



# **SELF STUDY REPORT**

**FOR**

**2<sup>nd</sup> CYCLE OF ACCREDITATION**

**K. D. K. COLLEGE OF ENGINEERING, NAGPUR**

GREAT NAG ROAD, NANDANVAN

440024

[www.kdkce.edu.in](http://www.kdkce.edu.in)

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**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

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# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Karmavir Dadasaheb Kannamwar College of Engineering (KDKCE), Nagpur is established in 1984 by BCYRC, a registered society, is a private self-financed institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur. College is approved by AICTE & Directorate of Technical Education, Maharashtra. KDKCE is located in the urban area, at Nandanwan, Nagpur encompassing a sprawling area of 5.55 acres, with actual built up area of 26550.79 Sq. m. College is awarded "A" grade by Government of Maharashtra. College offers seven UG engineering program, two PG engineering programs & MBA. Two departments are approved Research Centers by RTMNU leading to Ph. D. degree. College is accredited by NBA for five UG programs viz. Civil Engineering, Electrical Engineering, Mechanical Engineering, Electronics and Telecommunication Engineering and Computer Science Engineering. College is recognized under 2(f) of UGC act 1956 and it has also been received certification on ISO 9001:2015, ISO 50001:2018 and ISO 14001:2015. The College has been recognised with Patent Fest Certificate of Recognition. This accreditation and recognition is a testament to the college for high standards of education and its commitment to quality.

### **Vision**

**"Service to the Society Through Quality Technical Education."**

### **Mission**

We at KDKCE shall work continuously to achieve,

- 1) Academic Excellence in Engineering and Technology Through Complete dedication to all round Growth of Students.
- 2) Enable the Students to Develop Outstanding Professional with Technical Competence and Management Skills.
- 3) Fulfill the Expectance of the Society and Industries with Ethical Standards for developing Sustainable Solutions.

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

### **Institutional Strength**

1. Accredited by NBA for five UG programs & NAAC
2. Two UG Programs Civil, Mechanical are NBA accredited Four Times while one Electrical Engg program Three times

- 3.ISO 9001:2015, 14001: 2015, 50001:2018 certified
4. Active NPTEL local chapter
5. Students consistently secure University merit positions
6. Need based scholarship is availed to the economically weaker students
7. Ragging free campus, as noted by NBA, ensuring the students have a safe and conducive environment to learn
8. Good faculty retention ratio
9. Faculty members are an ideal blend of youth and experience
10. 40 faculties with Ph.D.
11. Faculty representations in university bodies such as the Academic Council, the Board of Studies, Research & Recognition Committee etc
12. MOUs with industries, foreign university and e-internships through EduSkill (AICTE)
13. Good student support system includes counseling, career guidance, and placement assistance which helps the students to succeed in their academic and professional careers.
14. Incubation centre allotted by MSME for 65 Lakh
15. College recognizes and appreciates academic performers
16. College sponsors faculty for PhD
17. Incentives and rewards for research paper publications in journals
18. Mechanical and Civil Engineering department are recognized as Place of Higher Learning leading to Ph.D. by RTM Nagpur University
19. Technology enabled learner support
20. Technical education penetration in rural and tribal areas
21. Vibrant Entrepreneurship Development Cell
22. Industry - Institute Interaction Cell
23. Professional activities through Active clubs, chapters and forums
24. e-Yantra lab is set up through IIT, Bombay

25. International and National Conferences and workshops are regularly organized
26. Digital library providing access to e-journals
27. Wi-Fi facility in the college campus
28. Authorised TCS Online Exam centre
29. Green and energy efficient campus having 150 + kW Solar power Generation, Solar Water Heater, Bio Gas unit at hostel
30. College location in the heart of city
31. Strong alumni base - alumni supports
32. 24x7 hours medical care

The KDK College of Engineering is committed to providing quality education to its students and to preparing them for successful careers.

### **Institutional Weakness**

1. Book publication and patents need to be enhanced
2. More funding from industries for academic enhancement is needed
3. Placements in industries needs enhancement
4. Consultancy activities requires upgradation
5. Selection through competitive examinations needs enhancement.
6. Limited AQIS grants from AICTE
7. Being an affiliated institution, chances for curriculum refinement is restricted

### **Institutional Opportunity**

1. Strengthen the Industry Institute Interaction for better placement of students
2. Develop facilities and consultancy for revenue generation
3. Increase the quality of research publications
4. Improve networking with institutes of repute

5. AICTE's broader AQIS avenues would fetch more sanctioned projects
6. Improve research and entrepreneurship activities
7. Skill Enhancements with industry
8. Availability of research grants from Government, research agencies
9. 100 % PG projects to be industry based

### **Institutional Challenge**

1. Challenge of employability for students
2. Placement in industries in higher position
3. Change in technological advancements at a fast rate
4. Intake quality of students
5. More faculties with industrial exposure

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

KDK College of Engineering being affiliated to RTM Nagpur University adheres to prescribed syllabus while incorporating various essential curriculum elements to offer a well-rounded quality education. Within the prescribed syllabus, students are provided with limited academic flexibility through elective courses. This allows them to tailor their education to suit their interests and career aspirations, fostering a more personalized learning experience. To enhance students' employability and soft skills, 103 value-added and NPTEL courses were integrated into the curriculum in last five years benefitting about 68 % students. These courses cover communication, leadership, and specialized workshops, complementing their technical education. The college leverages online learning platforms such as NPTEL, SWAYAM, and MOOCs to supplement the prescribed curriculum. These platforms offer a wide array of courses, enriching the curriculum and enabling students to explore diverse subjects and emerging technologies. While adhering to the prescribed syllabus, the curriculum is enriched through regular updates to align with industry advancements. This ensures students are exposed to the latest trends and developments in their field of study. The curriculum includes courses on professional ethics, human values, environmental consciousness, and sustainability. Students learn about their ethical responsibilities as engineers, consider societal impacts, and explore sustainable engineering practices. Project-based learning is emphasized to bridge the gap between theory and practice. Students undertake projects that apply theoretical knowledge to real-world engineering challenges, fostering problem-solving skills and creativity. Students are required to complete projects, field projects and internships in collaboration with industry partners. Nearly 72 % students have undertaken project work, field projects and internships. These

experiences provide hands-on exposure to industrial practices and enhance employability. A comprehensive feedback system engages multiple stakeholders, including students, faculty, employers and alumni. This system collects input on various aspects of the curriculum, teaching methods, and infrastructure. Feedback collected is analysed meticulously, leading to action taken reports. This ensures that constructive feedback drives continuous improvements in the curriculum, teaching methodologies, and the overall learning experience. In conclusion, the college adheres to prescribed syllabi while incorporating academic flexibility, value-added courses, online learning opportunities, curriculum enrichment, ethics education, project-based learning, industrial exposure, and a comprehensive feedback system. These components work together to provide students with a comprehensive and adaptable education, aligning them with industry and societal needs and preparing them for successful careers in engineering.

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

K.D.K. College of Engineering, Nagpur has a Good students' enrolment averaging to 85.55% for last five years. College follows reservation policies of GOI and Government of Maharashtra. Average reserved category students admitted for last five years are 85.54%. The institute has Mentee-Mentor ratio of 19:1. Advanced and slow learners are advised to pursue different activities according to their performance as well as inclinations. Faculty members are encouraged to pursue professional development opportunities.

At K.D.K.C.E., teaching-learning process is based on the philosophies of OBE and revolves around student-centric learning methods that encourage active engagement, critical thinking, and creativity. Teaching strategies include experiential, collaborative and participative learning, problem solving methodologies etc. There is an integration of ICT tools, introduction to real world problems through expert lectures, value added courses, industrial tours & visits, internships, industry-based projects and practical applications. The college is affiliated to RTM Nagpur University and follows RTMNU curriculum. Computer laboratories with Internet, Wi-Fi facilities, LCD projectors, Smart boards and seminar halls are provided for enriched learning experiences. Students develop leadership, management & communication skills through a wide range of activities through students' forums, NSS, Rotaract club, club-auto etc.

K.D.K.C.E. follows continuous evaluation mechanism for internal assessment of theory, practical and project work as per guidelines framed by the Institutional Examination Committee. Students are tested using a variety of examinations like Sessionals, objective tests, quizzes, PUT, viva-voce, demonstrations for laboratory-work, project seminars & presentations etc. There is a grievance redressal system for complaints related to internal/external assessment.

The Vision, Mission statements, COs, POs, PSOs, PEOs are stated and displayed on college website and at various locations on the campus. The curriculum based and other activities have pre-defined outcomes which are mapped with the POs. All these activities result in attainment of the POs and PSOs and help in student progression.

Student feedback forms a part of self-assessment and quality assurance system. It is utilised in planning and implementation of academic/other activities to prepare graduates to fulfill the PEOs.

Thus, K.D.K.C.E. has a very effective teaching, learning, and evaluation process that results in development of a competent professional and a holistic individual.

## **Research, Innovations and Extension**

The institute has a dedicated team of researcher who undertake research activity involving students also. The institute has received grants from various government and research agencies. The institute is having good infrastructure for academic and research. The faculty members encourage student to undertake industry based research projects.

To encourage and promote Innovation, entrepreneurship, incubation and IPR activities, the institute is having dedicated entrepreneurship development cell funded by AICTE. Institute is having Incubation Center supported by Ministry of MSME New Delhi and Incubation Sub-Center of affiliating R.T.M. Nagpur University. IPR Cell is promoting the awareness about IPR among staff and students and encouraging them for filing their patents, copyrights etc. The incubation center have startup activities. The activities for ideations are regularly conducted. Seminars related to IPR, Entrepreneurship research methodology are regularly conducted in all the departments.

Various departments organize seminars, National & International Conferences every year to encourage Faculty publications for research contribution. 900 plus research papers are published in last five years in premium & UGC care journals. 269 books, book chapters and papers in national & international conference are also published.

The institute is having vibrant NSS, ROTRACT unit which undertake lot of extension activities in the neighborhood community sensitizing the students towards social issues for their complete development. The similar activities are also undertaken through ROTRACT, departmental student forums and professional student chapters.

The outreach activities are undertaken in nearby rural areas for promotion of various government activities and development of rural masses. For these activities the institute is recognized and awarded by various government and government recognized agencies like Nagpur Municipal Corporation, Social Welfare Department, Govt. of Maharashtra, Old Age Homes, Orphanages etc.

The institute has 32 functional MOU's in existence and many linkages to address interaction of students and faculties with industries training agencies, government agencies etc. Under the aegis of MOU's various activities are undertaken like research, training, skilling, internship and industry exposures.

## **Infrastructure and Learning Resources**

K.D.K. College of Engineering, Nagpur has adequate facilities for teaching learning. The campus is spread over 5.55 Acres with a total built-up area 26550.784 sq.m. For teaching learning & other activities, there are 41 classrooms, 12 tutorial rooms, 70 laboratories, 5 seminar halls, 04 computer centres, workshop, central library, closed & open auditorium, canteen facility and playground in the campus. Classrooms are equipped with multimedia teaching aids, smart board & Smart classes with google classroom as Learning Management System. The Classrooms, seminar/conference halls, Auditoriums are equipped with LCD Projectors with all accessories and wi-fi connectivity. Computer laboratories with Internet, Wi-Fi facilities, LCD projectors, Smart boards and seminar halls are provided for enriched learning experiences

To facilitate continuous power supply & maximum energy requirements of the college; a 250 KVA transformer, 140 KVA Genset & solar panels on the roofs of the buildings are installed. Central workshop of

built up area of 674.71 sqm, provides hands on training to next generation engineers.

Institute has indoor and outdoor games facility, gymnasium, yoga centre in campus and students & faculties utilise these facilities on regular basis. The Well-equipped closed and open auditorium is used to organize cultural activities, Seminars, Professional/Invited Talks, Awareness programs etc. A multi-station gymnasium with free weight exercises is available at Hostel B. Yoga is practiced in college campus and in ETC seminar hall.

The Central Library is well equipped & is fully automated with Synchronic Soflib Software( ILMS) – version 5.5. The library has a collection of total 9855 titles, with 58960 volumes with a total cumulative investment of Rs. 1,45,41,308/-. Library has subscription of DELNET and J-Gate international e- journals and membership of NDLI and e-Shodhsindhu to promote research. It is having collections of e- journals of Springer nature, Elsevier Science , IEEE ,Scopus,Web of science etc. and e- books & a provision of access to e-journals. It also subscribes 78 national journals (AJMS), 285 Online National Journals , 911 international journals (DELNET) & 39494 e-Journals under J-Gate. It also have membership of e-Shodh Sindhu (Consortium for Higher Education e-Resource). Specialized services like Reprography, inhouse/remote access to e-resources facilities are provided. CCTV cameras are installed in the library for strict surveillance.

Institute is having latest computers, laptops, printers, and scanners for academic and administrative purpose. Entire campus is Wi-Fi enabled with the help of 27 access points. The internet connectivity with 300 MBPS 1:1 leased line is available in the campus. Student – Computer ratio is 1: 2.8 as per intake and 1:3.08 as per enrolled students.

### **Student Support and Progression**

The Institute has Scholarship facilities for the students. Scholarship to SC/ ST/ NT/ VJ/ OBC/ EWS/ EBC / MINORITY students is provided by the State and central Government. The Non Government organization also provide scholarship to students. About 85 to 90% students get the benefit of the Scholarship. Special training sessions , Guest lecture on different modules in the area of Skill development for soft skills, Computer literacy, Personality Development Programmes, English language, Life Skills for health and hygiene, awareness for trends and technology are conducted in the Institute. Expert lectures and technical session from industry, corporate, academics, T&P in-charge, CRT training, workshops and seminars, conferences, Mock campus are arranged for the benefit of students for guidance to competitive examination and career counseling. The Institute has constituted Committees like Anti ragging, ICC Internal Complain Committee, Women Cell, Grievance and redressal cell with senior Faculty members which look after gender sensitive issues, sexual harassment, Anti-ragging committee keep a watch on the activities of the students. The Institute also provides facilities of Group Health Insurance Scheme for students.

The Institute is having Training and Placement department to guide and help the students for industrial training and to get the best of the placement opportunities in various Private and Government organization. Students are also encouraged to pursue higher studies. GATE classes are conducted by department for the students who are interested in doing post graduation in Engineering.

Talented Sports persons are provided financial help from college. Further, our students participate in varieties of sports and cultural activities like Cricket, Swimming, mountaineers, Athletics, Singing, Dance, Mock Parliament, Tug of war, badminton, Kho-Kho, Chess, Debate, Quiz, Roboclub, Go-cart, etc. at college, intercollegiate, University and National level. Various departmental Association EESA, MESA, FACEIT,



CESA are there in the Institute which have student representatives. College is having NSS and students take active part in social activities like tree plantation, swach bharat abhiyan, Donation drive, Anti drug activities, Traffic awareness etc.

Alumni meets are organized every year. Alumni are invited to share their experiences with students. Alumni are helping in the development of college from time to time.

### **Governance, Leadership and Management**

The college functions under a structured governance, leadership, and management framework, with the Director and Principal at the helm. The Director and Principal are supported by the Vice-Principal, IQAC Coordinator, Deans, HODs, faculty in-charge of committees, and the Office Superintendent, collectively managing academic and administrative affairs. The college's overarching vision is to provide quality education to engineering students, equipping them to meet professional and personal challenges and contribute to society and the nation.

The Principal's office drives strategic planning and policy formulation for academics and administration, fostering decentralized decision-making and participatory practices. Faculty engagement and input are highly valued, manifesting in participatory management, committees' constitution, and students' integral role in realizing the institution's vision.

The college prioritizes innovative teaching methodologies, employing interactive techniques like group discussions, seminars, and student-led lectures to enhance engagement. Faculty members ensure student progress through continuous evaluation across curricular, co-curricular, and extra-curricular activities. To elevate teaching standards, faculty benefit from Professional Development Programs, Training, Refresher courses, and Faculty Development initiatives.

A robust research culture is nurtured, with incentives for publications, research projects, patents, and copyrights. Community engagement is a focus, facilitated by the NSS unit, departmental associations, and professional chapters. The college is ecologically conscious, attested by its Green, Energy, and Environment audits, and ISO certification in Energy and Environment Management.

Empowering staff is a cornerstone, evident through welfare measures fostering dedication and retention. A transparent appraisal system recognizes exemplary contributions, fostering organizational commitment. Budget allocation is managed by the Board of Governance, disbursed to departments for effective administration and academics. Funds are diversified through tuition, consultancy, and competitive exams, managed with efficient internal and external auditing.

Continuous enhancement is pursued through stakeholder feedback. The Internal Quality Assurance Cell (IQAC) is pivotal in reviewing teaching-learning, policies, and suggesting quality measures. The IQAC is committed to consistent institutional improvement across all domains.

In essence, the college operates through a well-structured governance system, led by the Director and Principal, supported by dedicated faculty and administrative members. Its mission is to provide quality education while fostering participatory management, research endeavors, community engagement, and environmental responsibility. The institution's commitment to ongoing improvement and stakeholder engagement underscores its dedication to holistic development.

## **Institutional Values and Best Practices**

KDK College of Engineering is a renowned institution known for its commitment to providing quality education in the field of engineering. Institute is also committed to fostering gender equity, sustainable practices, academic excellence, and inclusivity. This executive summary outlines the key institutional values and best practices that underpin the institute success and reputation in various domains.

The institute actively promotes gender equity through awareness programs and policies aimed at creating a safe and inclusive campus environment for all genders. Institute undertook a gender audit to ensure gender equity, inclusivity, and diversity within its academic and administrative operations.

The institution has implemented renewable energy sources like solar panels for promoting sustainable practices. Institute effectively manages both degradable and non-degradable waste through recycling, composting, for contributing to a cleaner environment. The institute has undertaken green campus initiatives, including tree-planting drives, water conservation measures such as rainwater harvesting and efficient water use practices, ensuring responsible use of this precious resource for creating a sustainable and eco-friendly campus environment.

The institution fosters an ecosystem for academic excellence by encouraging research, providing modern facilities, also by integrating technology into teaching and learning processes, offering online resources, QR code for access of teaching materials, and interactive platforms to enhance the educational experience and promoting interdisciplinary collaboration among faculty and students.

The institute is dedicated to the upliftment of students from tribal areas, providing mentorship, and support services to enhance their educational opportunities and outcomes by establishing the career guidance and counselling cell in the institute. The college has achieved national and international recognition through accreditation from NBA (National Board of Accreditation), NAAC (National Assessment and Accreditation Council), and ISO (International Organization for Standardization), affirming its commitment to quality education.

The dedication of the institute towards gender equity, sustainability, academic excellence, and social inclusivity underscores its commitment to holistic education. These initiatives, along with national and international recognition, demonstrate the institution's unwavering commitment to producing socially responsible, environmentally conscious, and academically proficient graduates. The college's innovative and sustainable practices make it a model institution for engineering education.

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	K. D. K. COLLEGE OF ENGINEERING, NAGPUR
Address	Great Nag Road, Nandanvan
City	Nagpur
State	Maharashtra
Pin	440024
Website	<a href="http://www.kdkce.edu.in">www.kdkce.edu.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Avinash M. Badar	0712-2710030		0712-271365 8	
IQAC / CIQA coordinator	Nina R. Dhamge	0712-2711400	9022593774	0712-271365 8	nina.dhamge@kdkce.edu.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	

State	University name	Document
Maharashtra	The Rashtrasant Tukadoji Maharaj Nagpur University	<a href="#">View Document</a>

Details of UGC recognition		
Under Section	Date	View Document
2f of UGC	09-11-2020	<a href="#">View Document</a>
12B of UGC		

Details of recognition/approval by stationary/regulatory bodies like AICTE, NCTE, MCI, DCI, PCI, RCI etc (other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day, Month and year (dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	10-04-2017	12	Extension of the approval for the academic year
AICTE	<a href="#">View Document</a>	10-04-2017	12	Extension of the approval for the academic year

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Great Nag Road, Nandanvan	Urban	5.55	26550.78

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BTech,Civil Engineering	48	XII standard in Science or equivalent with CET or JEE Score	English	60	59
UG	BTech,Mechanical Engineering	48	XII standard in Science or equivalent with CET or JEE Score	English	60	60
UG	BTech,Electrical Engineering	48	XII standard in Science or equivalent with CET or JEE Score	English	90	90
UG	BTech,Computer Science And Engineering	48	XII standard in Science or equivalent with CET or JEE Score	English	180	180
UG	BTech,Electronics And Telecommunication Engineering	48	XII standard in Science or equivalent with CET or JEE Score	English	60	60
UG	BTech,Information Technology	48	XII standard in Science or equivalent with CET or JEE Score	English	60	60
UG	BTech,Artificial Intelligence And Data Science	48	XII standard in Science or equivalent with CET or JEE Score	English	60	60
PG	Mtech,Civil Engineering	24	BE in Civil Engineering or Equivalent	English	18	18

PG	Mtech,Mechanical Engineering	24	BE in Mechanical Engineering or Equivalent	English	18	8
PG	MBA,Management	24	U.G.degree in any discipline	English	60	60

**Position Details of Faculty & Staff in the College**

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	13				6				128			
Recruited	10	3	0	13	4	2	0	6	78	50	0	128
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				23
Recruited	21	2	0	23
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				16
Recruited	16	0	0	16
Yet to Recruit				0

### **Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	10	3	0	3	1	0	19	5	0	41
M.Phil.	0	0	0	0	1	0	0	0	0	1
PG	0	0	0	1	0	0	56	45	0	102
UG	0	0	0	0	0	0	0	0	0	0

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



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

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
		14	1	0	

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

<b>Programme</b>		<b>From the State Where College is Located</b>	<b>From Other States of India</b>	<b>NRI Students</b>	<b>Foreign Students</b>	<b>Total</b>
UG	Male	1676	23	0	0	1699
	Female	862	8	0	0	870
	Others	0	0	0	0	0
PG	Male	76	1	0	0	77
	Female	93	0	0	0	93
	Others	0	0	0	0	0

<b>Provide the Following Details of Students admitted to the College During the last four Academic Years</b>					
<b>Category</b>		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
SC	Male	395	431	441	363
	Female	238	235	241	221
	Others	0	0	0	0
ST	Male	57	49	58	47
	Female	28	25	30	23
	Others	0	0	0	0
OBC	Male	725	778	839	762
	Female	396	389	418	422
	Others	0	0	0	0
General	Male	358	386	342	326
	Female	161	151	144	132
	Others	0	0	0	0
Others	Male	243	229	238	190
	Female	138	121	138	134
	Others	0	0	0	0
<b>Total</b>		<b>2739</b>	<b>2794</b>	<b>2889</b>	<b>2620</b>

### **Institutional preparedness for NEP**

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>While the prime effort of the institution remains on the optimization of methods of curriculum delivery to ensure academic excellence, preparing the students for industry or self-employment is also one of the institution's highest priorities. KDK College being an affiliated college of RTM Nagpur University completely adheres to and follows the course structure and curriculum as approved by the University. Thus the college will implement in letter and spirit the curriculum and course structure as formulated by the University as per NEP. The college already has a well-established framework for offering professional elective courses for students of different disciplines. RTM Nagpur University (affiliating</p>
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	<p>university) has already introduced the concept of B.E./ B.Tech. degree with minor/honor and major/honor as per direction no. 2 of 2021. The various departments of the college already offer open elective papers to students from other departments as part of their curriculum. Students of different disciplines are being involved in Student Research Projects of inter and multidisciplinary nature. The rapidly evolving employment market, the need for entrepreneurship development, up-skilling, innovation and developing global competencies has led to the need for rethinking competencies and taking it beyond the classroom teaching. Moreover, the world today needs good citizens, who are socially responsible, compassionate, and tolerant towards others and are ready to offer their services for the development of their community and country. It is essential today to inculcate in the young generation good moral and ethical values and attitudes that will help them overcome any kind of obstacles and help them to excel in whatever profession they may choose to follow. The college has necessary expertise to implement the curricula linkages with industry/ other institutions and integration between different disciplines. The College will implement and provide value added courses involving flexible and innovative curricula subject to the approval by the affiliating university. The college has active and vibrant NSS, Sports club and student forum in every department. Through these initiatives the college is already involved in community engagement and service, environmental education and value based education. The college adheres to the 4 year curriculum framework with multiple entries and exits as provided by the University.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>KDK College of Engineering is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University of Nagpur and completely adheres to the curriculum framework and syllabi as directed by the University from time to time. The College has already implemented Academic Bank of Credits framework as approved by the University. The college already has student management system (ERP) in place where all student details including their internal assessment, attendance, continuous internal evaluation and examination related details are entered. K.D. K. College of Engineering, Nagpur</p>

	<p>received a letter from Rashtrasant Tukadoji Maharaj Nagpur University, Internal Quality Assurance Cell, to take part in a campaign for registration of students in Academic Bank of Credit Portal and till date 100% students of the college have registered on the portal. Thus as the RTM Nagpur University has adopted the ABC, the college has also implemented it by encouraging students to register on ABC portal of the National Academic Depository (NAD), an initiative of MHRD. The faculties of the college have completely migrated to the blended mode of teaching-learning pedagogy where the faculties provide appropriate learning to the students and have implemented the learner-centric approach. Faculties not only provide relevant online and offline resources to the students but also develop and deliver content beyond syllabus for any gaps in the curriculum. Course activities have been the part of the teaching-learning process in addition to regular classroom teaching-learning. The faculties of the college are constantly engaged in the creation of online content including text material, instructional videos, demonstration videos of experiments, workshops, remedial and tutorial sessions to help the students achieve the optimum learning.</p>
3. Skill development:	<p>KDK College of Engineering offers various Skill enhancement and Industrial Skill development courses as per their aptitude, curriculum and which are best suited to their needs. In addition to these course, the college also offers elective courses which aim to develop discipline related skills and hands-on approach. The college also offers language skills course and Campus Recruitment Training as a part of skill enhancement courses. Some of the courses offered are: 1. Salesforce 2. Communication Enhancing Skills 3. CNC Milling and Programming 4. Recent Trends in Mobile Application Development 5. AutoCAD, STAAD &amp; Revit 6. Machine Design &amp; Development 7. Drone Technology and ATV Design 8. Python for Data Science 9. Energy Conservation and Introduction to Artificial Intelligence 10. Introduction to Robotics 11. LED bulb manufacturing The college has MoU with various technical training institutes and industries of related disciplines to offer Certificate courses for providing skilling, training and employment benefits to the students. The College has tie up with different companies for on the Job</p>

	<p>training, industry training and internship of the students. The college has also established facilities like e-Yantra lab, NSS, NCC, Club Robo and Club Auto to inspire inter-disciplinary ideas for Innovation at under graduate level and expose the students to the latest trends and skills with interdisciplinary approach. The institution offers additional skill development courses for the students under different program of study which educate, sensitize and help them to develop a positive value based mindset and attitude.</p>
<p>4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):</p>	<p>The faculties take efforts to enhance the learning level of the students by solving their doubts/ queries in vernacular languages. The teaching in classroom is in mixed mode of languages (English and vernacular). The Institute celebrates Matrubhasha Diwas, Hindi Pakhwada, Indian festivals like Makar Sankranti, Diwali Milan, Garba Fest, Kite Festival etc. Various cultural Programs are celebrated wherein students participate in competitions like folk dance, skit, singing, poster and essay competition, rangoli, mehendi, debate in Hindi etc. Students are encouraged to visit monuments of cultural importance in local site visit and exertion tours. Indian Sports like Kabaddi, kho-kho, Pittu (Lagori) etc. are organized at college as well as intercollegiate level. Program based on heartfullness, Yoga, meditation etc. are conducted. A course on “Performing Arts” is included in V Sem. B.Tech. Mechanical Engineering. The college faculties also have interest in the areas of Indian Knowledge System to help students to develop understanding about our traditional ethos. The college constantly encourages its faculty to hone their skills in the area by attending FDP, Refresher courses, seminars and conferences and also by organizing these for the benefit of all the students of the institution. Faculties undergo FDP/ refresher courses on Universal Human Values (UHV). It is notable to mention that the college recently organized Faculty Development Program on NEP-2020 to promote Indian Knowledge System in which faculties presented their expert talks on different themes under NEP 2020. The institution is promoting faculties to provide the classroom delivery in bilingual mode.</p>
<p>5. Focus on Outcome based education (OBE):</p>	<p>The college has completely adopted the learning outcome based curriculum framework and</p>

	<p>implements the program structure of Choice Based Credit System and curriculum approved by Rashtrasant Tukadoji Maharaj Nagpur University. Program Outcomes (POs) as defined by NBA are adopted and Program Specific Outcomes (PSOs) are framed in consultation with eminent persons from industries, academia and faculties of the institute. Course Outcomes are framed for each course. CO-PO mapping is done for each course. Apart from this, vision &amp; mission statements are disseminated to all stakeholders of the programs through faculty meetings, student awareness workshops, induction programs, parents meet etc. College has established a robust and credible continuous evaluation and internal assessment system to constantly monitor the progress of all its students including their regularity. CO-PO assessment manual is prepared and followed for direct and indirect assessment. Based on these assessments the faculties plan their intervention to help the slow learners so that they can cope up with the rigor of the curriculum. In order to create the best teaching-learning environment for its students the college has completely implemented the blended teaching-learning pedagogy. Through the blended approach, faculty constantly monitor whether the learning objectives and learning outcomes are being achieved or not and accordingly take necessary steps to ensure that all students gain the necessary expertise, knowledge, skills and capabilities.</p>
6. Distance education/online education:	<p>The college is carrying out its teaching-learning process in blended mode where continuous monitoring and evaluation is done to ensure that faculty can do timely intervention so that students can understand and remove their weakness in a time bound manners. For this purpose the college has subscribed to Google Suite which includes all Google tools like Google Meet, Google Classroom, Google Calendar amongst others to develop and deliver the entire teaching learning process in an online environment in addition to offline teaching and interaction. Google classrooms for each individual subject in each semester are created by subject teachers and students are invited to join the class. College established ICT enabled classrooms and laboratories. In session 2021-22, due to COVID 19 pandemic, distance &amp; online Teaching-learning process was carried out in Odd Semesters while Even</p>

semesters were conducted in mixed mode. Theory classes, seminars, Guest Lectures and many activities were conducted in online mode through Google classrooms. Understanding levels of students were tested by conduction of online quizzes on a regular basis. Assignments and sessional examinations are conducted in online/offline as per academic calendar. In Laboratory sessions, faculties demonstrated experiments in online mode during pandemic. Practical experiment demonstration videos are also made available in YouTube. Interaction in laboratory sessions, tutorials, doubt clearing sessions, project discussions and demonstrations are carried out though Google classrooms.

### Institutional Initiatives for Electoral Literacy

<p>1. Whether Electoral Literacy Club (ELC) has been set up in the College?</p>	<p>Yes. Electoral Literacy club is a platform to engage students through interesting activities and hands on experience to sensitize them on their electoral rights and familiarize them with the electoral process of registration and voting. Electoral Literacy club is established in KDKCE in the year 2022 with the primary objective of sensitizing the student community about democratic rights which includes casting votes in elections. Electoral Literacy Club (ELC) targets the new voters, (in the age group of 18-21 years old) pursuing their graduation and conduct mock polling activities to give the experience-based learning of the democratic setup. ELC also conducts other activities such as road shows to create awareness regarding electoral procedures.</p>
<p>2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?</p>	<p>The Institution has the ELC functional with the following Student Coordinator: Mr. Shreyas Almast, III year B.Tech. (Electronics and Telecommunication). Co-coordinating faculty members: Dr. Girdharilal H. Agrawal, Dr. (Mrs.) Dipali S. Satone, Dr. (Mrs.) Archana M. Ramteke, Dr. Kailash A. Gedekar and Mr. Anshul R. Nikhade. For each department, two student representatives from each year are coordinating the working of ELCs. The club has all the students from all semesters as its members. ELCs are conducting awareness campaign programs amongst first time</p>

	<p>voters. The role of an Electoral Literacy Club is to empower students and young adults with the knowledge and skills needed to become active and responsible participants in the democratic process. ELC involves in: • Organizing the Club enrolment • Planning activities for the ELC •Facilitating the enrolment of students not registered as voters. It achieves this through education, awareness-building, hands-on experiences, and a commitment to non-partisanship and civic engagement.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>Under the initiatives taken up by ELC, students have done voluntary contribution in the electoral processes by 1. Participation in voter registration in E-Roll format for enrolment as voter. 2. if not pending for enrolment, attaining 18 years as on 1st Jan 2023, collected form 6 and talk about the various documents required. For students belonging to other cities and states, they were made aware about National Voters' Service Portal and asked to register themselves online. 3. To create awareness and interest among faculties and students through Workshops on National Voters Day, ELC has conducted an awareness program at KDKCE. The significant in its purpose is to encourage young voters to take part in the electoral process. 4. ELC has also organized Debate/Speech Elocution Competition as parliamentary debate, a normal debate, a panel discussion or a speech elocution competition. College has collaborated with local government officer to enhance the impact of our initiatives. ELC at KDK College of Engineering has organized a registration camp with local Government official. ELC club organizes events or activities to celebrate democracy, such as Democracy Day, to highlight the importance of democratic values and principles.</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>The ELC takes initiatives that are socially relevant to electoral related issues especially awareness drives, highlighting their contribution to advancing democratic values and participation in electoral processes. Survey of the students regarding the voter registration is been done. Awareness regarding Electoral literacy as per the directions from both the central and state governments and our affiliating university has been done with the aim: 1. To help the target audience understand the value of their vote to ensure that they exercise their suffrage right in a confident, comfortable and ethical manner Visited</p>



	<p>corporate offices, Companies and Educational institutions to give awareness and importance about voting's. 2. To develop a culture of electoral participation and maximize the informed and ethical voting and follow the principle 'Every vote count's and 'No Voter to be Left Behind', ELC at KDK College has organised rally about voter registration for disabled persons and senior citizens. By following the guidelines and staying committed to its objectives, the Electoral Literacy Club at KDKCE makes a significant contribution to creating informed and responsible young voters who actively participate in the democratic process.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>The 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. The ELC, conduct an awareness programme and other programmes which create an awareness regarding electoral procedures. KDKCE ELC Conducted and participated voter awareness campaign. Voter registration drive was conducted at institute for above 18 years of age students. The club remains active beyond election seasons and promote a culture of civic engagement and responsibility throughout the year, not just during elections.</p>

## Extended Profile

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### 1 Students

#### 1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
2739	2794	2889	2620	2756

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 2 Teachers

#### 2.1

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

Response: 295

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

#### 2.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
147	170	174	175	146

### 3 Institution

#### 3.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
761.6	589.61	392.33	606.99	785.52

File Description	Document
Upload Supporting Document	<a href="#">View Document</a>

## 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:**

K.D.K. College of Engineering is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and follows its academic calendar and syllabus. For each programme, Programme Specific Outcomes (PSO) are outlined in tune with vision and mission of the institute and Course Outcomes (CO) are framed based on Bloom's taxonomy. Institute has a well-developed structure for effective implementation of curriculum that consists of action plans implemented through IQAC. Academic calendar and time table is prepared prior to start of session. Academic calendar of the institute displays dates for start and end of odd and even semesters, internal and university examinations and other activities apart from regular academics. Follow up of this calendar depends upon the University schedule. However, the academic calendar is followed otherwise. Institute aims at effective curriculum delivery by providing required state of the art facilities in classrooms, tutorial rooms, seminar halls and laboratories. ICT based teaching is practiced. Additionally, interactive methods like NPTEL videos, quizzes, seminars, objective tests, group discussions, are incorporated for effective learning process. Google Classrooms are created, facilitating sharing of course materials, books, videos, etc. Semester-wise WhatsApp group of students and faculties are prepared for publishing notices, time-table, other instructions etc. Each faculty prepares teaching file which consists of course details, teaching plan and record of course delivery. A record of theory, practical/ assignments/ tutorial attendance with performance evaluation, project work engagement and progress are maintained. Every faculty member is assigned a group of students for mentoring throughout the session. Implementation and monitoring of teaching-learning process is done by academic monitoring committee at department level for effective execution of curriculum. The curriculum gaps, if any, are fulfilled by delivering the content beyond syllabus, expert lectures, seminars, subject activities, workshops and other co-curricular activities. During the pandemic lockdown period, online academic monitoring system was implemented to monitor online classes through Google monitoring sheet. Students are encouraged to register for examination of NPTEL and other MOOCS courses which has resulted in 34 students completing these courses in AY 2022-23.

Evaluation of learning is done through two sessional examinations and pre-university test. Apart from these examinations, class tests, surprise tests, quizzes etc. are conducted by subject teachers. Assignments are given and evaluated. Final internal assessment marks are calculated by considering all tests and assignments. Students are informed in advance about the parameters of internal evaluation system. Laboratory work is assessed on a continuous basis. Similarly, the Project work, case studies and industrial visits are assessed by seminars delivered regularly by students along with viva-voce. Course related workshops, quizzes and PPT presentation competitions are taken up for evaluation of learning. Academic Audit is done at departmental and Institute level to verify the academic conduct of the department. Faculty Development Programs are conducted to enrich faculty members with updated knowledge, comprehensive skills and right attitude. Faculty is encouraged to participate in continuing

education programs run by elite institutes for exchange of knowledge and skill. Above mentioned teaching-learning process helps students assimilate the curriculum effectively and receive additional inputs in the form of technical skills needed by the industry.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 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:** 103

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

### Other Upload Files

1

[View Document](#)

### 1.2.2

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

**Response:** 68.13

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online

courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1985	2502	2024	1537	1353

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 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:

Being affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, the institute follows the curriculum of affiliating university having incorporated cross cutting issues relevant to Ethics, Gender, Human Values and Environment and Sustainability as stated below:

#### Professional ethics and Human values:

Under Professional Ethics related courses, Ethics in Information Technology and Professional Ethics courses are offered in Computer Science and Engineering(CSE), Mechanical Engineering programs. Course on Consumer Affairs is offered in Electronics and Telecommunication Engineering(ETC) and Information Technology(IT). A course on Industrial Economics and Entrepreneurship Development is offered in Mechanical and ETC. A course on Communicative English and Technical Writing is offered in Civil Engineering program. Effective Technical Communication course is offered in CSE,IT,ETC and AIDS. Industrial Visit and Report writing course is offered in Electrical Engineering. In addition to these courses, templates of thesis for UG-PG projects are to be followed and plagiarism checks for research papers as well as thesis are made compulsory to instill ethics in students.

Universal Human Values course is offered in CSE, IT and ETC. Student Induction Program of First year B.Tech. includes awareness of Universal Human Values. Information Technology includes a course on Social and Ethical aspects of IT. NSS wing of the college and various Departmental student's forums conduct programs related to human values and professional ethics on internet literacy, personality development, yoga, meditation, community Service, clean and green initiatives, etc., also workshops on Communicative English, moral values and ethics awareness, interview techniques, etc. are organized for integration of ethical and human values. Institute has constituted an Anti-Ragging committee and is a ragging free campus. Apart from this, industrial visits are arranged to know about the work culture and

practices in the industries. Students undergo Industrial training and internships in leading organizations.

### Gender:

The institute has constituted Women Development Cell, Women Redressal Cell and Internal Complaint Committee for the girl students which constitutes to 37% of the total students on roll. Women to men work force ratio of 32:68 is maintained for teaching and non-teaching staff. Women hold important portfolios in the areas of governance, administration and academics. Separate hostel is provided for boys and girls. No discrimination of students is done in class rooms, labs, allocation of projects and mini-projects and departmental student's forum committees. Women Development Cell organizes various programs and invited talks on Women Empowerment, health and Safety. College functions with co-existence without any discrimination.

### Environment and Sustainability:

Energy and Environment (theory and practical) course is offered in First year of B.Tech. for all programmes. Under Environmental and sustainability, Audit course on Environmental Science is offered by CSE & IT and courses of Renewable Energy Studies and Environmental studies are offered by Electrical Engineering. In Civil Engineering programme, students learn Environmental Engineering and are opting for electives on Air pollution and solid waste management and Water and waste water treatment. Electrical Engineering offers elective on Energy Management and Audit course. Projects are undertaken by final year students related to environmental issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modeling, flood prediction, green concrete etc. In addition to above, UG-PG projects and co-curricular activities related to environment and sustainability are undertaken.

Sample evidences of the above are given in the attached documents.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 1.3.2

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

**Response:** 72.14

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

**Response:** 1976

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 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	<a href="#">View Document</a>
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	<a href="#">View Document</a>
Action taken report on the feedback analysis	<a href="#">View Document</a>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>



## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1

##### Enrolment percentage

**Response:** 85.55

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

2022-23	2021-22	2020-21	2019-20	2018-19
666	624	583	463	564

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

2022-23	2021-22	2020-21	2019-20	2018-19
666	666	666	666	726

#### File Description

#### Document

Institutional data in the prescribed format

[View Document](#)

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

[View Document](#)

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

[View Document](#)

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

[View Document](#)

#### 2.1.2

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

**Response:** 85.55

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

2022-23	2021-22	2020-21	2019-20	2018-19
301	292	310	254	293

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

2022-23	2021-22	2020-21	2019-20	2018-19
333	333	333	333	363

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	<a href="#">View Document</a>
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)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.2 Student Teacher Ratio

### 2.2.1

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

**Response:** 18.63

## 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:**

At K.D.K.C.E., teaching-learning process is based on the philosophies of OBE and revolves around student centric learning methods. Teachers always try to create conducive environment to enrich students' learning experiences. Induction programs create sense of familiarity and belongingness for new entrants through participative activities. Students are informed about Program Outcomes and Program Specific Outcomes from beginning. This helps them to plan and accomplish required graduate attributes during their program stay.

All faculty members discuss Course objectives in first lecture to make students understand what they are expected to do at the end of course. Teaching strategies are set to give diversified learning experiences to students. All curricular activities mostly cater to PO1-PO5. For this, regular classroom and laboratory teaching, Videos, PPTs, virtual labs and modern simulation tools are used. Students learn by individual and collaborative learning practices in solving Assignments/tutorials. Class activities, laboratory practical sessions and Value added courses enhance their experiential, participative and collaborative learning experience. GATE & competitive examination classes, communication workshops & CRT help them for future studies and engagements. Alumni interactions prepare students for industrial and work challenges. Expert/Guest lectures are arranged to create awareness about technological advancements and industrial requirements. Students are persuaded to enroll for MOOC courses. Extensive use of ICT tools is there with learning platforms like Google classrooms, Google meets, college website etc. to share learning material, discussions, presentations and conduction of Quizzes. Computer laboratories with Internet, Wi-Fi facilities, LCD projectors, Smart boards, video conferencing, Language lab and seminar halls are provided for enriched learning experiences.

Students are provided opportunities to develop leadership, management & communication skills and are motivated to find sustainable solutions for societal problems in the context of environmental issues through a wide range of activities by students' forums, NSS, Rotaract club, club-auto etc. They are encouraged to participate in industrial trainings, internships, field visits and industry-based projects and also to present and publish their work in conferences/journals. Students get collaborative and participative learning experiences through extra/co-curricular, cultural and sports events. These activities in general, satisfy PO6-PO12.

Departments arrange special courses for fulfilling Program Specific Outcomes.

Whole academic session is planned such that students will undergo various learning experiences and after program completion, will be able to meet the stated PEOs in 4-5 years.

Some practices for enhancing effectiveness of Teaching-Learning process:

Sr. No.	Learning Method	Implementation Process
1.	Experiential Learning	i)Laboratory Practicals ii)Field Learning through – a) Industrial Visits b) Internships

		c) Training Programs d) Real world examples e) Industrial Project work
2.	Participative Learning	a) Google classroom b) Laboratory Practicals c) Projects d) Case studies e) Seminars & Presentations
3.	Problem Solving Methodologies	a) Tutorials b) Assignments c) Mini-Project/Project work d) Open ended practicals
4.	Students' Association Activities	Students plan & implement task
5.	Alumni Interaction	Industry readiness

Thus, it can be said that K.D.K. College of Engineering, Nagpur has a very effective Teaching-learning process that results in producing a competent professional and a holistic individual.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

### 2.4.1

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

**Response:** 100

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

2022-23	2021-22	2020-21	2019-20	2018-19
147	170	174	175	146

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

**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:** 22.17

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

2022-23	2021-22	2020-21	2019-20	2018-19
41	40	36	34	29

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.	<a href="#">View Document</a>
Institution data in the prescribed format	<a href="#">View Document</a>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awarded by UGC recognized universities	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 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:**

At K.D.K.C.E., the Internal/External Assessment system for both theory and practicals including seminars & project work are totally transparent. The Institute follows continuous evaluation mechanism for internal assessment. Internal Assessment is carried out for theory, practical and project as per guidelines framed by Institutional Examination Committee. Faculty members announce various modes of student assessment in advance. Students are informed about academic calendar which gives important dates of internal and University examinations at the beginning of session so that they can plan their studies in advance.

All examinations are conducted as per academic calendar. Students have a fair chance of good performance as internal examinations are conducted on small parts of the syllabus. Students are tested using a variety of examinations like Sessionals, objective tests, class tests, quizzes, PUT, viva-voce and demonstrations for laboratory work, seminars & presentations for project etc. throughout the semester.

Parents' meet is organized in each semester. Parents are shown complete student record including attendance, marks scored, assignments submitted etc. Parents can also view the answer sheets. Letters are sent to parents of students having less attendance or poor performance seeking their attention for improvement in performance of their ward.

The answer copies of all internal examinations and grades of assignments of Practical examinations are displayed as soon as the evaluation is carried out. Concerned subject teachers show evaluated answer-books to students and grievance if any can be immediately solved on the spot. The matter can always be discussed with mentor teacher, class-in-charge or Head of the Department if remains unsolved at the subject teacher level. Head of the Department in consultation with the subject teacher tries to solve the matter to the satisfaction of the student. If the problem persists, students can contact higher authorities including Principal/ Director, who convenes a meeting with concerned HoD and subject Teachers to solve the issue.

As marks are to be uploaded on the RTM Nagpur University online portal, all the complaints/ grievances are to be solved within the given time frame. Thus, the system is transparent, time-bound and efficient.

It is always ensured that all students are satisfied with their internal assessment.

RTM Nagpur University gives the scheme of examination for each program wherein mode of assessment is also mentioned. University calendar specifies dates for session start, vacations and examinations. University notifications and ordinances specify durations for result declarations and the scheme of challenge to valuation/revaluation along with its procedure. Students can approach RTM Nagpur University through college in case of any grievance after the declaration of results. In case of some discrepancy, students can demand a copy of the evaluated answer-book from University and may consult the subject teacher to decide whether to opt for revaluation after paying processing fees through college office. Students get revaluation result and mark-sheets as per schedule. Thus, the R.T.M. Nagpur University's assessment system is completely transparent.

As R.T.M.Nagpur University gives time-line for challenge to valuation and for filling examination forms for upcoming examination, the process of grievance redressal is time-bound and efficient.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 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:

Program Outcomes are defined by National Board of Accreditation, New Delhi and are to be fulfilled by all programs run by colleges affiliated to Universities while the Program Specific Outcomes (PSOs) are defined by individual programs. Program Specific outcomes are defined in various meetings held by Head of the Department with eminent persons from industries, academia and teachers of the Department. R.T.M. Nagpur University has provided the syllabus with Course outcomes (COs) for some programs while Course teachers have framed the course outcomes where they are not provided by the University.

All these outcome statements along with vision and mission of the Institute and Department are published on

- College website <http://www.kdkce.edu.in>
- Department website <http://www.kdkce.edu.in/Departments>
- Display boards in the Department
- Departmental Newsletter
- Project & Seminar Reports
- Apart from this, vision & mission statements are disseminated to all the stakeholders of the programs through faculty meetings, student awareness workshops, student induction programs, parents meet etc.

The Course outcomes for all programs can be accessed using the following link:

<https://kdkce.edu.in/index.php/Contentpage/index/RXZnZ3Z1dENTZnhTWIZZPQ%3D%3D/>

New admitted students are informed about these concepts at induction programs. Every teacher knows course objectives and informs students about course outcomes in the first lecture before start of the course work. Assessment methods are declared by the Institutional Examination committee. Subject teacher tests the students for CO attainment through assessment modes which are already declared at the start of the session. Assignments and tutorials work as guiding methods for achieving the COs. COs are displayed on all examination question papers and laboratory experiment manuals.

The COs are mapped with Program outcomes and Program Specific Outcomes (PSOs). POs 1-5 are mostly covered by the regular curricular activities. Co-curricular and Extra-curricular activities, industrial visits & training programs, Guest/Expert lectures etc. are conducted in order to fulfil some of the

program and program specific outcomes which are not covered by the regular program curriculum. Students are informed about the expected outcomes of value added courses/activities. These help in fulfilling the POs and PSO. These objectives are also mapped with POs and PSOs.

The CO attainment is evaluated based on students' performance in all examinations- internal as well as University, quizzes, assignments and activities carried out in a particular subject in the scale of 1-3.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 2.6.2

*Attainment of POs and COs are evaluated.*

**Explain with evidence in a maximum of 500 words**

**Response:**

As per AICTE guidelines and the model curriculum, the curriculum for each program is framed by R.T.M. Nagpur University, Nagpur. It has subjects belonging to Basic Science & Humanities, Professional courses as core and electives, Interdisciplinary subjects along with seminars & projects. The curriculum includes technical theoretical aspects with practical approach, along with industry applications appropriate to the program. The curriculum is designed with an expectation that students will be acquainted with the latest technological developments through industrial visits and invited expert lectures.

R.T.M. Nagpur University has provided the syllabus with Course outcomes (COs) for some programs while course teachers have framed the course outcomes for others. They are mapped with different units of the syllabus. COs are informed to the students at the beginning of the course and are also available on college website. Subject teacher informs students about the mode of assessment for evaluation of COs. In general, there are two sessional examinations based on two units each and end semester pre-university test based on whole syllabus. In addition to these tests, class tests, surprise tests, quizzes, objective tests, class activities etc. are conducted and are used wherever necessary to assess the attainment of COs. Laboratory work, Seminars & Projects are evaluated using tests, demonstrations, viva-voce, presentations, publications etc.

Program Outcomes are defined by National Board of Accreditation, New Delhi and are to be fulfilled by all programs run by affiliated colleges while the Program Specific Outcomes (PSOs) are defined by individual programs. The COs are mapped with Program outcomes and Program Specific Outcomes (PSOs). Co-curricular and Extra-curricular activities, industrial visits & training programs, Guest/Expert lectures, Extension activities and Outreach programs, Value added courses etc. are conducted in order to fulfil some of the program and program specific outcomes which are not covered by the regular program curriculum.



The assessment of Course Outcome is based on the performance of students in internal evaluation and in university examination. For theory courses, weightage of 20% is given to internal assessment and 80 % for university assessment for the aggregate assessment of a CO. For practical courses and projects, the weightage of internal and university assessment is 50% each of the aggregate assessment of a CO. The CO attainment is calculated in the scale of 1-3. It is observed that the attainment varies depending upon the difficulty level of the subject and may lie in the range of 1-2 for the subjects in the beginning of the program, which increases as students get accustomed to the Engineering curriculum and may lie in the range of 2-3 by the time they reach final semester.

The PO and PSO attainment is calculated for complete batch of students which progresses through all the courses of a particular program including Co-curricular/Extra-curricular activities and project work. The CO-PO-PSO Attainment is calculated as per guidelines given by Assessment and Attainment manual which can be accessed using the following link:

[https://kdkce.edu.in/writereaddata/fckimagefile/UpdatedAssessmentManualElectrical202122\\_3.pdf](https://kdkce.edu.in/writereaddata/fckimagefile/UpdatedAssessmentManualElectrical202122_3.pdf)

The link showing CO-PO-PSO evaluation as per above manual is given below:

<https://www.kdkce.edu.in/NAAC/2.6.2-Sign.pdf>

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 2.6.3

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

**Response:** 93.31

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

2022-23	2021-22	2020-21	2019-20	2018-19
562	805	866	718	733

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

2022-23	2021-22	2020-21	2019-20	2018-19
707	842	893	719	787

<b>File Description</b>	<b>Document</b>
Institutional data in the prescribed format	<a href="#">View Document</a>
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.	<a href="#">View Document</a>
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

### 2.7.1

#### Online student satisfaction survey regarding teaching learning process

#### Response:

<b>File Description</b>	<b>Document</b>
Upload database of all students on roll as per data template	<a href="#">View Document</a>

## 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:** 35.88

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

2022-23	2021-22	2020-21	2019-20	2018-19
5.8	4.33	21.48	1.85	2.42

#### 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:**

K. D. K. College of Engineering, Nagpur stands as a testament to innovation, knowledge creation, and seamless transfer within its educational ecosystem. Through its multifaceted activity centers and dedicated initiatives, the institution has developed a vibrant environment that nurtures creativity, skill development, and entrepreneurial spirit among students. This comprehensive approach is fueled by the integration of various cells, students clubs, and collaborations that collectively drive holistic student development.

Institute's Incubation Center useful in nurturing start-ups, is supported by the Ministry of MSME, New Delhi. The Institute is also a Sub-Center of Incubation Centre of RTM Nagpur University, Nagpur (RTMNU). The first ever start-up of RTMNU is also the Student of KDKCE mentored by our Incubation Center. The incubation center is having two start-ups, one of which is funded by Biotechnology Industry Research Assistance Council under its BIG Scheme, Govt. of India.

An IPR Cell operates within the institution to promote the significance of intellectual property rights, such as patents and copyrights. This cell facilitates the promotion of innovative ideas. Institute's efforts in this domain have led to the publication of patents, showcasing the institution's dedication to translating ideas into tangible assets. 5 patents are granted, 37 patents published and 15 copyrights granted.

Institute has meticulously designed an ecosystem that thrives on innovation and knowledge creation. This ecosystem is characterized by a diverse range of entities, including skill development clubs, Green Audit, Research & Development and Consultancy Cell, Industry-Institute Interaction Cell, Entrepreneurship Development Cell, incubation center etc. The institution's ISO 9001, 50001, and 14001 certifications underscore its commitment to maintaining high standards in all these elements.

Institute encourages students to delve into specific domains of interest through various skill clubs. Clubs like Club Auto, Club Robo, software training through Indo-German Tool Room, empower students with technical skills and hands-on experiences. Students participate in the national level event through the clubs like Club Auto, Club Robo and have won many prizes. These clubs foster an environment where student can hone their talents, collaborate on projects, often securing good positions.

Institute's Entrepreneurship Development Cell, established in 2003, plays a pivotal role in fostering an entrepreneurial mind-set among students. Backed by grants of Rs.4 lacs from AICTE, this cell conducts various training programs and workshops, guiding students through the intricate process of creating their ventures. Collaborations with renowned organizations like MITCON further enrich the entrepreneurial support network.

Through the Industry-Institute Interaction Cell, students get engage with real-world challenges, final-year projects address live industry problems, enhances students' problem-solving skills and seamless transfer of knowledge between academia and practical applications.

Institute actively promotes research through national and international conferences that facilitate the exchange of knowledge. The institution's engagement in significant events, such as the "108 Indian Science Congress" showcases its dedication to contributing to the interface between science and society under the theme "Science and Society". The Ideation Club further enhances this ecosystem by providing a platform for students to ideate and harness their creative potential.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 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:** 47

**3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on**

**Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
13	07	15	08	04

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

**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:** 3.07**3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
145	201	235	142	184

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

**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:** 0.91

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

2022-23	2021-22	2020-21	2019-20	2018-19
34	45	108	37	45

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

**3.4 Extension Activities****3.4.1**

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

**Response:**

Over the last five years, KDKCE (KDK College of Engineering) has been an enthusiastic participant in conducting extension activities within its neighborhood community. These endeavors are, carried out through a dynamic National Service Scheme (NSS) and various student associations and aim to sensitize students to pressing social issues. By fostering a strong connection between education and societal engagement, KDKCE strives for the holistic development of its students while creating a positive impact on the community.

Institute employs multiple platforms to sensitize students toward a broad spectrum of social issues. These efforts are executed through various student forums, associations, and professional society student chapters. Noteworthy entities include NSS, Rrotract Unit, and associations like MESA, CESA, EESA,

ISF, and FACE-IT. Additionally, the institute hosts student chapters of esteemed professional societies such as ISTE and IEEE.

Institute's vibrant NSS unit, funded and supported by the government, plays a pivotal role in extension activities. With a dedicated team of 100 students hailing from various departments, the NSS unit is engaged in a wide array of activities. These range from rural development, health check-ups, and blood donation drives to assisting the underprivileged, elderly, and marginalized communities. Furthermore, the unit actively contributes to environmental awareness, village development, and campaigns like Swachh Bharat Abhiyan and Unnat Bharat Abhiyan. The institute is undertaking its extension activities in nearby area and villages. The health check up camp for old age people is conducted in association with Social Welfare Department, Govt. of Maharashtra. Rally for Environment friendliness was conducted in nearby areas. Events like Khushiyon ka Ghar, Celebrating Smiles, Bringing light and Sweetness in the life of old age home people in Bahadura Village during Diwali Festival were conducted. Activities like awareness about use of paper bags instead of plastic bags, awareness about tuberculosis, Breast cancer, Importance of Blood through blood donation camp were carried out.

Institute's outreach initiatives extend beyond the campus borders. Activities like blood donation drives, support for old age orphanages, traffic awareness programs, rural development, and gender equality campaigns underscore the institution's commitment to creating positive change in the larger society. These activities are often spearheaded by departmental student associations.

The institution has showcased remarkable adaptability during challenging times, such as the COVID-19 pandemic. Online awareness programs and social initiatives were conducted to address emerging needs. We even contributed by developing an Oxygen Concentrator and participating in government-led Oxygen Audits.

The impact of these extension activities is substantial and far-reaching. Women empowerment, gender equality, and social harmony are some of the noteworthy outcomes. The activities not only foster leadership skills and teamwork but also immerse students in real-world scenarios, exposing them to the challenges faced by various communities. This exposure enhances their empathy, understanding, and commitment to social causes.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 3.4.2

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

#### **Response:**

K.D.K. College of Engineering, Nagpur in its 39-year journey, has made a significant impact not only in

academics but also in Educational and Social Responsibility (ESR), extension activities, and community engagement with government and non-government agencies. The institution has been recognized and awarded for a range of extension initiatives, including health awareness campaigns, blood donation camps, rural education and technology awareness programs, development of rural-specific technologies, support for old age homes and orphanages, and contributions during the COVID-19 pandemic.

The institute has received accolades such as the Nagpur Municipal Corporation TAX Rebate Promotion Scheme, which acknowledges its dedication to societal betterment. Additionally, it has been awarded Best College and recognized as an Expert Speaker and a proud supporter by the Sakal Group, showcasing its commitment to education and community service.

The Lions Club has honored the institution for its contributions, including donating study materials and offering counseling services. Furthermore, the institution received an award for 'Technical Presentation & Promotion Awareness in 4-stroke two-wheeler Engine' from Bajaj Automobile, highlighting its role in promoting technical knowledge.

A significant recognition is being a 'Nurturing Campus for Patent' at the "Patent & Idea Fest 2023," underlining its commitment to innovation and intellectual property.

In healthcare, the institution has consistently organized blood donation and stem-cell donation camps, alongside various medical aid programs, garnering recognition from government-recognized agencies. Over 500 students and faculty members have donated blood and stem cells, showcasing their commitment to public health. Collaboration with the 'Sewa Foundation' for Tuberculosis awareness further demonstrates their dedication

Beyond healthcare, the institution has consistently extended support to the underprivileged, including the elderly, disabled individuals, and orphans. Initiatives such as 'share & care,' cloth donations, financial assistance, and healthcare support to old age homes, orphanages, and shelters have garnered recognition from relevant agencies.

During the COVID-19 pandemic, the institution's resilience shone through. It developed a mini oxygen concentrator, provided health relief, and a faculty member participated in the Government Oxygen Audit Committee for Hospitals. The institution donated masks, sanitizers, and medical aid, and faculty and students volunteered for COVID-19 awareness programs and data analysis of COVID-19 patients. They also aided Nagpur Municipal Corporation in assessing oxygen facilities in hospitals during the oxygen scarcity crisis.

Environmental consciousness is another area where the institution excels, receiving the Best Campus Award for promoting green initiatives and environmental awareness. Students and faculty actively participated in cleanliness drives under the Swachha Bharat Abhiyan, earning praise from the foundation's trustees.

Faculty members have played a pivotal role in shaping young minds by creating content for JEE Exams and offering career counseling programs in rural schools and colleges. They have also provided free infrastructure to organizations conducting CET and JEE exam training and counselling.



File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**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:** 64

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

2022-23	2021-22	2020-21	2019-20	2018-19
16	11	08	16	13

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
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	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

**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:** 59

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

## 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:

To keep pace with growing demands of engineering education, institute makes investment of capital for state of the art infrastructures like class rooms, laboratories, conference halls, seminar hall, , library resources, Auditorium, computing equipment etc. As per the norms prescribed by AICTE, the Institution has adequate facilities for teaching learning. The campus is spread over 5.55 Acres with a total built-up area 26550.784 sq.m. For teaching learning & other activities, there are 6 blocks to house 41 classrooms, 12 tutorial rooms, 70 laboratories, 5 seminar halls, 04 computer centres, workshop, central library, closed & open auditorium, canteen facility and playground in the campus. Classrooms are equipped with multimedia teaching aids, smart board, LCD Projectors with all accessories and wi-fi connectivity & Smart classes with google classroom as Learning Management System. All laboratories have well-maintained equipment with investment of more than 7 crores. Whenever additional course is started or curriculum needs arise it is ensured that required physical infrastructure is available on time. Considering the contact hours of each course, classroom and laboratory utilization timetable is planned by the departments & Resources are shared across departments whenever needed.

Institute is having latest computers, laptops, printers, and scanners for academic and administrative purpose. Entire campus is Wi-Fi enabled with the help of 27 access points. The internet connectivity with 300 MBPS 1:1 leased line is available in the campus. The website provides access to official information of the college.

To facilitate continuous power supply & maximum energy requirements of the college; a 250 KVA transformer, 140 KVA Genset & solar panels on the roofs of the buildings are installed. Central workshop of built up area of 674.71 sqm, provides hands on training & skills to next generation engineers.

The institute focuses on overall development of the learners which give positive vibes to the society by concentrating on intellectual and spiritual quotients.

**Sports activities** i.e. indoor and outdoor, gymnasium, yoga centre is also available in campus and students utilise these facilities on regular basis. The Department of Sports provides a broad spectrum of sports, recreation, and leisure activities for students and faculty which help them to build an all-rounder personality and improve their psychological as well as physical health. Well-equipped closed and open auditorium is used to organize cultural activities, Seminars, Professional/Invited Talks, Awareness

programs etc.

Playground about 9911.820 sqm, for outdoor games like basketball, volleyball, football, Cricket, mix cricket, tug of war , athletics, Kabaddi, kho-kho etc. and sports room for indoor games such as table tennis, carom, chess, pool table are available.

A **multi-station gymnasium** with free weight exercises is available at Hostel B. Yoga is practiced in college campus and in ETC seminar hall.

To enhance teaching learning and for overall development of Students, various clubs like Robo Club, Auto Club, rotract club, Coding Club ,Student activity Centre, different department forums like CESA, MESA, FACE-IT, ISF, EESA etc. are formed.

Students actively practice and participate in university level events, extra-curricular activities, National level competitions and won awards and prizes. Each Year College conducts sports meet and cultural activities.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

#### 4.1.2

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

**Response:** 8.54

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

2022-23	2021-22	2020-21	2019-20	2018-19
74.42	43.79	55.78	12.75	81.18

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
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)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

### 4.2.1

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

#### Response:

The Central Library of the College is well equipped & furnished in accordance with the AICTE norms. It is fully automated with Synchronic Soflib Software( ILMS) – version 5.5 that supports all in-house operations of the Library. The resources are completely Bar Coded and automated using Synchronic Soflib-5.5 Integrated Library Package for Transactions and OPAC (Online Public Access of Catalogues) for the users and consisting of Acquisition, Cataloging, Circulation, Serials control and Web OPAC facility which allows students and faculty to browse a book by author, title, publisher or any keyword. The library management system helps in tracking the subscription period and renewal dates of the serial.

The OPAC tool is provided to explore library resources. Various search options available are General Search, Advanced Search & Accession Search/ Quick search.

The library has a collection of total 9855 titles, with 58960 volumes with a total cumulative investment of Rs. 1,45,41,308/-.

#### *Subscription to e-resources & Journals*

Library has subscription of DELNET and J-Gate international e- journals to promote research. It is having collections of e- journals of Springer nature, Elsevier Science , IEEE ,Scopus,Web of science etc. and e- books & a provision of access to e-journals. For this purpose a separate arrangement in Digital Library is made where students & staff can access, download, print the open access journals & research papers, also they can listen to the video lectures with the help of audio-visual aids.

It also subscribes 78 national journals (AJMS), 285 Online National Journals , 911 international journals (DELNET) & 39,491 e-Journals under J-Gate. It also have membership of NDLI and e-Shodh Sindhu (Consortium for Higher Education e-Resource). Specialized services like Reprography, inhouse/remote

access to e-resources are provided.

Digital version of Library books, UG & PG Project Reports, guest lectures of eminent speakers are made available in data centre on college website so that students can avail the library facility online remotely. The library cards are issued to faculty and students, which are used for effective management of library. Exclusive reference section is available in the library with a seating capacity of 200. New arrivals of books and journals are displayed on separate stands and racks. Stock maintenance is done effectively with software. CCTV cameras are installed in the library for strict surveillance.

### **The library is optimally used by the faculty and students**

**Per day usage** of library by teachers and students i.e foot falls for offline and online access is recorded and maintained in the separate register & in DELNET account respectively.

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

Year	Number of physical users accessing library	Number of users using library through e-access	Number of working days
2022-23	21889  (Reading Room-15032 Circulation-6857)	12578  (Issued-6280, Returned-6078  Delnet-220 )	180
<b>Total</b>	<b>34467</b>		<b>180</b>

**Average usage of the library by the college** = Total no. of teachers & students using library in each year for all working days / Total no. of working days

**Average usage of the library by the college =  $34467/180 = 191.48$**

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## **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:**

College is having IT facilities including computing equipment with latest configuration. Each department has their own computing facility with adequate number of Computers, printers and scanners. Centralized Computer Centre manages procurement and maintenance of computing equipment. The wired and wireless network Infrastructure is established with priority on reliability, performance and cost efficiency. Institute has hardware Installation Policy, Software Installation and Licensing Policy, Network (Intranet & Internet including Wi-Fi) Use Policy, E-mail Account Use Policy and Web Site Hosting Policy for better utilization of resources and network infrastructure. There are 4 servers with Xeon processor, 32 GB RAM, 2 TB hard disk with a RAID configuration for improving the reliability of data resources. Required software for the conduct of various lab experiments as per the syllabi are available in the departments.

**System software** available in the college are-

WINDOWS 7, 8 AND 10, WINDOWS SERVER 2012R, LINUX, UBUNTU

**Application software** available in the college are: C++ , Weka Tool , MySQL ,JDK XAMPP Tool ,Tomcat Server , PHP 5.5 ,PUTTY, ELTS English Software, MATLAB , AutoCAD ,Staad Pro etc.

30 Laser jet printers, 3 Xerox work centers and 6 scanners are provided across the campus for academic and administrative purposes. In addition to these software, Required open source software like SQL Star Plus, Star UML are also used to fulfill the requirement of curriculum.

The configuration of computers is upgraded to latest configuration Core i7 with SSD Hardisk, 8 GB RAM to meet the technological advancements. Computer labs are well equipped with the latest system and application software.

The College is very keen on upgrading internet bandwidth from time to time. Currently, internet bandwidth is 300 Mbps (1:1 Airtel-leased line) to provide fast internet access & in addition 400 Mbps BSNL broadband internet connections as a back-up line.

Wi-Fi facility is provided throughout the campus through 27 access points for accessing all types of e-learning resources. For improving teaching-learning facility and to provide better education to students high resolution Cameras and high sound quality speakers were purchased. Interactive panel RE7501 75" & Pentouch Interactive flat Panel PTw75 is available in departments for enhanced Interactive learning & hybrid working with remote collaboration & designed for interactive whiteboarding, videoconferencing, screen sharing & more.

The Classrooms, seminar/conference halls, Auditoriums are equipped with LCD Projectors with all accessories. College faculty members have been using Google Class Room platforms with an in-built recording facility. The campus is having 24x7 CCTV surveillance system for security purpose. Budget provisions are made for up gradation, deployment and maintenance of IT infrastructure.

**Sample Details of what has been recently purchased are mentioned below:**

1. HP all in one Intel core i7 computers
2. Interactive Panel

- 3.HP G400 SFF 7th Generation Intel Core i7
- 4.HP Ellitedesk Intel Core i7, 6th Generation Processor, 8 GB RAM DDR-4, 256 GB SSD HDD,HP Wired Keyboard, Mouse, Windows 10 professional are added in 2022-23 for academic purpose
- 5.Dell inspiron 3511 Laptop
- 6.MaxWell Projector

**Licensed Software purchased are-**

Biomax Smart office software(Qty-2)

**List of Open Source software are-**

- 1.WEKA
- 2.Wireshark
- 3.Packet tracer
- 4.STAR UML
- 5.Ubuntu(LEX tool)
- 6.Turbo C
- 7.Turbo C++
- 8.DEVC ++
- 9.Anaconda (Python)
- 10.MySql
- 11.Arduino
- 12.JDK
- 13.Oracle Database 10g Express Edition (Oracle Database XE)

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**4.3.2**

**Student – Computer ratio (Data for the latest completed academic year)**

**Response:** 3.08

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

**Response:** 890



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

#### 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:** 49.69

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

2022-23	2021-22	2020-21	2019-20	2018-19
346.99	278.87	195.02	319.40	418.17

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
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)	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 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:** 89.03

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

2022-23	2021-22	2020-21	2019-20	2018-19
2512	2554	2583	2301	2334

#### 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)	<a href="#">View Document</a>
Report with photographs on ICT/computing skills enhancement programs	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 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:** 69.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
2269	1877	1735	1846	1807

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 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	<a href="#">View Document</a>
Proof related to Mechanisms for submission of online/offline students' grievances	<a href="#">View Document</a>
Proof for Implementation of guidelines of statutory/regulatory bodies	<a href="#">View Document</a>
Details of statutory/regulatory Committees (to be notified in institutional website also)	<a href="#">View Document</a>
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 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:** 63.83

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

2022-23	2021-22	2020-21	2019-20	2018-19
400	502	510	453	487

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

2022-23	2021-22	2020-21	2019-20	2018-19
562	805	866	719	733

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)	<a href="#">View Document</a>
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)	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 5.2.2

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

**Response:** 5.03

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

2022-23	2021-22	2020-21	2019-20	2018-19
21	11	25	06	04

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 5.3 Student Participation and Activities

### 5.3.1

**Number of awards/medals for outstanding performance in sports/ cultural activities at University /**

**state/ national / international level (award for a team event should be counted as one) during the last five years**

**Response:** 62

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

2022-23	2021-22	2020-21	2019-20	2018-19
24	16	04	07	11

File Description	Document
Upload supporting document	<a href="#">View Document</a>
list and links to e-copies of award letters and certificates	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

### 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:** 48.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
104	68	18	23	28

File Description	Document
Upload supporting document	<a href="#">View Document</a>
Institutional data in the prescribed format	<a href="#">View Document</a>

## 5.4 Alumni Engagement

### 5.4.1

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

**Response:**

**KDKCE Alumni Association:**

The Role of Alumni Association in KDK College of Engineering is very important and the Institute has very good rapport with the industry and Alumni from the inception. The KDKCE Alumni Association is registered under Charity Commissioner with Registration No. Nagpur/0000236/2018. Principal is the President of the Alumni association. Vice Principal, Dean, Alumni Incharge, One faculty and two Alumni are the office bearers of the Alumni Association.

The main objective is to enroll all alumni as members of this association and facilitating active participation of the alumnae in appropriate activities. The KDK Alumni association aims to link the alumni to the institution to support the development plan to achieve its vision .The Alumni association maintain a good linkage between institute and alumni. Regular Alumni meet and interaction with Alumni is done frequently by conducting various webinars, seminar and Guest Lecture. Following are some of the activities carried out with the help of Alumni.

**Curriculum Enrichments:** The alumni are involved for curricular gap identification and development of value added courses. The suggestion of Alumni is very helpful in deciding CO, PO and PEO for the courses. This will also help to recommend certain changes in the syllabus of RTM Nagpur University.

**Interactive Session:** The Alumni Association helps in holding interactive sessions to motivate current students about the employability and educational opportunities in all sector. The alumni who are entrepreneurs arrange industrial visit, Projects and internship for current students of college.

**Mentorship:** Alumni play very important role in mentoring students in their areas of expertise and to assist the current students in securing suitable jobs.

**Placements/ References:** The alumni network of college help the students in referring to companies and get placed at their organizations. Some of the Alumni provide references and guidance to students to get placed.

**Generosity:** The Alumni association network of college provides financial assistance to poor students. Alumni also provide cash donation. Some of the alumni donated some equipment's to the college for the development of labs.

**Administration:** Alumni are the member of DAB and Alumni association and they provides inputs for imparting quality system to recent trends and requirements of industry.

The alumni cell has a database of about **5800** Alumni with their latest occupation and addresses.

Every year alumni meet is organized at KDKCE campus. The details of Last Five Years the Alumni Meet are:

1. In 2018-2019 Alumni Meet was organized on 02 Feb 2019 with around 100 Alumni participation.

2. In 2019-2020 Alumni Meet was organized on 25 Jan 2020 with around 70 Alumni participation.
3. In 2020-2021 due to Corona Pandemic Online Global Alumni Meet was organized on 23 May 2021 with around 260 Alumni participation.
4. In 2021-2022 due to Corona Pandemic on Line Global Alumni Meet was organized on 5 March 2022 with around 138 Alumni participation.
5. In 2022-2023 Alumni Meet was organized on 11 March 2023 with around 68 Alumni participation

This alumni meet give the platform to students and alumni to interact with each other.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>



## 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**

*Service to the Society through Quality Technical Education*

#### **Mission**

**M1** Academic excellence in Engineering and Technology through complete dedication to all round growth of young students

**M2** Enable the students to develop into outstanding professionals with technical competence and managerial skills.

**M3** Fulfill the expectance of the society and Industry with high ethical standards for developing a sustainable solution.

#### **Governance and Leadership**

Vision and Mission of the college are futuristic aiming at inclusive growth of students through quality technical education to placate the needs of society and nation at large.

Strategic and Perspective plans are prepared, and policies are framed keeping an eye on the vision and mission of the institute and are implemented through effective leadership and governance.

Vision and Mission propel the governance of the college through its Board of Governors (BoG), College Development Committee (CDC), and Internal Quality Assurance Cell at the college level and Departmental Advisory Board, Programme Assessment & Quality Improvement Committee at department level.

The college has developed healthy culture of delegation of powers and authority to each level of the organogram. The senior faculties are constituents of various committees, which make the decision in regard to effective governance.

The academics and administration of the college is governed under the leadership of the Director and Principal. The Principal, after discussion with BoG, CDC, Director takes the decision in the interest of college and the task is distributed at various levels for better governance, implementation of

strategic/perspective plans, and policies to achieve the vision & mission.

### NEP and Sustained Institutional Growth

In line with National Education Policy (NEP-2020), college puts all efforts to transfer its learning environment from competence-based learning to life-long based learning. Details in this regard are mentioned in the academic profile of Self Study Report.

### Decentralization and Participative Management.

The college endorses decentralization practices and participatory management through 19 statutory and non-statutory committees such as CDC, Admission committee, Grievance –Redressal Committee, Library Committee, Infrastructure Committee, etc., ensuring that each level of organogram has the necessary authority for effective implementation of the plans, policies, and rules and has the autonomy to redress the issues.

The college has organization structure that includes BoG, Chairperson, Secretary, CDC, Director, Principal, Vice-Principal, and IQAC to monitor Academics, Administration, Finance, and Committee performance.

IQAC plays momentous role in monitoring and recommending quality initiatives to be undertaken for inclusive growth of the stakeholders.

Heads of department have the autonomy in administration of a department and academic conduction. Program Assessment & Quality Improvement Committee (PAQIC) monitors the academic conduction and gives relevant suggestions while Departmental Advisory Board (DAB) provides necessary suggestions for better learning outcomes.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 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:

The college has the following perspective plans:

- **Adopting Quality Sustenance Practices**
- **Nurturing Skills & knowledge for inclusive growth of student**
- **Strengthening Research Ecosystem in the Campus**
- **Enhancing Industrial contribution in academics**
- **Augmenting Outreach and Extension Activities**
- **Aligning Teaching - Learning Process with NEP 2020**

The perspective plan is effectively deployed through various administrative bodies and committees in a very systematic and hierarchical manner.

**Board of Governors** provides all necessary approval to plans, policies, and proposals and ensures that are in accordance with Vision and Mission of the Institute.

**College Development Committee (CDC)** regularly takes feedback from the stakeholders to incorporate into the plans and policies. The committee ensures the plan; policies and actions are in tune with Vision and Mission of the Institute.

Both BoG and CDC meets at regular interval and discuss effective implementation of plan & policies

**Internal Quality Assurance Cell**, which is an important body to monitor academic conduction, taking feedback, imparts necessary suggestions & guidance to ensure quality in all the domains of academic conduction & administration.

- The college adopts the student centric teaching that imparts them experiential learning, problem solving, critical thinking and life-long learning. Inputs from Departmental Advisory Boards are taken for enhancing quality in academics.
- College conducts **Academic and Administrative Audit** of each program to ascertain the achievement quality benchmarks and depending upon the audit observations, follow-up actions are taken to ensure sustenance of the quality in academic deliverance.
- College conducts value added courses, orientation programs, organizes expert lectures, industrial visits, etc. to nurture their skills. College also encourages staff members to attend seminar, conferences, FDPs, workshops, STTP to enhance their skill.
- Faculties and students are encouraged to submit the grant-in-aid proposals to various funding agencies, take-up the industry linked project that solve the societal issues, provides financial assistance, on-duty facilities for research activities, research-based training to the students, etc.
- College provides campus placement opportunities, enhancing industry linkages to impart training, internship to the students, campus recruitment training.
- College takes up outreach/extension activities for sensitizing students towards social issues. Camps are held in nearby villages to make them aware of the social and environmental issues.

**Statutory and Non-statutory Committees** established in the college supports the authority for efficient and effective administration of the college. All the committees work diligently as per the objectives and immediate actions are initiated to reach to an amicable solution to the

issues related to grievances, safety, security, academic fulfillment, etc. so as to achieve the stated goals of the college.

The college is and affiliated to RTM Nagpur University and approved AICTE, Directorate of Technical Education. All the requirements, rules and regulations are effectively followed. College has its own Human Resource Manual, which is followed in regard to appointments, service rules and procedures, welfare, etc.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Institutional perspective Plan and deployment documents on the website	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## 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	<a href="#">View Document</a>
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	<a href="#">View Document</a>
Annual e-governance report approved by the Governing Council/ Board of Management/ Syndicate Policy document on e-governance	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

## 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:**

Institutional Financial and Non-financial welfare measures are as below:

**Employee's Provident fund**

The institution has the mandatory provision of EPF and contributes the eligible amount to the respective EPF account.

**Gratuity**

Every year college deposits yearly contribution to a policy of LIC-Group Gratuity Cash Accumulation Plan of Teaching and Non-Teaching staff.

**Group Insurance**

College has taken an initiative to have the group insurance for those who are willing to be the part of this initiative

**Maternity Leave**

College renders a maternity leave to eligible lady staff as per the rules of the government

**Medical/Ambulance**

Medical facilities are available round the clock for the faculty as well as students for any medical emergency.

**Fee Concession/Bank facility**

Under the Institutional Social Responsibility, college provides the financial aid in the form of Fee concession to the needy students.

**PhD facilitations and Promotions**

Faculty members are provided facility for pursuing PhD. Faculties, based on their qualification & performance appraisal, are given promotion on to the higher post or financial benefits.

**Publication Incentives**

Incentives/Sponsorships are provided to the faculty and students for participation in the National or

International Conferences and publishing research papers in the reputed journals.

### **Financial aid for research, Patent filing, and knowledge up-gradation**

Financial assistance is provided to the faculty for academic enrichment, patent/copyrights filing, and innovative projects.

### **On-Duty Leave**

College provides OD leave (on duty) for attending conferences, seminars, FDPs and research work.

### **Best Faculty Award**

College recognizes the excellent performance of a faculty and awards him/her as the best faculty of the college.

The college organizes health awareness camps and free health checkups, and Passport camp.

### **Self-Appraisal System**

The College has adopted a Self-Appraisal system to evaluate the performance of the faculty in teaching, research and extension programs. At the end of the academic year, every teaching staff submits the Self-Appraisal form duly endorsed by the Head of Department and is evaluated on the basis of academic credentials, research contribution, quality enhancement, campus life enrichment, contribution to the college/university work and extensions services as per the guidelines of the institutional bodies. The evaluation of teaching faculty by the student has been adopted in the college that helps in self-evaluation and development.

Besides self-appraisal system, college has envisaged Teachers' Performance Plan for quantitative assessment of an individual staff in regard to Teaching & Learning, Research, and Outreach. Based on the assessment, Faculty members are acknowledged as Best faculty award for their excellent academic services in the year based on the evaluation grade.

Non-teaching staff submits the self-appraisal and the same are evaluated by the respective head of department for its assessment for their contribution towards academic & the administration.

The Principal acknowledges notable performance of any faculty. The administration, through IQAC, encourages the faculty members to take up the Quality initiatives to enhance the performance in transforming knowledge to the students.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**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:** 23.15

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

2022-23	2021-22	2020-21	2019-20	2018-19
54	73	34	14	13

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

**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:** 73.31

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

2022-23	2021-22	2020-21	2019-20	2018-19
139	162	157	169	131

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

2022-23	2021-22	2020-21	2019-20	2018-19
39	42	42	48	51

File Description	Document
Institutional data in the prescribed format	<a href="#">View Document</a>
Copy of the certificates of the program attended by teachers.	<a href="#">View Document</a>
Annual reports highlighting the programmes undertaken by the teachers	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

**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 and optimal utilization of resources and funds**

Mobilization and optimal utilization of resources and funds is a critical aspect of any educational institution's financial management. The college's Accounts department plays a pivotal role in preparing the budget estimates after receiving the requirement of recurring and non-recurring expenses from each department. The heads of the department gather input from laboratory in-charges, activity in-charges, and others to ensure that the budget estimates are comprehensive and reflect the needs of the institution.

The college budget encompasses both recurring and non-recurring expenses, such as salaries, electricity and internet charges, equipment and facilities, maintenance costs, stationery, and other consumables. It also includes planned expenses, such as the purchase of lab equipment, furniture, and other development expenses. The college mobilizes funds through various sources such as tuition fees, consultancy, and competitive examinations, both online and offline.

The college earmarks funds for different heads, including salary, arrears, and welfare measures;



mandatory deposits; academic infrastructure creation and maintenance; purchasing equipment and software; research and

development; organizing international and national conferences/seminars; conducting curricular, co-curricular, extra-curricular, and extension activities; and recurring expenses, among others.

The college utilizes its resources in an optimal format, with the departments empowered to utilize the sanctioned budget for academic conduction. The institution ensures that the funds are utilized efficiently and effectively to achieve the desired academic outcomes.

### **Internal and External Audits**

The college's financial management is subject to internal and external audits to ensure compliance with accounting and auditing principles that are generally accepted in India. The internal and external audits of the college's income and expenditure are an ongoing continuous process. A committee of staff appointed by the college performs the internal audit, examining the evidence supporting the amount of expenditures in the financial statements. The internal auditors also check all utilization certificates of the grant to ensure the funds are used as intended.

In addition to the internal audit, external auditors verify and certify the financial statements audited by the internal auditors. During the audit process, all vouchers of transactions carried out in each financial year are checked thoroughly, and compliance with the provisions made under various statutory bodies is verified.

The auditors' report reflects that there has been consonance with budgetary provisions and utilization. Any advice or observations pointed out by the audit team are incorporated in the auditor's report and financial statements, helping the institution improve its financial management practices continually.

In conclusion, the college's financial management strategies ensure the mobilization and optimal utilization of resources and funds from various sources. The regular internal and external audits provide transparency and accountability in the financial management of the institution.

<b>File Description</b>	<b>Document</b>
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

## **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:**

#### **Quality assurance strategies and processes**

The IQAC, constituted on July 2016, of the college monitors the quality assurance in academic deliverance along with support of heads, Deans and other IQAC committee members. IQAC, based upon feedback and suggestions suggests the quality initiatives to be undertaken for assurance and sustenance of quality in all domains of academic administration. Strategies that IQAC has envisaged in the college are as follows:

- To see adequacy of equipment as per the latest curriculum
- Oversee the implementation of curriculum of choice-based credit system
- Monitors the online mode of teaching
- Suggests to create ICT enabled facilities for effective Teaching-Learning Experience
- Monitors Course/Programme Outcome attainments, and suggestions for improvement.
- Recommends to obtaining Quality Audit Certification, NIRF participation, NAAC, and NBA Accreditation of the programmes.
- Monitors industry linkages, MoUs activities, collaborative projects, training, internships, skilling, etc. for better placement achievement
- Suggests organizing International/National Conference, STTP, Workshops, FDPs, Orientation program, Professional Development & Administrative Training program, Value Added Courses, etc.
- Recommends and monitors learning content beyond syllabus through MOOCs on online platform
- Suggests faculty members to participate/attend International/National Conference, STTP, Workshops, FDPs.
- Recommends incentives mechanism for research publication, patent filing, copyrights, etc.
- Mentors system through Teacher-Guardian Mechanism.
- Monitors the incremental improvement in admissions, academic performances, training & placements, welfare, students facilities, etc.

#### **Academic Monitoring:**

The IQAC institutionalized an effective Academic Monitoring System through Programme Assessment and Quality Improvement Committee (PAQIC), Teacher – Guardian Scheme, and monitors the academic progress of the students to see that they excel in all domains and achieve requisite graduate attributes.

#### **Review of Teaching – Learning Process & Methodologies**

Teaching – Learning process is periodically reviewed by the IQAC through outcome attainments, annual feedback and suggestions from the stakeholders. Upon analyzing the inputs, IQAC suggests identifying Gaps for various attributes to achieve the benchmarks and suggests framing necessary strategies to impart knowledge, skills and attitude through content beyond delivery, co-curricular, and extra-curricular activities. To fill the gaps and to have better learning outcomes, IQAC recommends conducting value added courses; Internship, skill development program, orientation programs, campus recruitment training, communication enhancement program, programs on human value enrichment, etc.

**Learning Outcome:**

Based on CO-PO assessment and its attainments, IQAC revisit the learning outcomes. Suggests suitable benchmarking and provides guidelines for improving the attainments in the upcoming session. Learning outcomes attainment is also monitored by the IQAC through indirect methods such as end semester feedback and exit surveys and recommends necessary strategies to fill the gap. IQAC recommends undergoing students and staff for MOOCs on various online portal for increasing the learning outcomes.

**Incremental Improvement**

IQAC suggests enhancing ICT facilities in teaching-learning that leads to better academic monitoring and quality deliverance. IQAC monitors the organization of faculty developmental programs, student's skill development programs, and value added courses. IQAC also suggest providing Financial assistance to each faculty members for research activity and professional enrichment.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

**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

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

## 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:**

Over the years, our institution has taken significant strides in promoting gender equity and sensitization through the implementation of a comprehensive Gender Audit and various measures across both curricular and co-curricular activities, along with enhancing facilities for women on campus. The Gender Audit has been a pivotal tool in assessing and addressing gender disparities within our institution. It involves a systematic review of the campus environment to identify areas where gender equity needs improvement. Through this process, we have gained valuable insights into the gender equity in our campus and have been able to tailor our initiatives accordingly. The Gender Audit has led to the integration of gender equity into our co-curricular activities.

In the co-curricular sphere, we have implemented a range of initiatives aimed at empowering female students. This includes leadership development programs that provide female students with the skills and confidence needed to take on leadership roles in various student organizations and activities. We firmly believe that fostering leadership qualities among women is instrumental in promoting gender equity, both on campus and in society.

Moreover, we actively encourage female students to participate in cultural events, celebrations, and extracurricular activities. Their active involvement adds a sense of diversity and richness to our campus culture. We celebrate events like Makar Sankrant, International Women's Day, World Health Day, and women empowerment events, underscoring our commitment to gender equity and women's contributions to our community.

In terms of facilities, we have made substantial improvements to ensure a safe and supportive environment for women on campus having separate Girl's common rooms with the provision of sanitary incinerators. Enhanced security measures have been put in place CCTV camera and well-lit pathways, to ensure the safety of all students, particularly female students. Our institution also offers self-defense classes for female students, empowering them with essential skills for personal safety. These classes not only build physical strength but also boost confidence, contributing to an overall sense of security among our female community members.

Furthermore, we have taken steps to address the specific needs of female students in terms of healthcare and wellness. Health awareness programs are regularly conducted to educate students on physical and mental health issues that are particularly relevant to women. Additionally, we offer meditation, counseling and yoga classes to help students manage stress and maintain their mental and emotional well-being.

In conclusion, our institution's commitment to gender equity and sensitization is evident in the comprehensive measures we have taken over the years. From integrating gender perspectives into the curriculum and offering specialized programs to empowering female students through leadership initiatives and self-defense classes, we have strived to create a supportive and inclusive environment. Our facilities and security measures further reinforce our dedication to ensuring the well-being of all students, irrespective of gender. By actively engaging students in gender-related discussions, celebrations, and awareness programs, we continue to foster a campus culture that values and promotes gender equity, preparing our students to be advocates for gender equality in society at large.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>

### 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.	<a href="#">View Document</a>
Geo-tagged photographs/videos of the facilities.	<a href="#">View Document</a>
Circulars and report of activities for the implementation of the initiatives document	<a href="#">View Document</a>
Bills for the purchase of equipment's for the facilities created under this metric	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

### 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	<a href="#">View Document</a>
Policy document on environment and energy usage Certificate from the auditing agency	<a href="#">View Document</a>
Green audit/environmental audit report from recognized bodies	<a href="#">View Document</a>
Certificates of the awards received from recognized agency (if any).	<a href="#">View Document</a>
Provide Links for any other relevant document to support the claim (if any)	<a href="#">View Document</a>

#### 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:**

K.D.K College of Engineering, Nagpur, has made significant institutional efforts and initiatives to foster an inclusive environment that not only celebrate diversity but also sensitize students and employees to their constitutional obligations as citizens.

The college actively celebrates various events and cultural programs that contribute to the promotion of diversity and inclusivity:

Celebration of Matrubhasha Diwas encourages students to appreciate and respect their mother tongue and other regional languages. This initiative promotes linguistic diversity and creates an environment where students feel comfortable expressing themselves in their native languages.

National Heroes Day Celebration pays tribute to the individuals who have made significant contributions to the nation, transcending considerations of caste, religion, or region. This fosters a sense of unity, pride, and patriotism among students and employees.

The college organizes Dandia and cultural programs during Navratri to promote communal harmony. Through traditional dance performances and music, students from diverse backgrounds come together to celebrate the festival, bridging cultural divides.

Marking the harvest festival, Makar Sankranti celebration promotes cultural diversity. The event includes kite flying, cultural programs, and traditional food, allowing students to experience the rich tapestry of India's diverse cultures.

The college's observance of Christmas fosters an understanding and appreciation of religious diversity. It encourages students to embrace the cultural traditions of different communities, contributing to an inclusive environment where all students, regardless of their religious beliefs, feel respected and valued.

The college organises various cultural programs to showcase the cultural diversity within the institution. These programs include dance, singing, rangoli, skits, and personality show, allowing students to learn about and appreciate different cultural traditions.

These programs and celebrations actively promote cultural diversity, break down cultural barriers, and create a sense of unity and understanding among students from various backgrounds.

In addition to celebrating diversity, the college has taken initiatives to sensitize students and employees to their constitutional obligations, values, rights, duties, and responsibilities:

The college celebrates national events such as Independence Day, Republic Day, and Constitution Day. These celebrations instill a sense of patriotism and national pride, providing an opportunity for students and employees to learn about the historical significance of these events and the values they represent. This promotes patriotism and respect for the Constitution.

Observing Shaheed Diwas through events and seminars on the contributions of national heroes and freedom fighters inspires students and employees to delve into the history and sacrifices made for India's freedom. It underscores the importance of upholding constitutional values and principles.

The inclusion of the subject "Indian Culture and Constitution" in the first-year curriculum by RTM Nagpur University is a significant step. It educates students on the values, principles, and provisions of the Constitution, covering topics like fundamental rights and duties of citizens. This subject equips students with knowledge about their rights and responsibilities as citizens, fostering a sense of civic duty and awareness of constitutional values.

In conclusion, K.D.K College of Engineering, Nagpur, is committed to creating an inclusive environment that celebrates diversity and sensitizes its students and employees to their constitutional obligations, values, rights, duties, and responsibilities. These initiatives not only promote tolerance and harmony but also prepare individuals to be responsible and informed citizens who contribute positively to society.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Provide Link for Additional information	<a href="#">View Document</a>



## 7.2 Best Practices

### 7.2.1

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

**Response:**

#### **Best Practice-I**

**1. Title of the Practice:** Ecosystem for Academic Excellence at K.D.K. College of Engineering, Nagpur

#### **2. Objectives of the Practice:**

- To harmonize the Teaching-Learning process with the overarching vision and mission of K.D.K. College of Engineering and adhere to national educational standards.
- To induct a methodical approach for the execution of Outcome Based Education.
- To systematically review the attainment of course and program outcomes through the teaching-learning process.
- To guarantee adherence to the accreditation standards set forth by the National Board of Accreditation (NBA) and the National Assessment and Accreditation Council (NAAC).
- To ensure the excellence of students' learning outcomes.

#### **3. The Context:**

Output-Based Education was traditionally followed by the RTM Nagpur university and the institute. It was centered on achieving predetermined outputs, often in the form of degrees. In this approach, the primary focus was on completing the curriculum and obtaining credentials.

Later on Outcome-Based Education was adopted by affiliating university and correspondingly is implemented by the institute which shifted the focus towards defining specific learning outcomes or competencies that students are expected to achieve.

#### **4. The Practice:**

Outcome-Based Education is implemented successfully by the institute immediately as per the guidelines from AICTE and affiliating university. OBE is practiced in our institute as below:

**Program Outcomes:** The curriculum based and other activities have pre-defined outcomes which are mapped with the POs. All these activities result in attainment of the POs and PSOs. These outcomes reflect the skills, knowledge, and abilities that students are expected to acquire during their education.

**Curriculum Enrichment:** Identifying the curriculum gaps to align with the defined learning outcomes. This involves designing value added courses, projects, and assignments that are structured to help students achieve the desired competencies.

**Teaching Learning:** At K.D.K. College of Engineering, teaching-learning process is based on the philosophies of OBE and revolves around student-centric learning methods that encourage active engagement, critical thinking, and creativity. Teaching strategies include experiential, collaborative and participative learning, problem solving methodologies etc.

**Continuous Improvement:** Co-curricular and extra-curricular activities contribute in attainment of the POs and PSOs and help in student progression.

## **Best Practice-II**

### **1. Title of the practice:-Sustainable Green campus**

#### **2. Objectives of the practice:**

- To harness solar energy for sustainable power generation.
- To implement energy-efficient LED lighting.
- To promote biogas production from kitchen, canteen and organic waste.
- To promote the use of renewable energy sources.
- To conserve energy in all forms.
- To reduce carbon emission in the campus.
- To expand and maintain green cover within the campus through tree planting.
- To conserve water resources within the campus.
- To establish effective solid, liquid and e-waste management systems.
- To promote the use of public transportation for commuting.
- To promote environmental consciousness among students and staff.

#### **3. The Context:**

The college was highly dependent on traditional electricity, costing more and harming the environment so alternative and renewable energy sources were necessary. Urbanization and pollution caused environmental damage, so the college aimed to reduce their own carbon footprint. To maintain clean and green campus there must be better waste management system. Lastly, many students and staff didn't know about sustainability, so educating them was a challenge.

#### **4. The Practice:-**

- College has installed solar plants to reduce reliance on conventional electricity sources, powering hostels and classrooms.
- Energy-efficient LED lights are used in classrooms, labs, corridors, and gardens, conserving electricity and ensuring safety.
- Dust bins were provided in the class rooms and corridors throughout the campus.
- College has installed Biogas plant, Vermicomposting plant and sewage treatment plant for waste management.
- Roof-top rainwater harvesting is practiced to conserve water resources.
- Annual tree plantation drives enhance the green cover, aiding carbon sequestration.
- Providing bus facility for students and staff, to reduce the carbon emission by decreasing the number of vehicles.
- Single-use plastics are banned to combat pollution.

- Maintenance of cleanliness in the campus was outsourced.
- Green, Energy, and Environmental audits were carried out.

**5. Evidence of Success:**

- Use of solar energy has reduced carbon in the atmosphere and electricity bills of the institute.
- The provision of bus facilities has reduced individual carbon footprints.
- The 1000-liter biogas plant effectively converts kitchen and canteen waste into green energy.
- The strategically placed dustbins and proper waste management systems have resulted in cleaner classrooms and corridors.
- The campus has around 683 trees which is responsible in reduction of adequate amount of Carbon in the atmosphere.
- College has received best green campus award from Nature Science Foundation.
- The College has conducted Green, Environment and Energy Audit from the certified agency.

**6. Problems Encountered and Resources Required:**

It was difficult to change the habits, and so the efforts were needed to educate students towards proper use of dust bins, saving water, putting of lights and fans after use.

Funds required for installation of

- Solar power Plants in the campus and hostels
- Biogas plant
- Vermicomposting plant
- Maintenance of garden

File Description	Document
Best practices as hosted on the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

**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:**

K.D.K. College of Engineering, Nagpur, established in 1984, has distinguished itself in several ways over the years. This institution has not only played a significant role in uplifting students from remote and tribal areas but has also gained national and international recognition. With a focus on technology-

enabled learning and various accreditations, Institute of Engineering stands out as a beacon of educational excellence.

One of the most commendable aspects the institute is its commitment to the upliftment of students from remote and tribal areas. In a country as diverse as India, ensuring equal access to quality education is a crucial challenge. Institute has taken this challenge head-on by actively encouraging students from these marginalized backgrounds to pursue higher education. As a part this, committee members of career guidance and counseling cell, visits the school and colleges from the remote and tribal areas such as Gadchiroli, Gondia, kurkheda, Chandrapur, Amgaon etc., to create awareness about various career opportunities available in the technical education. Through various programs and mentorship initiatives, the college has successfully motivated many students to continue their studies beyond the secondary level.

This emphasis on further studies has yielded remarkable results, as a significant number of graduates have found placement in reputed industries. By providing these students with the necessary skills and knowledge, the college has empowered them to secure meaningful employment opportunities, contributing not only to their personal growth but also to the economic development of the region. This dedication to the holistic development of students is what sets Institute apart.

Furthermore, institute has earned both national and international recognition for its academic excellence and commitment to quality education. One notable achievement is the National Board of Accreditation (NBA) accreditation for 85% of its programs. Moreover K.D.K college of Engineering is the only affiliated and self-financing institute in R.T.M., Nagpur University, amongst the Engineering colleges to achieve the feat.

Consequent upon meeting the standards of parameters laid down by N.B.A, our institute is reaccredited for five Under Graduates programs (**Mechanical Engineering, Civil Engineering, Electrical Engineering, Electronics & Telecommunication Engineering and Computer Science & Engineering**) till 2025. NBA accreditation is a testament to the high standards of education and infrastructure maintained by the institution. It not only ensures that the curriculum is up-to-date and relevant but also that the teaching and learning processes are of the highest quality.

In addition to NBA accreditation, the institute has also received accreditation from the National Assessment and Accreditation Council (NAAC). NAAC accreditation evaluates various aspects of an institution, including its infrastructure, teaching, research, and student support services. Being accredited by NAAC signifies that Institute of Engineering meets the stringent criteria set for excellence in higher education.

Another feather in the cap for Institute is its ISO certification. ISO certification is a globally recognized standard for quality management systems. By achieving ISO certification, the college has demonstrated its commitment to maintaining high-quality processes and procedures across all its departments. This ensures that students receive a consistent and high-quality educational experience.

One of the key elements that contribute to the distinctive nature of institute is its investment in technology-enabled learning. In today's digital age, technology plays a crucial role in enhancing the learning experience. The college has embraced this by providing state-of-the-art infrastructure, including ICT-enabled classrooms and laboratories. These facilities are equipped with modern tools and resources to facilitate effective teaching and learning.

Moreover, the incorporation of smart boards in classrooms is a testament to the institution's commitment to innovative and interactive teaching methods. Smart boards allow for dynamic and engaging lessons, making the learning process more interesting and effective.

A unique feature of institute is the use of QR codes for accessing data. In an era where information is readily available online, the college has leveraged QR codes to provide students with easy access to relevant educational materials. This forward-thinking approach not only simplifies the learning process but also prepares students for the digital world they will encounter in their careers.

In conclusion, K.D.K. College of Engineering, Nagpur, stands out for its unwavering commitment to the upliftment of students from remote and tribal areas, leading to successful placements in reputed industries. Its numerous accreditations, including NBA and NAAC, attest to its dedication to quality education. ISO certification further reinforces its commitment to maintaining high standards. The emphasis on technology-enabled learning, with ICT-enabled classrooms, laboratories, smart boards, and QR code accessibility, sets institute apart as a progressive and innovative institution. Overall, the institute has carved a niche for itself as a premier educational institution that not only imparts knowledge but also empowers students for a bright future.

File Description	Document
Appropriate web in the Institutional website	<a href="#">View Document</a>
Any other relevant information	<a href="#">View Document</a>

## 5. CONCLUSION

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### Additional Information :

K.D.K. College of Engineering through its inception had been upgrading and seasoning itself to cater to immediate needs of the society by imparting industry relevant technical education. Institute has MOUs with reputed industries to fill the gap between the industry and academia. These MOUs help the students to attend the seminars, hands-on workshops, internships, projects, lecture series, certification programs etc. organized by the industries and provide the certificate to the students. EduSkill foundation by AICTE is available for all branches of students for online internship. KDK College of Engineering has active professional bodies like ISTE, IETE, ICI and IWWA for students and faculty.

1. Star rating of Institute's Innovation Council at its active momentum.
2. Band promising rating by ARIIA
3. NBA accreditation for UG programs of CE, ME, EE, ETC and CSE .
4. ISO certification
5. Active NPTEL local chapter
6. Faculty excellence awards
7. Hostel accommodation for boys and girl students
8. Envisioned infrastructure, laboratories, digital library access and Wi-Fi enabled Campus
9. Successful implementation of Skill Development Program and different Government Schemes like Swachh Bharath Abhiyaan, Unnath Bharath Abhiyaan etc.
10. Active participation in co-curricular and extra - curricular activities
11. Good placement record with best placement training
12. Calm, eco friendly, energy conserving, green campus with solid waste degradation process
13. Scholarships for meritorious and economically deserving candidates
14. Well experienced faculty
15. Periodical alumni, industry expert interactions, talks, training programs and seminars

### Concluding Remarks :

KDK College of Engineering is a well-managed institution that is committed to providing quality education to

its students. The college has a clear vision of providing quality education to engineering students and equipping them to meet professional and personal challenges. The college has a number of best practices in place to achieve its vision, including:

1. A focus on innovative teaching methodologies that engage students and promote active learning.
2. Continuous evaluation of students across curricular, co-curricular, and extracurricular activities to ensure that they are meeting the learning outcomes.
3. Incentives for faculty to publish research papers, conduct research projects, and patent their inventions to promote research and innovation.
4. A commitment to community engagement and environmental responsibility to prepare students to be responsible citizens.
5. A transparent appraisal system that recognizes exemplary contributions to promote organizational commitment.
6. A well-structured governance system that is committed to ongoing improvement and stakeholder engagement to ensure that the college is always striving to be better.

The institution's management, faculty, and staff are resolutely dedicated to fostering academic excellence, while also nurturing the holistic development of students. This holistic approach is embodied in our Outcome Based Education (OBE) model, blending classroom learning with project-based experiences. Our aim is to empower the students, equipping them with the skills, knowledge, and courage to chart their unique educational journey.

In line with accreditation agencies such as AICTE, Government of Maharashtra, DTE, RTM Nagpur University, NAAC, and NBA, the institution is committed to maintaining the highest standards.

We strongly believe in the active involvement of all stakeholders in shaping industry-based technical education, thereby addressing the needs of society and instilling core educational values.

Overall, KDK College of Engineering is a well-managed institution that is committed to providing quality education to its students. The college has a clear vision, a strong governance system, and a number of best practices in place to achieve its vision and also committed to providing a holistic education to its students and preparing them for successful careers. We are dedicated to continually shaping the future of our students, our society, and our nation.