 % Indirect attainment

#### Following steps are followed for CO-PO attainment matrix:

#### Direct Method (80% weightage)

- Define Rubrics
- CO & PO attainment for CIE and SEE
- Overall CO attainment with 40% of CIE and 60 % of SEE
- PO attainment mapped with CO (40% of CIE and 60 % of SEE)

#### **Calculation of Direct Attainment:**

- Collection of student CIE and SEE marks scored.
- Mapping of CO, PO, Max Marks, Threshold percentage is decided.
- Percentage of Marks obtained for each CO is calculated for all students.
- Total percentage of students scored more than threshold value is obtained which attainment of a particular Course Outcome. This is based on the rubrics given below.
- Attainment level 1 = More than 50- less than 60 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.
- Attainment level 2 = More than 60 less than 70 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.
- Attainment level 3 = More than 70 percentage of students scoring more than the threshold value i.e. 60% in CIE and 45% SEE.

From the course articulation matrix and percentage of CO attainment, PO and PSO attainment is calculated

and tabulated.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

#### 2.6.3 Pass percentage of Students during last five years (excluding backlog students)

Response: 95.26

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

2021-22	2020-21	2019-20	2018-19	2017-18
404	449	399	377	399

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

2021-22	2020-21	2019-20	2018-19	2017-18
420	479	411	398	421

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
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: 3.75 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: 112

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)

2021-22	2020-21	2019-20	2018-19	2017-18
15	32	20	20	25

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:**

The institution is focused on research and innovation and the department of R&D serves as an establishment to manage and facilitate activities related to R&D in line with Vision and Mission of the institute. The R&D center is also tasked to source and manage funds to ensure all research activities are sustainable and objective-driven. To foster research, the institute has come up with Guru Nanak Research Promotion Policy (GRPP). As per the policy the faculty members are given incentives for publication in Scopus and SCI indexed journals and also for grant of patents and publishing the same. In addition, incentives are also given for getting grants from private and governmental agencies. Faculty members of all the departments take the research seriously and publish the findings in reputed journals every year. Similarly, students are made aware of the importance of publishing their work in peer reviewed journals; however, UG & PG students publish their research articles in reputed journals under the guidance of subject experts. In order to develop strategic research partnerships with leading universities overseas, the institute has signed a MoU with Universiti Teknologi PETRONAS (UTP) and Universiti Tunku Abdul Rahman (UTAR) Malaysia. Students have undergone virtual research attachment program in the final year with UTP Malaysia. At the same time, faculty members carry out research in collaboration with leading institutes of India and abroad. Faculty members published more than 300 papers and 30 patents and 10 patents were granted.

The institute also houses Institute Innovation Council (IIC) to conduct various innovations, IPR and entrepreneurship-related activities prescribed by central Ministry of Education Innovation Cell (MIC) in a time bound fashion. It also organizes workshops, seminars, guest lecturers with entrepreneurs, investors and professionals. The institute's innovation portal is used to highlight innovative projects carried out by students and faculty of the institute. It organizes Ideathon, Bootcamp and Hackathon in association with MoE GOI, ITBT GoK. Similarly, the institute also has new age innovation network (NAIN) incubation center funded by Government of Karnataka. In this scheme students are given platform to convert their innovative ideas into products. Students are encouraged to identify societal problems of nearby localities and find the solution for the same under the guidance of faculty members which should be innovative, feasible and economically viable. Subject experts guide students and nurture the smart ideas of students and convert the projects into prototypes. These activities inculcate problem based learning (PBL) skills, critical thinking skills, communication skills and team work among the students.

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File Description	Document
Upload Additional information	<u>View Document</u>
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: 45

## 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

2021-22	2020-21	2019-20	2018-19	2017-18
15	7	6	10	7

File Description	Document
Upload supporting document	<u>View Document</u>
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:** 1.12

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

2021-22	2020-21	2019-20	2018-19	2017-18
126	13	23	26	14

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	<u>View Document</u>
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:** 0.22

#### 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

2021-22	2020-21	2019-20	2018-19	2017-18
9	19	6	3	3

File Description	Document	
List of chapter/book along with the links redirecting to the source website	View Document	
Institutional data in the prescribed format	<u>View Document</u>	
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters		
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.

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#### **Response:**

Guru Nanak Dev Engineering College is having the vision of welfare of society. For achieving this goal the institute is actively involved in various extension activities through NSS, NCC and Youth Red Cross etc.

NSS Unit organizes various activities throughout the year and sensitizes and motivates the students to enroll for the same. The objectives of the programs are to sensitize students about various social issues and to contribute for the community to enhance their quality of life. The NSS volunteers work on issues of social relevance such as literacy and education, digital India, health, family welfare and nutrition, environment conservation, women empowerment, clean and green environment etc. Blood donation camps are organized every year by Youth Red Cross wing to donate blood for the needy in case of emergency. During COVID – 19 emergencies, youth red cross organized COVID-19 test in the campus to keep check on the spread of the virus in and outside the campus. Volunteers of this unit in association with DoH also organized COVID-19 vaccination camp in the institute and all the staff members and students were inoculated against COVID-19. Apart from this, this unit is also active in spreading awareness on AIDS prevention, menace of drug abuse, water conservation etc. As a part of corporate social responsibility; NSS volunteers visit orphanages, old age homes and help the people out there in every possible manner. NSS wing organized the road safety and fire safety awareness programs at nearby schools to inculcate the importance of safety while on the road and while using electrical gadgets in school and at home respectively. NCC wing in our college plays a credible role in shaping the character of students by imbibing the values of patriotism, service, discipline, hard work and overall personality development. Based on the aims of NCC, the organization has laid down training syllabus for cadets. Cadets enrolled are given institutional training and can participate in adventurous activities, community development programs at District and National levels. All the cadets attend various camps viz. Republic Day Camp (RDC), Combined Annual Training Camps (CATC), National Integration Camp (NIC), Advance leadership course, Trekking Camp and Thal Sainik Camp (TSC).

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File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

## 3.4.2 Awards and recognitions received for extension activities from government / government recognised bodies

#### **Response:**

Aforementioned Metric no. 3.4.1 details about the various extension activities being carried out in our institute. It would be matter of pride to mention that the activities performed by the institute are being recognized and awarded by the organizations being served. Drawing attention on the recognitions received by the institute, Abhishek Jadhav an NCC cadet is the recipient of Silver Medal for achieving 2nd position in Static Aero-modeling in the State level competition held at Jodhpur – UP. This award is prominent to the institute as the cadet has successfully cleared the critical phase 1, 2 and 3 stages of the competition to successfully grab the silver medal.

Similarly, recognitions were received by the institute from Gram Panchayats for conducting swacch Bharat Abhiyaan, career guidance, COVID – 19 awareness drives in high schools. The institute also received recognition for delivering talk on Personality Development, Tips to Face Board Examinations, Innovative Thinking, Fire Safety, and Road Safety to high school students in the nearby villages. The heads of schools applauded and appreciated the institute for taking such selfless initiatives for the betterment of the society. Department of Health recognized and appreciated the Blood Donation camp organized by the institute to help the needy. The institute has established old age home for the elderly citizens. This initiative is recognized by the local governmental organizations with letter of appreciation and felicitation to the management of the institute.

At 16th international education leadership & skill development summit 2023 organized by ASSOCHAM (The Associated Chambers of Commerce and Industry Of India) national council on education, the institute has received the award in the category "excellence in serving for social cause / in rural areas" on 26th MAY 2023.

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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: 58

#### 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

2021-22	2020-21	2019-20	2018-19	2017-18
11	9	13	16	9

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:** 26

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	<u>View Document</u>
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise 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:**

As per the vision, mission, objectives and quality policy of the institute and Norms of AICTE and University, the Institute provides adequate availability of physical infrastructure including sports facilities, Cultural facilities along with classrooms, laboratories, R&D and ICT facilities.

The institute continuously upgrades its infrastructure such as, Internet facility, classrooms and furniture etc, to meet the changing needs of academic environment. The institute has a total built up area of 35184.50sq.mts, out of 26.27 acres area. There are 50 LCD projectors, 48 class rooms, 6 seminar halls, 57 laboratories, 2 common rooms for girls, 1 incubation center, Workshop lab, computer centre and Language laboratory. The clean and green campus has all facilities such as playgrounds, hostel, IT infrastructure including WI-FI facility, 24 hours power backup, well equipped library, cafeteria, two air conditioned auditoriums with a capacity of 120 and 400. The institute has a solar power plant on roof of 160kw. The institute continuously invests on lab equipment to strengthen the R&D activities. Every department has ICT facilities like desktops, projectors, internet facility, WI-FI. There are two separate hostels for girls and boys with a capacity of 60 and 200 rooms respectively. Hostel students are provided WI-FI facilities, power backup, medical facilities and RO water. Internet enabled CCTV's are installed at all the strategic areas in class rooms, hostel and office to ensure security. Recreation facilities such as TV, newspaper, yoga and Indore games are provided to the hostel students. Ramps with hand rails at entrance steps at most places, parking slots, lift in college etc., are made available for the benefit of the disabled. Transport facility is provided to students from all corners of the city.

The institute has a 400m athletic track, 7000 sq.mts ground for football 162sq.mts ground for volley ball,420 sq.mts for basket ball 223.36 sq.mts and cricket ground as per standards for outdoor games and for indoor games Table Tennis, chess, carom and Multi Gym with 16 stations facilities are available as per standards.

**Cultural activities:** Institute organizes various events to promote cultural strength. Students are encouraged to participate in various cultural activities organized by University and other institutes. Institute organizes annual events like "Fresher's day, Guru-Fest, E-Buzz" etc. and students from many institutes across the country will participate in these events.

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File Description	Document
Upload Additional information	<u>View Document</u>
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: 32.28

Kesponse. 32.20

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

2021-22	2020-21	2019-20	2018-19	2017-18
23.825	248.10	99.96	109.55	164.917

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
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:**

Library Management System: The library of Guru Nanak Dev Engineering College of Engineering and Management is the knowledge resource centre for the learners having a total carpet area of about 1608Sq.m (first and second floor). The library has adequate resources with respect to 20 computers, Wi-Fi, and LAN facility. The library is grouped with various divisions viz Property Counter, Circulation Counter, Technical Section, a Reference section, National and International Journal Section, New Arrivals, In-Out Management for staff and students, OPAC, Reading Hall first and second floor, Digital library, Discussion Rooms, VTU e-Learning (e-Shikshana) Reprography, Scanning Section, and Newspaper section and Swayam Prabha /NPTEL TV Channels room.

The institute library currently uses KOHA (version 22.11.05.000) Integrated Library ManagementSoftware (ILMS) product of Katipo communications, New Zealand. This software is fully automatedwhich includes OPAC in the LMS for searching the books by students and staff. The GNDEC library has a good collection of books and Journals with 9585 titles and 41066book volumes and 100 journals and magazines.

E-resources also include (Under VTU Consortium) Elsevier, ProQuest, Emerald, IEEE POP, Springer, Taylor& Francis, NDL, DELNET, and Other e-Books. DrilBit Plagiarism. The security features such as CCTV Cameras, Fire Extinguishers & various important display boards are available.

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Management for staff and students, OPAC, Reading Hall first and second floor, Digital library, Discussion Rooms, VTU e-Learning (e-Shikshana) Reprography, Scanning Section, and Newspaper section and Swayam Prabha /NPTEL TV Channels room.

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File Description	Document
Upload Additional information	<u>View Document</u>
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:**

The institute has Internet and Wi-Fi facility for both students and staff members in the campus and also for students staying in hostels for both boys and girls. A centralized 24/7 operational server is maintained regularly to provide uninterrupted IT services for students and staff. The campus is provided with wireless access point and all Wi-Fi network facilities are well authenticated. The ICT of the institute is supported, System Analyst, System Administrator, System Engineer, Network Engineer and lab technicians.

The institute has well established policy to take care of uninterrupted power supply with roof solar power station of 160kw capacity, 200KVA UPS and 2 Generators of 125kw capacity. Maintenance of data, air conditioned environment in the server room. The software and their licenses are located in central server. The institute has computer centre and language laboratory for students and staff members for carrying out the academic and Research work.

The entire campus is provisioned with wired and wireless connections in all departments, staff rooms and offices, laboratories are provided with internet facilities. Wi-Fi is available within campus and hostels. The campus has 826 desktops provisioned with wired and LAN connections. The entire campus is provisioned

with updated Wi-Fi devices, projectors, and CCTV Surveillance along with Internet facility of 100Mbps.

The institute website is maintained by institute. The maintenance of UPS and generator is done by maintenance Section of the Institute. Civil maintenance engineer, electrical engineer, plumber, supervisors to monitor the maintenance work.

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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: 2.32

4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 838

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:** 32.13

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)

2021-22	2020-21	2019-20	2018-19	2017-18
157.64	112.81	143.92	111.13	117.92

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: 69.56

# 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

202	21-22	2020-21	2019-20	2018-19	2017-18
106	50	1107	1427	1580	1575

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:** 14.3

## 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

2021-22	2020-21	2019-20	2018-19	2017-18
260	304	280	270	273

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:** 68.39

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

2021-22	2020-21	2019-20	2018-19	2017-18
260	304	280	270	273

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

2021-22	2020-21	2019-20	2018-19	2017-18
404	449	399	377	399

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: 16.22

# 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.)

2021-22	2020-21	2019-20	2018-19	2017-18
04	24	23	26	27

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	<u>View Document</u>
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)

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#### during the last five years

#### **Response:** 43

# 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

2021-22	2020-21	2019-20	2018-19	2017-18
3	1	16	15	8

File Description	Document	
Upload supporting document	<u>View Document</u>	
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: 67.8

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

2021-22	2020-21	2019-20	2018-19	2017-18
141	0	27	100	71

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

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#### the institution through financial and/or other support services

#### **Response:**

Guru Nanak Dev Engineering College, Bidar (GNDECB) has a registered Alumni Association (Register No. DRBI/SOR/299/2020-2021) under the Societies Registration Act 1960. The alumni are contributing substantially in enhancing knowledge level of students and in placements also.

#### Alumni Contribution: -

- 1. **Alumni Interaction:** Alumni of GNDECB give inputs to aspiring Engineering graduates. They are invited as resource persons at various events such as guest lectures and panel discussions. They provide inputs and share their experiences regarding skills, recent technologies, trends in corporate world, application of knowledge and corporate working culture.
- 2. **Placement and Career Guidance:** Alumni are working in reputed organizations at various capacities. They keep the faculties and the placement officer abreast about the available job opportunities. They assist and guide the students to crack the interviews. They also share their experience with the students and motivate them for their career development in various domains.
- 3. **Campus recruiters:** Alumni also help Training and Placement officer for recruiting in their companies and also recommend and promote GNDECB to their employers for campus placements.
- 4. **Summer Internship Opportunities:** Alumni provide innumerable opportunities in various companies for the students to carry out their internship is helpful for placement of students.
- 5. **Entrepreneurship Awareness:** our Alumni have established startups in different sectors, many of them are first generation entrepreneurs. The alumni turned entrepreneurs also provide job opportunities for the final year students.
- 6. **Alumni Meet:** GNDECB has a tradition of organizing Alumni Meet Occasionally. In this meet the alumni get chance to reconnect with their Alma mater and friends. This is the best platform for networking and sharing new trends and current happenings in the corporate world. These inputs are helpful to academicians for molding the aspiring students.
- 7. **Institute Social Responsibility:** Our Alumni in association with GNDECB are engaged in conducting social welfare activities for the needy.

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File Description	Document
Upload Additional information	<u>View Document</u>
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 of the Institute

To be a premier technological institution that fosters humanity, ethics, and excellence in education and research towards inspiring and developing future torchbearers

#### Mission of the Institute

**M1**.To impart quality educational experience and technical skills to students that enable them to become leaders in their chosen profession.

M2. To nurture scientific temperament and promote research and development activities.

M3. To inculcate students with ethical and human values so as to have a big picture of societal development in their future careers.

**M4**.To provide service to industries and communities through educational, technical, and professional activities.

The Governing Council (GC) is the apex decision-making body that plans, prepares, and monitors the growth of the institution in accordance with its vision and mission. Internal Quality Assurance Cell (IQAC) and Academic Council (AC) are the important functionaries to implement the policies approved by the Governing Council, which are in line with the Vision and Mission of the institute.

The Principal conducts regular meetings with the Deans along with the Heads of the departments and reviews the processes and plans of each department. All the planning and policy decisions to enhance the quality are reviewed and discussed at various levels before their implementation.

Visvesvaraya Technological University, Belagavi adopted NEP 2020 in 2021 and the curriculum has been revamped accordingly. Being an affiliated college, efforts have been made to implement the NEP in the institution as per the university guidelines.

Well-planned academic calendar prepared includes, co-curricular and extra-curricular activities, which are in tandem with the Vision and Mission of the Institute. The Principal maintains effective coordination and monitors the departments and various committees formed for students' enrichment and overall development of the institute.

The various central committees constituted in the institute and the coordinator of the committees plans development activities and ensures their timely execution, this reflects effective governance which is in tune with the Vision and Mission of the Institute.

#### Nature of Governance

The Governing Council, IQAC, Academic Council, Department Advisory Board, Principal, and faculty focus on institutional goals.

#### **Decentralization and Participation**

The Institute practices decentralization and participative management culture. The Principal, Deans, HoDs, and staff members are involved in defining policies, framing guidelines, and rules/regulations pertaining to various activities of the institute. The PAC plans and monitors the execution of academic activities of their programs and assigns specific responsibilities to individuals or committees as required to achieve short-term and long-term goals. All stakeholders of the institution have participative roles in various decision-making committees. Every program head with their professional chapter/student chapter/ students association is free to organize the technical events needed for the programs.

#### **All College Committees Participation:**

Institute promotes a culture of participative management for which 41 various committees are set up for planning, monitoring, and execution of action plans.

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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:**

Institute has various statutory bodies carrying out functions and responsibilities in pursuit of institutional vision and mission. There is a well-defined organizational structure, service rules and policies in place for the smooth functioning of the institute.

**Governing Council:** The Governing council is responsible for ensuring effective management of the institution and for planning its progressive development as per the strategic plan for the institution proposed by IQAC. GC members meet twice a year and take policy decisions on financial, academic, and administrative matters for the overall development of the institution.

**IQAC** monitors the progress of various academic activities and programs to achieve the institution's vision and mission. The Principal consistently follows management policies to achieve the vision with the support of staff. The Principal and Head of Departments come together to form different central-level committees to provide "decentralized administration" and smooth functioning to achieve the institution's objectives and goals put forth. The strategic plan is developed by adopting a participatory approach at the institutional and department level.

The strategic plan encompasses all the aspects of academic, administrative, and quality issues. Academic activities are planned by adapting Outcome-Based Education (OBE) adopting student-centric teaching methods, a choice-based credit system, and Strengthening the R&D activities.

#### Policies and Administrative setup

The Principal is the chief academic administrator and a bridge between the management, staff, and students. Well-defined open and transparent Recruitment policies, Purchase policies, Delegation of Power & Empowerment, and Research policies are in place. The Faculty requirement is sent to GC for approval, subsequently, the selection is done by the duly appointed selection committee. Appointment of the faculty is done as per the Government norms.

The management conducts regular reviews of compliance with the strategic plan (both long-term goals and short-term goals). The management feels the quality of faculty and diversified educational system has an important role to play in attaining institutional goals.

The R&D policy motivates faculty members to acquire higher qualifications. The management cares for the institution and its staff, and it's evident from the faculty retention ratio. The strategic plan is being successfully implemented based on the actionable tasks mentioned in the strategic plan.

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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:**

I] Institutions Performance Appraisal System for Teaching and non-teaching staff

Management believes in the participation of a faculty member in every area of academic, administrative, and research activity of the institute. The faculty appraisal system defines several areas of performance from classroom teaching to administrative responsibilities.

- 1. Faculty (Teaching staff) appraisal consists of the following aspect (Numbers in the bracket indicates the maximum score allocated to evaluation criteria)
- 1. Teaching and Learning (50)
- Innovative methods used in the Teaching and learning process ( maximum of 5 API score )
- Academic contribution (Max 5 API score)
- Students' Performance (Maximum 30 API score)
- Feedback from students (Maximum 4 API)
- UG students' project work Presentation / Publication (Maximum 2 API Score)
- Participation in Institute level events by mentees( Maximum 2 API Score)
- Feedback by Mentee( Maximum 2 API Score)
- 1. Participation in Administration (25)
- Coordinator work (Maximum 25 API score)
- 1. Research Work (25)

- FDPs/ Workshops/ (minimum three days) conducted (Maximum 3 API score)
- Seminars/Guest Lectures / conducted ( Maximum of 2.5 API score)
- Conferences/symposium conducted (Maximum of 2.5 API score)
- FDPs/ Workshops/ Seminars attended (Maximum 5 API score)
- Research work publication in journals / Conferences/symposiums (Maximum 5 API score )
- Project proposed/Ongoing/ Completed Research Projects/Consultancies (Maximum 2.5 API score)
- Invited talks/keynote lectures/speakers (Maximum 2 API score)
- Research Guidance (Maximum 2.5 API score)

The faculty appraisal report consists of the above points along with HOD and Principal Remarks.

- B. Non-Teaching Staff Appraisal: The methodology followed for non-teaching staff is as follows
  - 1. Conduct during the period
  - 2. Performance during the period
  - 3. Attendance during the period

The non-Teaching Staff appraisal report consists of the above points along with HOD and Principal Remarks.

- II] Welfare Measures:
  - 1. General:
- 1. The institute provides the Employees Provident Fund (EPF) facility for eligible staff members.
- 2. The institute has a Group term life insurance for staff members
- 3. Institute has MOU with Guru Nanak Hospital, Bidar to attend any medical emergency
- 4. The institute gives Gratuity to the staff members
- 5. The institute provides paid Maternity leave.
- 6. Duty leaves for attending conferences, seminars, symposiums,s and other academic activities off-campus are granted to the staff members.
- 7. In case of illnesses and diseases for treatment and recuperation medical leave is given to eligible faculty members.
- 8. Accommodation facility for long-term and on-demand basis with nominal charges.
- 9. Technical and non-technical Training programs are organized by the institution to upgrade and update the skills and knowledge of faculty members.
- B. Awards / Incentives:
  - 1. To promote the research ecosystem, the institute gives awards and incentives for publications in

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reputed journals.

- 2. Appreciation and incentives for patent publication and grants.
- 3. Best faculty awards at institute level are given by management every year to motivate staff during the Teachers Day.
- 4. Department level best performing faculty are identified and awarded with appreciation letter.
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- Feedback from students (Maximum 4 API)
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- Participation in Institute level events by mentees( Maximum 2 API Score)
- Feedback by Mentee( Maximum 2 API Score)
- 1. Participation in Administration (25)
- Coordinator work (Maximum 25 API score)
- 1. Research Work (25)
- FDPs/ Workshops/ (minimum three days) conducted (Maximum 3 API score)
- Seminars/Guest Lectures / conducted (Maximum of 2.5 API score)
- Conferences/symposium conducted (Maximum of 2.5 API score)
- FDPs/ Workshops/ Seminars attended (Maximum 5 API score)
- Research work publication in journals / Conferences/symposiums (Maximum 5 API score )
- Project proposed/Ongoing/ Completed Research Projects/Consultancies (Maximum 2.5 API score)
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- Research Guidance (Maximum 2.5 API score)

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  - 4. Department level best performing faculty are identified and awarded with appreciation letter.

File Description	Document
Upload Additional information	<u>View Document</u>
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: 10

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

2021-22	2020-21	2019-20	2018-19	2017-18
03	41	12	06	07

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format	<u>View Document</u>
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: 55.06

# 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

2021-22	2020-21	2019-20	2018-19	2017-18
85	77	88	93	103

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

2021-22	2020-21	2019-20	2018-19	2017-18
22	22	26	25	25

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:**

#### **Mobilization of Funds:**

The Institute is Unaided and dependent solely on student fee collection. Many students fail to pay the fee on time, financial requirements of the institute are met by funds transferred from the trust. Initially, the Capital expenditure of institutes paid by SNJSF Foundation, and the same amount will be transferred back to the trust from the institute in due course of time.

Admissions are done through the Karnataka Examinations Authority (KEA) of the Karnataka Government and the Directorate of Technical Education. The amount of fee to be charged to the students is fixed by the KEA. The fee amount collected is deposited in the college account.

College is getting Grants and sponsorships from various organizations including Professional Bodies to conduct various Techno-cultural events, Seminars, and National and International Conferences. A few departments are generating revenue through Consultancy.

## **Optimal Utilization of Resources:**

The effective and efficient use of available financial resources is made through budgetary allocations. The

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Head of the Department (HOD) in consultation with the Faculty and Lab in Charge finalizes the yearly Budget of the departments and the same is put forth to the Principal. Taking into account all the department-wise Budgets, a college-level Budget is prepared. This Budget is placed before the Governing Council for its approval. Once the same is approved, the purchases are made through the Purchase Committee as per the Purchase Policy.

As per the purchase policy to procure any equipment a comparative statement is prepared by considering a minimum of three quotations from different vendors. This process ensures that the right equipment is purchased at the most competitive price. Half-yearly Budget utilization is submitted by each of the departments. This keeps a further check on them to ensure funds are utilized effectively. Any additional requirements that arise due to unforeseen expenditure are discussed in the HOD's meeting and the same is requested to the Management for approval.

## The institution conducts Internal and External Financial Audits regularly:

#### **Internal Audit:**

The college account section verifies the Institute's accounts at regular intervals. The college account Team checks fee receipts and payments with vouchers and necessary supporting documents. The college account Team also ensures that all payments are duly authorized. After the verification, the report is sent to the management if only there are any adverse observations.

#### **External Audit:**

The Institution has appointed a qualified practicing Chartered Accountant firm MGRK associates (Charted accountant U. Ganesh Rao) External Auditors who Audit the accounts of the Institute. The External Auditors conduct a Statutory Audit at the end of the financial year. There are no audit-related adverse remarks in the last five years

## **Mobilization of Funds:**

The Institute is Unaided and dependent solely on student fee collection. Many students fail to pay the fee on time, financial requirements of the institute are met by funds transferred from the trust. Initially, the Capital expenditure of institutes paid by SNJSF Foundation, and the same amount will be transferred back to the trust from the institute in due course of time.

Admissions are done through the Karnataka Examinations Authority (KEA) of the Karnataka Government and the Directorate of Technical Education. The amount of fee to be charged to the students is fixed by the KEA. The fee amount collected is deposited in the college account.

College is getting Grants and sponsorships from various organizations including Professional Bodies to conduct various Techno-cultural events, Seminars, and National and International Conferences. A few departments are generating revenue through Consultancy.

#### **Optimal Utilization of Resources:**

The effective and efficient use of available financial resources is made through budgetary allocations. The Head of the Department (HOD) in consultation with the Faculty and Lab in Charge finalizes the yearly

Budget of the departments and the same is put forth to the Principal. Taking into account all the department-wise Budgets, a college-level Budget is prepared. This Budget is placed before the Governing Council for its approval. Once the same is approved, the purchases are made through the Purchase Committee as per the Purchase Policy.

As per the purchase policy to procure any equipment a comparative statement is prepared by considering a minimum of three quotations from different vendors. This process ensures that the right equipment is purchased at the most competitive price. Half-yearly Budget utilization is submitted by each of the departments. This keeps a further check on them to ensure funds are utilized effectively. Any additional requirements that arise due to unforeseen expenditure are discussed in the HOD's meeting and the same is requested to the Management for approval.

#### The institution conducts Internal and External Financial Audits regularly:

#### **Internal Audit:**

The college account section verifies the Institute's accounts at regular intervals. The college account Team checks fee receipts and payments with vouchers and necessary supporting documents. The college account Team also ensures that all payments are duly authorized. After the verification, the report is sent to the management if only there are any adverse observations.

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File Description	Document
Upload Additional information	<u>View Document</u>
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 institute has various committees under its ambit to mainly focus on

- Teaching & Learning
- Research and Development
- Industry interaction
- Training and placement

#### **Teaching & Learning**

IQAC takes efforts to guide teachers to focus on outcome-based education (OBE) by conducting sessions on

- Course Outcome (CO) formulation
- CIE and CO, PO attainment
- Quality of CIE Test question papers,
- Assignments and their evaluation
- Product development
- Induction and hands-on training of LMS

The teachers discuss COs with students at the commencement of the course. Gaps identified by the PAC are bridged by conducting additional activities. The HOD monitors students' attendance and conducts regular review meetings. Students who are irregular are counseled by mentors to improve their attendance. Teachers upgrade themselves through NPTEL course certifications.

#### Research and Development (R&D)

The R & D committee motivates teachers and students to participate in conferences, seminars, technical competitions, etc. Promotional policies such as financial support to attend FDP/conferences and presenting proposals to funding agencies, financial rewards for quality publications, etc. have been implemented.

## **Industry interaction**

IQAC has initiated Industry Institute Interaction (III) Cell for strengthening interaction between institute and industry which involves contribution by every individual teacher. Faculty members connect with industry to organize visits/hands-on training/expert lectures/internships/sponsored projects/placements. It is made mandatory for students to undergo an internship after the semester End examination by VTU.

## Training and placement (T&P)

Various value-addition programs according to the needs of the industry are organized regularly. IQAC initiated CREPT, STEP, CSSPD, etc. for employability skill development of the students to enhance the placement rate.

#### **Internal Academic Audit**

IQAC conducts an internal academic audit annually to ensure all the academic processes are carried out regularly and documentation is maintained. IQAC organizes an induction program for newly appointed teachers to make them aware of their roles, responsibilities, and rules/regulations.

Apart from the above statements, IQAC is taking care of the following points:

- Preparing the programs for assessment and accreditation by NBA
- Participating in All India survey of higher education (AISHE)
- Participation in the national institutional ranking framework (NIRF).

## IQAC takes review the following

- The teaching-learning process,
- Structures & methodologies of operations
- Learning outcomes
- Incremental improvement

Teaching-learning processes, methodologies, and learning outcomes are periodically reviewed by the IQAC. The effectiveness of the implementation of these initiatives is monitored periodically by conducting academic audits. IQAC also takes care of enhancement in the usage of innovative pedagogy techniques, Enhancement in the usage of ICT tools, Implementation of Outcome Based Education (OBE), and Continual Improvement and Strengthening of the ERP System.

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File Description	Document
Upload Additional information	<u>View Document</u>
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:**

To be a more democratic system that pays attention to ensure equal rights without any gender bias, it is imperative to take up measures that explicitly or implicitly aim at enforcing equal status for both genders. In a male dominated or patriarchal society such as ours, this objective can be attained by allowing more women to participate in those events or activities which see more participation by the male fraternity hitherto, within and outside the campus. Towards this end, Guru Nanak Dev Engineering College (GNDEC) routinely organizes various programs, cultural fests, co-curricular activities, seminars on women empowerment, etc., to promote gender equity.

#### **Increasing female enrolment in engineering programs:**

With middle and high schools, Guru Nanak Dev Engineering College offers STEM programs and activities specifically designed for girls. The long-term plan for providing scholarships and financial aid to female students interested in pursuing Engineering is also in the pipeline.

**In collaboration with IEEE, Bangalore section, the college has organized a STEM Program and activities specifically designed for girls as part of our efforts to usher in more gender equity.** 

The college has zero tolerance towards discrimination or harassment of female students and staff. It ensures a safe, secure, and comfortable environment where the students and staff can pursue their academic dreams without any inhibition. 24x7 CCTV surveillance system is in place and a designated faculty can be contacted day and night for assistance in case of any emergency.

The College Internal Complaint Committee (CICC) has been constituted and is functional in the college under "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013", referred to as "The Act. 2013". This committee aims to prevent, prohibit, and redress sexual harassment of women employees and students in the college. They meet on a need basis to address any complaints from students, teaching, and nonteaching members and take necessary action. The college has a zero-tolerance policy toward any such transgression.

To create a more lady-friendly environment, a napkin dispenser & incinerator are installed in the ladies washrooms.

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#### 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 has made considerable effort to cater to the needs of students from different states, castes, creeds & religions. At the beginning of the academic year, all the first-year students are taken through an induction program, which highlights the importance of inclusiveness and respect for different cultures, castes, and creeds. Elaborately human values and ethics are discussed and debated during the induction program. During the program, students are informed about social media usage and the ill effects of posting inflammatory messages on social media. The students take a lead role in organizing several extension activities for uplifting of the society at large in the form of "SadhbhavanaDiwas", "National Unity Day", "Electoral Literacy Day", "Gandhi Jayanthi", and international Yoga Day.

Institution celebrates national festivals such as Independence Day, Republic Day & Gandhi Jayanthi, constantly reminding the faculty and the students to remember and respect the sacrifices made by our freedom fighters and recollect the contributions made by Dr. B. R. Ambedkar, father of our Indian constitution. Students and staff speak about fundamental rights & duties, Human rights, and directive principles of the constitution. Students and staff are also encouraged to deliver national unity and communal harmony talks, and a sense of belongingness and national integrity is instilled among staff and students. The institution conducted an essay writing competition on Republic Day, and prizes were distributed to deserving candidates.

The institution celebrates International Women's Day on 8th March every year to highlight the importance of Women's contribution to society, sensitization of gender equality, and respect for women.

As per the university curriculum, Universal Human Values is taught as a credit course for second-year engineering students. The constitution of India and professional ethics(CIPE) are taught as a credit course for first-year engineering and second-year lateral entry students. Moreover, teaching about CIPE covers all modalities, which sensitize a person, awaken his/her conscience and develop an attitude of behaving decently in a social set-up with the following outcomes.

- 1. Created awareness about the constitutional values and objectives written in the Indian Constitution.
- 2. Ascertained the views of students and teachers regarding the achievement made in respect of each of the values /objectives in the present context in India.

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Upload Additional information	<u>View Document</u>
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:**

1. Innovation Unleashed-Ideas to Prototypes

#### **Objectives of the Practice:**

1) To provide facilities that empower faculty and the .students to perform any experimental work necessary to build prototypes and realize their innovative ideas.

2) To develop a scientific temperament and create an R&D ecosystem.

**The Context:** In the current global technological scenario, it is of paramount importance that we have the latest infrastructure facilities which can enable the faculty and students to conduct research on emerging technologies and develop appropriate solutions for societal problems to meet SDGs.

**The Practice:** Despite being a tier 2 institution all the laboratories are fully equipped with the latest equipment like measuring instruments, power sources, other auxiliary equipment, etc. A number of simulation tools can be used by students and faculty for research and study. All the classrooms are equipped with ICT facilities to enable the faculty to explain the content by various types of presentations which helps to hold the attention of students in a better way. Also, various online lectures can be presented.

- 1) The Vinuthana lab of the ECE department is equipped with the latest hardware and software tools like microcontroller development boards, Raspberry-pi latest version boards, NODEMCU, Matlab, NS2 Network Simulator, etc., which are available to everyone to develop a prototype to resolve real-world problems.
- 2) The Civil Engineering department utilizes the infrastructure to provide consultancy services to various Government and Non-Government organizations involving faculty and students.
- 3) The Department of Electrical and Electronics Engineering infrastructure is utilized in providing solutions to industries like KPTCL, CMC, and PWD in and around the Bidar District.

**Evidence of Success:** In the department of ECE, during the last two academic years 6 student projects have been sponsored by KSCST to the tune of Rs.50,000/-. IOT lab has been set up in the department which is sponsored by VGST, Government of Karnataka. VGST also sponsored the HFSS simulator which is used in research involving radio and microwave antennas. During the same time around 5 scholars have completed their Ph.D research work using the existing facilities.

#### 2. Initiatives to meet the obligations of serving society.

In an effort to meet the social cause and serve the community at large, GNDEC, Bidar regularly takes up various activities through the NSS wing of GNDEC, AICTE activity, Red Cross, and PMKVY.

- 1)To provide food, clothes, and other minimum required things to the needy.
- 2)NSS wing conducts various awareness programs on issues like alcohol addiction, tobacco addiction, and activities like tree plantation, cleanliness, etc.
- 3) Under the RED Cross wing to provide the needy with blood, conduct free health checkups, etc.

**The Practice:** GNDEC regularly conducts health checkup camps at Guru Nanak Hospital, Bidar, blood donation to needy patients(students from the hostel do volunteer sometimes), various cleanliness programs in the city and in the surrounding villages, street plays on issues like domestic violence, food awareness, etc.

India being a developing nation still grapples with a number of issues prevailing on a large scale like poverty, illiteracy, and poor quality education, poor health infrastructure, economic disparities to name a

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few. To eliminate these issues and achieve the status of a developed country with overall better standards of living, the Government, Industry, and Academic Institutions have to come forward and contribute in any way possible like supporting the people with charity(providing food, clothes, books etc), provide education to the needy, take care of the destitute, take measures for climate control and make every possible effort to make the world a better place to live in.

#### **Problems Encountered**

- 1. To identify the needy.
- 2)To collect people inclined to serve the people.
- 3)To take permission from relevant authorities to do charity

## **Resources Required**

To arrange for the resources like food to be distributed, clothes, etc., manpower inclined to serve the people, the finance, and other logistical support.

#### **Evidence of Success**

- 1)A number of people have benefitted from blood donation
- 2)Poor children have been supplied the food, clothes, books, etc.
- 3)Free health checkups have benefitted people in general.

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

#### 1. Minority Institution

Established in the year 1980 with the motto of "Essence of Wisdom is Service to Humanity", the only minority Institution in the region of North Karnataka. Since its inception a large number of minority students have graduated successfully and settled well in their chosen fields. Also students from almost all states of the country graduated from this Institute making it truly cosmopolitan.

- **2. NSS Unit:** The Institution has well established and a very dynamic NSS unit wherein students regularly take up initiates like street cleaning, spreading awareness on harmful effects of tobacco and drugs, tree plantation etc
- **3. NCC:** The Institute has a well established NCC flight(wing) with a good number of students' enrollment. The wing has been serving the objectives of Cadet Corps since the last two decades. Presently the flight strength is 100 cadets. The cadets are trained regularly and take up any emergency work during natural calamities and help the needy.
- **4. Institute Innovation Council:** GNDEC has established Institution Innovation Council during 2020-21 which aims at promoting the ideas to culminate into innovation.

- **5. Edureq Skill Development LLP:** This LLP got registered in the year 2022 under the NAIN center of the Institute. This start up aims to develop the skills of students so that they become industry ready by the time they pass out of the institute.
- **6.Agritec solution LLP:** Aims at providing affordable solutions to farmers on various issues pertinent to cultivation of crops.
- **7.State of the Sports Infrastructure:** The college boasts of a 400m athletic track and field (8 lanes) with raised border and Hammer throw and Discus throw cages. Also indoor and outdoor stadia for sports like table tennis, basketball are present. Also Gym for boys in set up in the Boys' Hostel.

#### 8. Professional student chapters:

- 1. IEEE
- 2. MOUs with various foreign Universities
- 3. ACM

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- 1. IEEE
- 2. MOUs with various foreign Universities
- 3. ACM

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

## 5. CONCLUSION

## **Additional Information:**

Guru Nanak Dev Engineering College, Bidar(GNDEC,) has established MOUs with various Research institutes, foreign universities and industries to bridge the gap between industry and academia. This collaboration allows students to undertake internships, projects, and training programmes and participate in events such as seminars, workshops, and certification programs, organized by various industries and universities in India and abroad

The GNDEC Institution Innovation Council (IIC) supports student entrepreneurs by providing assistance in market analysis surveys, digital marketing, and seed funding for developing innovative prototypes. The college has also established the New Age Innovation Network (NAIN) by the Karnataka Innovation and Technology Society (KITS), which is a nodal agency under the Department of Electronics, Information Technology, and Biotechnology (DEITB) of the Government of Karnataka, India. NAIN fosters innovation and entrepreneurship by providing a platform for collaboration, knowledge sharing, and networking among start-ups, researchers, industry experts, and policymakers.

GNDEC embraced Outcome-Based Education (OBE) among faculty and students to enhance the learning and teaching experience through well-planned curriculum and activities which impart skills to the graduates in different fields. To enable learning beyond the syllabus and for imparting additional knowledge, GNDEC motivates and assists the students to register and get certified by online platforms such as NPTEL and SWAYAM with the active support of its local chapter.

In summary, GNDEC's collaborations, Research and innovation support, start-up ecosystem, and focus on Outcome-Based Education contribute to creating a dynamic and entrepreneurial environment for students, promoting industry-academia collaboration, and fostering innovation and growth.

## **Concluding Remarks:**

GNDEC Bidar, with a rich history of 42 years, is a prestigious institution that is renowned for its excellent education and commitment to holistic development. The college has witnessed continuous growth, both in terms of academics and infrastructure, guided by the vision and mission of the ever enthusiastic management.

The college recognizes the importance of obtaining accreditation from the National Assessment and Accreditation Council (NAAC) as a means to evaluate and ensure the standard of education. This accreditation is expected to further enhance the college's reputation and image. GNDEC Bidar has made significant contribution in the field of higher education and it has even altered the educational landscape of Bidar, with a commitment to quality and continuous improvement. It has received accolades, certifications, and awards at the state and national levels. The GNDEC provides a conducive environment for learning, equipped with ICT-enabled classrooms, seminar halls, and research facilities. The institution actively engages students in various activities, clubs, and sporting s for their all-round development.

The management plays a crucial role in enhancing the teaching and learning process by providing state of the

art infra structures to all departments. The college offers nine undergraduate and four postgraduate programs. It also houses seven university recognized research centres.

Efforts are made to bridge the gap between the institution and the industry by providing internship opportunities for students, enhancing their employability and higher-level skill development. The college has created an ideal environment for its growth, with impressive infrastructure spread across a green and serene campus. The college is home to multi-talented students and a highly qualified and motivated faculty who are well-equipped to tackle academic challenges. The management is dedicated, enlightened, and progressive, aiming to position the institution among the top engineering colleges in the country.

In summary, GNDEC Bidar has a longstanding legacy of providing quality education in tandem with the latest developments and it aims at continuous growth with a focus on academics and industry collaboration, the college is in pursuit of NAAC accreditation in order to contribute to its high standing in the field of higher education.