



YEARLY STATUS REPORT - 2020-2021

Part A	
Data of the Institution	
1.Name of the Institution	Ajay Kumar Garg Engineering College
• Name of the Head of the institution	Dr P K Chopra
• Designation	Director
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	01202761842
• Mobile no	9350023027
• Registered e-mail	deansp@akgec.ac.in
• Alternate e-mail	choprapk@akgec.ac.in
• Address	27th KM Milestone, Delhi - Hapur Bypass Road, Adhyatmik Nagar
• City/Town	Ghaziabad
• State/UT	Uttar Pradesh
• Pin Code	201009
2.Institutional status	
• Affiliated /Constituent	Affiliated
• Type of Institution	Co-education
• Location	Rural

• Financial Status	Self-financing				
• Name of the Affiliating University	Dr. A.P.J. Abdul Kalam Technical University				
• Name of the IQAC Coordinator	Dr. P. K. Chopra				
• Phone No.	01202761842				
• Alternate phone No.	01202761842				
• Mobile	9350023027				
• IQAC e-mail address	deansp@akgec.ac.in				
• Alternate Email address	choprapk@akgec.ac.in				
3.Website address (Web link of the AQAR (Previous Academic Year)	https://www.akgec.ac.in/aqar-2019-2020/				
4.Whether Academic Calendar prepared during the year?	Yes				
• if yes, whether it is uploaded in the Institutional website Web link:	https://www.akgec.ac.in/academic-year-2020-21/				
5.Accreditation Details					
Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B	2.79	2015	03/03/2015	02/03/2020
6.Date of Establishment of IQAC			10/10/2014		
7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,					
Institutional/Department /Faculty	Scheme	Funding Agency	Year of award with duration	Amount	
Institutional 1	SPICE	AICTE	2020 for one year	1 Lakh only	
8.Whether composition of IQAC as per latest NAAC guidelines			Yes		
• Upload latest notification of formation of IQAC			View File		

9.No. of IQAC meetings held during the year	2	
<ul style="list-style-type: none"> Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website? 	Yes	
<ul style="list-style-type: none"> If No, please upload the minutes of the meeting(s) and Action Taken Report 	No File Uploaded	
10.Whether IQAC received funding from any of the funding agency to support its activities during the year?	No	
<ul style="list-style-type: none"> If yes, mention the amount 		
11.Significant contributions made by IQAC during the current year (maximum five bullets)		
Monitoring of online classes. Utilization of ICT for effective online classes. Preparation of centralised good quality videos of all courses at AKGEC Skill Studio.		
12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year		
Plan of Action	Achievements/Outcomes	
An academic monitoring committee of senior professors is to be prepared for monitoring of online classes for theory and labs.	Improvement in online classes in terms of effective content delivery in interactive mode. Increase in class attendance.	
Professional recording facility to be developed at AKGEC	AKGEC Skill Studio is developed to record professional quality videos by the faculty.	
Planning of academic audit	Academic audit held after pre university examination.	
Planning of summer internship	In house summer internship was conducted by all the departments.	
13.Whether the AQAR was placed before	No	

statutory body?	
<ul style="list-style-type: none"> Name of the statutory body 	
Name	Date of meeting(s)
Nil	Nil
14.Whether institutional data submitted to AISHE	
Year	Date of Submission
2020-21	08/03/2022
15.Multidisciplinary / interdisciplinary	
16.Academic bank of credits (ABC):	
17.Skill development:	
18.Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)	
19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):	
20.Distance education/online education:	

Extended Profile

1.Programme

1.1

807

Number of courses offered by the institution across all programs during the year

File Description	Documents
Data Template	View File

2.Student

2.1 4356

Number of students during the year

File Description	Documents
Institutional Data in Prescribed Format	View File

2.2 473

Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year

File Description	Documents
Data Template	View File

2.3 885

Number of outgoing/ final year students during the year

File Description	Documents
Data Template	View File

3.Academic

3.1 249

Number of full time teachers during the year

File Description	Documents
Data Template	No File Uploaded

3.2 245

Number of sanctioned posts during the year

Extended Profile	
1.Programme	
1.1 Number of courses offered by the institution across all programs during the year	807
File Description	Documents
Data Template	View File
2.Student	
2.1 Number of students during the year	4356
File Description	Documents
Institutional Data in Prescribed Format	View File
2.2 Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year	473
File Description	Documents
Data Template	View File
2.3 Number of outgoing/ final year students during the year	885
File Description	Documents
Data Template	View File
3.Academic	
3.1 Number of full time teachers during the year	249
File Description	Documents
Data Template	No File Uploaded

3.2	245
Number of sanctioned posts during the year	
File Description	Documents
Data Template	View File
4.Institution	
4.1	92
Total number of Classrooms and Seminar halls	
4.2	2455.136
Total expenditure excluding salary during the year (INR in lakhs)	
4.3	1552
Total number of computers on campus for academic purposes	

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Ajay Kumar Garg Engineering College, Ghaziabad (an initiative of the Indian Institute of Management and Engineering Society) is affiliated with Dr.A.P.J. Abdul Kalam Technical University, Lucknow and strictly follows the curriculum prescribed by the university. The college offers AICTE approved, B.Tech. courses in twelve disciplines and at the postgraduate level, MCA and M.Tech courses in four engineering disciplines. The IQAC team is ensuring the instructional standards for stable education and examination system required for efficient curriculum delivery. The Head of the Departments discusses their action plans in their meetings with faculty members, for optimal and effective curriculum delivery. The process of ensuring the effective curriculum delivery by the Institute is listed as follows:

Every academic semester commences with the distribution of an institute academic calendar based on the AKTU (university) calendar to students, faculty members. After allocation of the

subjects, being taken from subject choice based on area expertise and previous year's performance, a master timetable is prepared and shared with students. The lecture-wise-schedule (LWS) is approved by HoDs for every subject in their department. The contents are delivered to students as per this LWS and regularly monitored by the IQAC team.

The subject course file is prepared by every faculty member of the department (reviewed by HoD and IQAC team) that includes Quality Policy, PEOs, POs, PSOs, COs, Academic Calendar, Syllabus, Class/Master time-table, Lesson Plan as per Bloom's Taxonomy, Mapping of COs and POs, Previous Year Question Papers, GAP-Analysis, Action is taken to fill the GAP, Assignments, Topic beyond the syllabus, Quizzes, Question Bank, List of Text & Reference Books, e-content. As per the university guidelines, time table of each department is prepared to seek the number of credit hours for each subject before the commencement of the semester by each department.

Due to pandemics, the institute has shifted to various online learning platforms like Google Meet, Edu Marshal Portal (ERP software) and AKGEC YouTube channel, etc. In accordance with AICTE induction program guidelines, students are familiarized by the departments about syllabus contents, teaching pedagogy, department societies, the various center of excellence in the campus, and Universal Human Values. Students are given exposure in form of guest lectures by eminent speakers, industry visits, various activities by department societies to meet the present industry needs.

The course coverage is closely supervised by the IQAC team, HOD, and Director General regularly to ensure that faculty members complete the curriculum within the allotted time. HoD and senior faculty members regularly visit the classes and monitor the conduct of classes and corrective action is further taken. A daily roster watch is also conducted for every class to ensure the smooth conduct of classes. Online classes were also being monitored regularly by the HoD and time-table team of every department. Department arranges the mentorship classes for the subject found difficult by students and particular attention is given to slow learners by the subject faculty and faculty coordinator. Regular interaction of brilliant, slow learners and less attendance students is done with HoD along with the faculty coordinator. Class representatives and parent-teacher meetings are conducted to discuss the progress of students further.

The institute is equipped with smart boards with all required ICT facilities to facilitate the efficient delivery of the curriculum. Students' attendance is monitored regularly through the Edu Marshal Portal. As a part of continuous evaluation, three internal sessional tests (Sessional Test-1 (ST-1), Sessional Test-2 (ST2), and Pre-University Test (PUT)) are conducted centrally by the institute. The student's performance in these internal exams is uploaded on the Edu Marshal Portal and analyzed further to take action. Feedback from Students, Teachers, Employers, and Alumni are taken based on predefined parameters. Further, faculty-wise student feedback is reviewed, and Corrective and Preventive Action is taken if required. After the end semester examination, university results are declared, analyzed and corrective measures are taken accordingly

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://drive.google.com/file/d/1XPFAYMhuDAaSDUEN6_0AvGyFqipysUZD/view?usp=sharing

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institute strictly adheres to the academic calendar issued by Dr. A.P.J Abdul Kalam Technical University, Lucknow, UP, in terms of date of commencement of the Academic Session, Centralized Internal Examination (CIE), and End Semester Examinations along with the vacation period. As per the university calendar, the Institute Academic Calendar is made comprising of well-planned events by discussing in HoDs meeting with Director General. The academic calendar is made available on the college website for all students and other stakeholders.

All the academic activities such as lesson plans, the conduct of classes, internal examinations are prepared and scheduled as per the academic calendar. Monthly and over-all attendance analysis of students is taken and analyzed after uploading the student's attendance on the Edu Marshal Portal based on the academic calendar.

This ensures the successful continuous internal evaluation of syllabus coverage for faculties as well as students. With prior information about the academic activities via the academic

calendar, multiple stakeholders can conduct continuous internal evaluations under their domains. For example, faculty members may make a plan of action for the revision of topics if required and may attend faculty development programs, workshops, international/national conferences, seminars, etc. This ensures professional growth and the overall development of the institute. The institute has a Centralized Internal Examination (CIE) system. During this COVID time, internal examinations were also conducted online through CODETANTRA, and students were monitored by their assigned proctors and super-proctors team. There are three internal examinations (two Sessional tests and one Pre-university test) that are conducted in a semester to evaluate the performance of the students. The student's academic progress is monitored for each subject's performance against their sessional examinations and suitable actions are taken accordingly.

Result Analysis is done by the Department Assessment Committee after every sessional Test. The pass percentage of each course is calculated, the performance of the students is monitored by the HoD and Director General and the necessary feedback is given to the concerned faculty members.

Students are provisionally cleared or debarred from internal examinations on basis of their overall attendance. Conduction of remedial classes/extra classes/labs is done after identifying the weak students based on their performance in internal examinations to improve their performance. To tune to the already covered syllabus for lateral entry of second-year B.Tech. students, special bridge classes are conducted separately for them by every department. To strengthen students in practicals, lab experiments are conducted in accordance with the university curriculum and beyond the syllabus. Their final evaluation for the lab is done based on grading done at every lab and two internal viva voce examinations are conducted in addition to their regular lab-time judgment. Parents are informed about the performance and attendance of their ward on regular basis by every department.

At the end of every semester, the End-Semester-Examination is conducted and managed in accordance with the date-sheet given by the university for all the theory papers and practical papers. Students should satisfy the eligibility criteria of 75% attendance in each semester to appear for University Examination

Working days are strictly followed as per university guidelines and designed academic calendar. At the institute level, various academic activities e.g., guest lectures, student workshops,

industry visits, internal major project viva, industrial training presentation schedule, felicitation of topper students, CR's meetings, alumni meetings, etc. are also planned in accordance with the academic calendar.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://drive.google.com/file/d/1XPFAYMhuDAaSDUEN6_0AvGyFqipysUZD/view?usp=sharing

1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

B. Any 3 of the above

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File
Any additional information	View File

1.2 - Academic Flexibility

1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

File Description	Documents
Any additional information	View File
Minutes of relevant Academic Council/ BOS meetings	View File
Institutional data in prescribed format (Data Template)	View File

1.2.2 - Number of Add on /Certificate programs offered during the year

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

20

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1648

File Description	Documents
Any additional information	View File
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

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

Response:

The institute is following Dr.A.P.J. Abdul Kalam Technical University's curriculum.

Professional Ethics & Human Values: The curriculum of UG/PG programs includes courses to encourage Human Values and Professional Ethics in students. This course is included to inculcate human values and professional ethics among all the students. The core courses on the Constitution of India, Law, and Engineering/Indian Tradition, Culture, and Society are also running in the B.Tech program. Courses on Professional Communication Lab, Soft Skills-I, Soft Skills-II are taught in B.Tech, Technical Communication, Universal Human values are included in B.Tech 2nd year. In addition to the above institution core course, multiple workshops have been organized to address Universal Human values among students and faculty members. Value Education (VE) Cell at institute level and Nodal center of AKTU, Lucknow is also constituted to familiarize and equip students as well as faculty and staff to the importance and need of values & ethics for the development of self & society as a whole. Various activities are conducted at the institute level as follows:

Details of Events Organized by HVPE Cell

S.No.

Date

Event

Resource Person

Remarks

1

05-Jul-20

Erudition'20

Sh. Vijay Pal Baghel

A talk by Vijay on "Impact of Covid-19 on Global Environment"

2

5 - 14 July 2020

Family workshop for FMs/Staff

Dr. Gopal Babu

Workshop on Understanding Relationships.

3

26-Jul-20

Erudition'20:

Dr.Sharmila Asthana

Dr.Sharmila Asthana

The second webinar of the Erudition' 20 series, "Holistic Health and Lifestyle"

4

1 - 5 & 12 - 16 Aug 2020

Family workshop for students

Dr. Gopal Babu, Mr. B N Pandey,

Dr. Parul Verma

About 40 family members of students and staff attended the workshop.

5

11-Oct-20

Erudition'20:

Dr. Gopal Babu

Dr. Gopal Babu

On "Studies on the Inherent Interconnectedness and Co-existence in Nature through Ecological, Scientific and Spiritual Evidence"

6

9, 10 & 12 Dec 2020

Student Induction Program (SIP)

Dr. Gopal Babu and His team

1st Year Students benefitted from the SIP program

7

01-Dec-20

Formation of C-PICE Club

Prof.V.K.Parashar,

Dr. Gopal Babu,

Mr. B N Pandey

The club would aim to undertake activities showcasing the Interests of the students, Creative work vis-à-vis talent, Networking & teamwork, Organizational & Management skills

8

8 -15 Feb 2021

Level 1 AICTE approved FDP

Dr. Gopal Babu, & Mr. B N Pandey

FMs of AKGEC attended the FDP

9

20 -24 Feb 2021

Alumni's workshop

Dr. Gopal Babu

Alumni attended with good feedback.

10

05-Jun-21

Combined class of all second-year students on Relationships

Dr. Gopal Babu

All second-year students attended the session.

11

20-Jun-21

"Transforming Stress into Strength"

BK Sangeeta Didi.

The webinar was focused on finding our innate potential where we can ensure stress-free life.

Courses to address Gender: At present, the curricular structure does not include any specific course that addresses cross-cutting issues related to gender. All students are treated equally by the Institute management, administration, and faculty irrespective of their gender and social status. Therefore, the Institute has a Students Grievance Committee (SGC) to address the grievances of students and handle gender-related issues. The SGC provides an exclusive platform for women employees and girl students to share their grievances either in person or in writing that helps to maintain a positive, harmonious and conducive atmosphere in the college. The NFCH (National Foundation for Communal Harmony) organizes various fund collections and conduct essay competition on events like-World Communal Harmony Day. The Institute campus is safe and provided with full CCTV coverage. Institute has a separate hostel for both girls and boys which is comfortably furnished and makes a good home away from home. To promote gender equality various senior posts such as Chief Account officer, Registrar, Head center support cell, Deputy dean R&D, Deputy Dean T&P, Head Computer Science & Engineering by female members.

Courses to address Environment and Sustainability: The curriculum includes different courses that address the Environment and its related issues. For example, the B. Tech Civil Engineering program includes courses on Environmental Engineering, Environmental Engineering Lab, River Engineering, Air and Noise Pollution Control, Geotechnical Engineering, Engineering Geology, Engineering Hydrology, GIS, and Advance remote sensing.

The institute is oriented towards environmental sustenance and eco-

friendliness. The architecture, design, and construction of institute buildings are made maintenance-free by using maximum bricks and stones and less cement plastering.

The architecture of buildings ensures maximum sunlight on all floors. This allows the high circulation of natural air and green plantations to flourish inside and outside buildings. The buildings are thermally insulated which keeps the temperature lower in summers and higher in winters, thereby reducing the need for power consumption. Each block and building is surrounded by large open areas on which green lawns, hedges, and planters maintain a healthy balance with the environment.

A network of rainwater harvesting systems ensures continuous recharging of the groundwater table. The sewage treatment plant recycles the water filtered through its beds for use of horticulture, green lawns, hedges, and plantations of college. There is a high focus on the conservation of natural resources. Automatic water dispensers are used in toilets/urinals to avoid continuous running of water and ensure its usage when needed.

Conservation of electricity is also ensured by the use of solar water heaters for providing hot water in all the hostels of the college. A rooftop solar power plant of 330 KW capacity has been installed on the college campus. This power plant is linked with the electric grid of the electricity department where surplus power generated is fed back through a meter installed for this purpose.

Conservation of fossil fuels is ensured by making special efforts to coordinate and club various trips of vehicles required by different departments and their usage optimized. The waste management area is given high priority. The recyclable garbage waste and non-recyclable wastes are dumped in specified containers/dustbins. A separate agency with specialized expertise and dealing in waste collection and disposal has been hired to collect the wastes on daily basis. This company processes the bio-degradable waste to make manure and dispose of cyclable & non-recyclable wastes as per established norms of the Government.

File Description	Documents
Any additional information	View File
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

167

File Description	Documents
Any additional information	View File
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	View File
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

3020

File Description	Documents
Any additional information	View File
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution **A. All of the above**

from the following stakeholders Students
Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://drive.google.com/file/d/1vnwRIFvrWxKydxT8mFgGbFdTrOESEswh/view
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://drive.google.com/file/d/15hqPSzpLToyWhfE4q0QlulGH61KAzL/view

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

1394

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

421

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

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

Learning levels of the students are not only assessed by the marks secured by them in various internal and external examinations but also through class and laboratory interactions with the faculty members. These students are closely monitored and appropriate actions are taken to provide assistance to weak students and encourage advanced learners. Various programs are being made part of the academic process for these advanced and slow learners.

Assistance to weak students

Buddy Program:

All Departments conduct a buddy program in which top 5 students from each section are made as buddy of bottom 5 students to help them in their studies and to provide them technical assistance. Regular meetings of these buddy partners with respective department heads are also conducted to motivate the students. Thus, peer teaching enhances teaching learning process as:

- Students get sufficient time for individualized learning.
- Direct interaction between students promote active and faster learning.
- Students feel more comfortable and open when interacting with a peer buddy.
- Peers and students share a similar discourse, allowing for greater understanding.

Mentorship Program:

In Mentorship programme weak students of 2nd year and 3rd year across the sections are provided extra classes by the senior students for some difficult subjects (depending on the difficulty

level of the subject). Minimum one class per week is scheduled for a subject during working hour.

Extra classes for lateral entry students:

Lateral entry students in 2nd year generally take admission 10-15 days after the commencement of the academic session. Extra classes are arranged for them during the first sessional exam. A minimum of 3-4 classes of 55 minutes each are scheduled for all technical subjects. For the session 2020-21 due to covid -19 pandemic the admission of students got delayed by approximately 2 months and hence faculty members were assigned and allotted for teaching the subjects as individual section of lateral entry students.

Special MCQ sessions

Due to Covid 19 pandemic and complete transformation of examination pattern to online mode and miscellaneous question paper pattern, special multiple choice question practice sessions were organized. These sessions were organized by every department, for week students separately so that they are able to solve the question paper in the given time frame at the time of their internal and external assessment.

Encouraging bright students

Reward for highest marks in internal and external examinations:

Meritorious students are given cash awards for internal exams called sessional 1, 2 and pre university test. Eligibility criterion to qualify for this award is a minimum of 80% marks in all subjects of a particular exam. Reward money for each internal exam is as follows:

ST1-Rs 1000

ST2- Rs. 2000

PUT- Rs. 3000

Advance learners are motivated to join various departmental societies, which foster activity-based learning. These societies are:

Department

Society Name

Year of Establishment

CSE & IT

Conatus

2011

CE

Nirmaan

2014

ECE & EI

Phoenix

2005

EN

Oorja

2006

ME

Samveg

2006

All these societies aim to conduct technical seminars, competitions, webinars etc. at national or international level.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

Number of Students	Number of Teachers
4356	249

File Description	Documents
Any additional information	View File

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

The major activities that enhance the learning experiences of students are as follows:

Experiential learning

Lab experiments -Experiential learning is the process of learning through experiences. Few lab experiments are conducted beyond syllabus.

Cloud Computing Cell has been a part of AKGEC since February 2016. The members are exposed to the latest Cloud technologies that enable them to be market ready thereby increasing their opportunities in placements and research. It provides a platform to the students to compute, manage and deploy the cloud.

Research and Industrial Consultancy Centre (RICC) has been established in the college to promote industrial consultation and extend consultancy and research as per industry needs.

Virtual laboratories provide real time learning experience. Students have the liberty to perform the virtual experiments by changing the parameters and experience different results.

Software Incubatoris the research and development centre established within the premises of AKGEC, to develop skills in our students in the areas of software development, web-based enterprise solutions, mobile development, web application and website development. The Centre conducts training programs on the latest software technologies which is instrumental in keeping our students technologically ahead of others.

Big Data Centre of Excellence is the Research and Development

centre of AKGEC. It is the first "Centre of Excellence" in AKTU, working in the field of Big Data. It was established in 2013 and for 4 years it has been motivating and guiding the students into the world of Big Data.

Patent by the Government of India- In this regard the unique design and development of FDM based 3-D Printer which has been granted a patent by the Government of India. The 3-D printer developed with minimal expenditure is expected to be fabricated and supplied to various schools and engineering institutions at a very reasonable price to promote experiential learning in the emerging technology of additive manufacturing. During the Covid 19 pandemic, AKGEC FabLab developed a low cost yet environmentally friendly and reusable products - Respirator and Face shield using 3D printing Technology.

Internships and industrial exposure provide students with an opportunity to share industry experiences. Also, field trips broaden their understanding and provide them with knowledge about practical working environment. Various internship programs are also conducted for the students by the college.

Participative learning

Various student societies are as follows:

Departmental societies

Conatus, Nirmaan, Oorja, Phoenix, Samveg

Extra-curricular Societies

Euphony, Footprints, Horizon, Goonj, Renaissance, taal, verve

Student Chapters

CSI (Computer Society of India) , ISTE, SAE India

These societies aim to conduct technical events, workshops, seminars, webinars and paper presentations.

To inculcate personality related skills there are various extra-curricular societies in the college as mentioned above.

Problem-solving methodologies

1. Providing assignments on regular basis and discuss them in tutorial sessions/classes.
2. Conducting quizzes through google forms.
3. Encouraging students to join MOOC courses.
4. By organizing alumni talk and guest lectures.

File Description	Documents
Upload any additional information	View File
Link for additional information	Nil

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

Modernized Lecture theatres

All lecture theatres are equipped with multimedia projectors, chalk-boards and microphone & speaker facility.

Classrooms with Smartboards

There are total of 87 classrooms which are equipped with smartboards.

- Improves student-teacher interaction
- Encourages teachers to teach in real-time with audios and videos lessons, visual multimedia & PPT presentations, 2D & 3D virtual space, etc.
- Paperless advantages
- Creates web and Internet-based teaching and learning platform for teacher and students respectively

Google-Classroom Learning Management System (LMS) is a platform of course management system and it is a free, flexible and open-source software package designed to help educators to create effective online learning environment which can be personalized.

Model Solution of all Internal and University exams in soft copy and hard copy are available in college library.

Due to Covid-19 pandemic, college has taken necessary initiatives

so that teaching-learning process is not affected.

College started online classes for students from April 2020.

- Effective Methodology has been used for class conduct at online platform. Explanation of topic using power point presentation, use of smart board, regular class and lab checking by the Head of Department, uploading of presentations on google class room, providing the hand written notes have been the special tools for the faculty members.

G-suite email ids as common platform for sharing information amongst faculty and students.

All faculty members are using Google Classroom for

- Sharing notes
- Assignments
- Video lecture

Google Meet chosen as the lecture delivery platform also.

Lecture recording at AKGEC digital studio - Faculties from all departments record their contents and lectures related to various subjects at digital studio. These recorded lectures are available at different platforms accessible to the students.

Online MCQ Test Practice - To support online examinations special Multiple choice question practice sessions have been arranged for students. These MCQ sessions have been organized at departmental level.

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

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

2.3.3.1 - Number of mentors

156

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

249

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

84

File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File

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

2.4.3.1 - Total experience of full-time teachers

1849

File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File

2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Marks scheme for internal evaluation

S. No.

Exam Name

Marks

1st year

2nd Year

3rd Year

4th Year

Syllabus Coverage

1.

Class Test 1 (CT1)

10

Yes

No

No

No

Course covered

2.

Sessional Test 1 (ST1)

25

Yes

Yes

Yes

Yes

20%

3.

Class Test 2 (CT2)

10

Yes

No

No

No

Course covered

4.

Sessional Test 2 (ST2)

50

Yes

Yes

Yes

Yes

Next 40% after ST1

5.

Pre-University Test (PUT)

100

Yes

Yes

Yes

Yes

100%

Process for setting internal Question papers:

- Question papers for all exams are prepared a week before in consultation with faculty members teaching same subject in various sections. The paper is checked by faculty expert followed by Head of the Department.

Process for evaluation of answer scripts:

- To ensure the uniformity in the evaluation of answer

scripts, answer sheets are distributed evenly among the faculty members who all are teaching the same subject code.

- For no discrepancy in totaling of marks, the evaluated answer scripts are cross-checked for totaling errors by faculty other than the one teaching that subject.
- Evaluated answer scripts are then shown to students to settle any grievances. Finalized marks thereafter are uploaded on the college e-learning portal which is used to calculate students' internal assessment marks at the end of the semester.
- Final sessional marks are displayed on the respective department notice board for information of the students. In case of any ambiguity/doubt in the mind of the students. In case of any ambiguity/doubt in the mind of the students, he can approach his subject teacher/HoD.

Lab Assessment:

One experiment is conducted every week. Students complete the writing work of lab record and submit it at the subsequent laboratory class. Two viva-tests are also conducted for each lab. Based on their performance in lab record and viva-voce internal marks are awarded.

Project Monitoring and Evaluation

1. Project groups have to maintain a log book which consists of the details of all the meetings with their project guide. The log book is submitted to the project section In-charge on weekly basis for monitoring of attendance.
2. Project presentations schedule

Project Presentation

Target

Semester

I

Approval of the project topic

7th

II

To complete the project up to PCB level and mounting the components over it

7th

III

Demonstration of fully functional project

8th

IV

Project into final product like shape which is ready to be used in real time.

8th

File Description	Documents
Any additional information	View File
Link for additional information	Nil

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient

AKGEC has a centralized examination cell comprised of faculty and staff members. This Examination cell is headed by Deans Examinations/Center Superintendent in case of internal/external examinations respectively. The responsibilities of exam cell include planning, execution and smooth conduction of internal and external examination. All the activities are followed under the guidance of the Director and the instructions issued by the affiliating university.

The mechanism to deal with internal examination related grievances is as follows:

- In case of Internal Exam related grievance students can contact the college examination cell during the examination

period. The grievances/issues are taken up as highest priority and exam cell clears the issues in a transparent manner.

- Student late entry is not allowed after 30 minutes of start of exam. Genuine cases issues are considered only by the direction of Dean of Examination and respective Department Head.
- Unfair Means (UFM) cases are handled by the exam cell along with the respective Department Head.
- Issues related to question paper are cleared by the subject faculty/ department head just after the reporting.
- After each internal exam, evaluated answer sheets are also shown to the students to settle any grievances related to evaluation.
- If any student missed any of the internal exam due to genuine reason related to health, placement etc. then students are allowed to appear in re- examination. The process for re-exam is as follows:
 1. Submission of re-exam application with the reason of absence within two days.
 2. Preparation of consolidated list of the genuine cases for the approval of Director.
 3. Conduct of re-exam of all the approved cases within 7 days at the department level.
 4. Evaluation of re-exam answer scripts just after the exam.

External Examinations:

In case of University Exam related grievance:

- The University issues the draft of date sheet well in time on the University portal and share with the college to check thoroughly. Once there is no discrepancy received from any of the college then final date sheet is issued on University website.
- Late entry in external examination is allowed only after 30 minutes of the commencement of exam by special permission of center superintendent in genuine cases only. After that no student is allowed to enter the examination hall.
- UFM cases during external examinations are immediately reported to affiliating university as per university guidelines.

- University related issues/ discrepancy reported by the students are communicated to University representatives within 30 minutes of examination.
- Students can check the Result Grievance Portal on the university's website <https://aktu.ac.in> and can register complaints using their login id. They will have to submit their documents along with an email id and phone number while registering the complaint. The university has provided the choice to the students to apply for re totaling of the marks secured by the student on each question/answer and /or reevaluations of the answer sheet.

File Description	Documents
Any additional information	View File
Link for additional information	Nil

2.6 - Student Performance and Learning Outcomes

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

In accordance with the guidelines of Outcome Based Education (OBE), the Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs) are framed by the department offering the relevant program, following extensive consultation with all faculty and stakeholders. Following the achievement of consensus, the statements are extensively disseminated and advertised via different channels of presentation and/or communication mentioned below.

- Website
- Curriculum /regulations books
- Laboratories
- Department Notice Boards
- Student Induction Programs
- Meetings/ Interactions with employers
- Parents meetings
- Faculty meetings
- Alumni meetings
- Library

While addressing the students, the faculty members, class teachers, mentors inform the students, create awareness and emphasize the need to attain the outcomes.

Course outcomes (COs) are the statements that articulate the essential and persistent discipline knowledge, abilities that students should have, and level of learning that is expected upon course completion. They are specified and communicated explicitly. The COs are an integral part of the year-wise curriculum document provided by the university.

Program outcomes (POs) are broad statements that summarize the professional accomplishments that the program aspires for and that students are expected to achieve by the end of the program. POs include a wide range of interconnected information, abilities, and personality attributes that students must acquire before graduating.

Program specific outcomes (PSOs) are the precise skill criteria and accomplishments that students must meet at the micro and macro levels by the end of the program. The PSOs, which are normally two to four in number, are prepared by the program assessment committee. The BoS, which includes the Head of the Department and subject matter experts from each department, discuss the matter and approve it after the approval of the Director.

COs, POs and PSOs are available on the institute's website.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://www.akgec.ac.in/departments/
Upload COs for all Programmes (exemplars from Glossary)	View File

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

CO Attainment Process:

The attainment of COs is assessed through direct evaluations. The direct attainment is measured based on the performance of the students in internal and external examinations conducted during the semester:

College conducts two mid-term sessional exams namely: ST-1 (Sessional Test-1) and ST-2 (Sessional Test-2) and one Pre-University Test (PUT). rCO-attainment Results are extracted from

the above mentioned exams in the following manner:

Exam Name

Units Covered

CO's Attainment Extracted

ST1

1

CO1

ST2

2,3

CO2 & CO3

PUT

1 to 5

CO4 & CO5

Each Faculty teaching the subject in a particular section calculates the CO Attainment for his/her section. Finally, CO attainment results of all the sections are averaged out to calculate the final CO attainment for that subject.

The calculated CO attainments in percentage are then converted into levels. The assigned levels vary session by session and are progressive in

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CO4 & CO5

Each Faculty teaching the subject in a particular section calculates the CO Attainment for his/her section. Finally, CO attainment results of all the sections are averaged out to calculate the final CO attainment for that subject.

The calculated CO attainments in percentage are then converted into levels. The assigned levels vary session by session and are progressive in nature.

1. Attainment level 3 will be assigned if 60% students score more than 40% marks out of relevant maximum marks.
2. Proportional attainment levels will be assigned if the target achieved is below 60%. e.g. if 50% students score more than set target of 40% marks then the attainment level will be: $(3/60)*50 = 2.5$
3. Similar Process of calculating the attainments is adopted for external examinations which forms the external CO attainment.

The final CO attainment will be calculated by proportionally adding the Internal and External Co attainments in proportion of 20:80.

PO Attainment Process:

Following Assessment Tools are used for attainment of POs and PSOs:

S.No.

TOOL

CATEGORY

1.

CO attainment results of all Theory & Practical Courses (Internal)

Direct Assessment

2.

CO attainment results of all Theory & Practical Courses (External)

3.

Student Feedback

In-direct Assessment

PO/PSO Attainment (Direct)

Direct PO attainment is derived from course-PO/PSO mapping table. Mapping strengths between the courses and the POs/PSOs are replaced by their proportional CO attainments (Cumulative assessment of direct and in-direct CO attainments).

PO/PSO Attainment (In-direct)

In-direct PO attainment is derived from course-PO/PSO mapping table. Mapping strengths between the courses and the POs/PSOs are replaced by their proportional student feedback.

PO/PSO Attainment (Final)

To calculate the final PO/PSO attainments Direct and In-Direct attainments are added in proportion of 80:20.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	Nil

2.6.3 - Pass percentage of Students during the year**2.6.3.1 - Total number of final year students who passed the university examination during the year**

885

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://www.akgec.ac.in/wp-content/uploads/2022/01/SAMPARK-20-21.pdf

2.7 - Student Satisfaction Survey**2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)**

<https://drive.google.com/drive/folders/1KjtYlqkYerxGSOGWbfqg5rTYyGZjbp0I?usp=sharing>

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

1667.9

File Description	Documents
Any additional information	View File
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)**3.1.2.1 - Number of teachers recognized as research guides****9**

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year**3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year****5**

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	View File
Supporting document from Funding Agency	View File
Paste link to funding agency website	Nil

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The Institute has taken many steps to improve innovation and research at its campus in recent times. It established the Institution's Innovation Council (IIC) in the year 2018 for promoting different activities related to Innovation, IPR, start-up, and entrepreneurship. Faculties and students are active members of IIC, which is supported by 26 IIC members, nine innovation ambassadors, and five faculty mentors. The Institute has a Pre-incubation Unit called FAB lab, an Incubation Unit called IDEA lab, and an IP Facilitation Unit called IPR Cell. The college has a well-defined policy for promoting research through incentives for publication and supports participation in reputed conferences. The college has the distinction of being the only Engineering College in the State of U.P. to have received approval from the Department of Science and Technology (DST), for establishment of Centre of Relevance and Excellence (CORE) in the field of Automation & Robotics. The College has established nine Centre of Excellence's in partnership with international industries to promote research, consultancy, project development and training in the emerging technologies. Additionally, the college also has the research and development centers named SOFTWARE INCUBATOR and Big Data Centre of Excellence.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

18

File Description	Documents
Report of the event	View File
Any additional information	View File
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year**3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year**

14

File Description	Documents
URL to the research page on HEI website	https://www.akgec.ac.in/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year**3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year**

41

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year**3.3.3.1 - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year**

18

File Description	Documents
Any additional information	View File
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

True to the lofty ideals of the National Service Scheme movement, our institute seeks to actively involve students in voluntary social service activities for the socio-economic development of the area surrounding our institution as well as the nation at large. Through our innovatively designed NSS program and other initiatives, we provide opportunities to students to empathetically understand and appreciate the problems of the communities, awaken social consciousness and inculcate in them a sense of dignity of labour and fellow feeling.

Our regular social service activities include cleanliness drives, environmental protection, healthcare support and educational support among others. Some of the initiatives taken by our college are as follows:

- Adopted a refugee camp at Adarsh Nagar, Delhi with 111 families consisting of about 700 people.
- Adopted five villages in Ghaziabad.
- Established 'Nature Club' which is committed not only to spreading awareness about the problems but also to motivate students to find solutions to real problems.
- The college is running a primary school named "Adarsh Vikas Kendra" to provide free primary education to children of economically weaker sections of society.
- The college organizes annual Blood Donation Camp.
- College conducts Skill Development Programme under the PMKVY.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.4.2.1 - Total number of awards and recognition received for extension activities from

Government/ Government recognized bodies year wise during the year

1

File Description	Documents
Any additional information	View File
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

10

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3266

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

204

File Description	Documents
e-copies of related Document	View File
Any additional information	View File
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

7

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

Ajay Kumar Garg Engineering College campus is spread over a 1,18,313 Sq. M. with 84960.14 Sq. M. built up area. It has excellent infrastructure with well-planned complexes for each department. These department complexes have spacious laboratories, smart classrooms, department libraries, and faculty cabins. The college has state-of-the-art computing facilities with over 1400 computers networked through broadband for internet access. The institute focuses on developing good infrastructure like smart classrooms, well-equipped laboratories, a central library with 131000 books and reading rooms, a Wi-Fi campus, canteen, transport facility, playgrounds, power backup, etc. Wi-Fi enabled campus includes faculty residences and three boys and three girl's hostels accommodating over 1500 students. Hostels have a library, TV room, canteen, general store, well equipped gymnasium as well as indoor and outdoor sports facilities. All the academic blocks have ramps/ lifts to make it convenient for physically challenged people.

Classrooms/Tutorial Rooms: College has spacious 87 classrooms with more than 60 sitting capacities, all classrooms are equipped with ICT facilities like smart boards, LCD projectors, and sound system.

During COVID-19, the Institution shifted to an online teaching learning process through Google classroom, and institute's LMS (Edumarshal). Hybrid mode teaching learning also has been done during some duration from smart classrooms. Assessment and evaluation of internal examinations have been done online using Google classroom and institute's LMS.

Laboratories/Workshops: The college has well-equipped 101 laboratories and 5 workshops. The institute has established innovation/ development center facilities to inculcate research habits among the student fraternity.

1. Software Development Center
2. Bigdata Center of Excellence
3. Open-Source Software and R&D Center
4. Cloud Computing Cell
5. College Societies

6. Centers of Excellence

Seminar Hall: The college has 5 seminar halls. These halls are regularly used for conducting seminars at the college, state, and national levels.

Computer Center: The college has 3 computer centers with all modern configured computers with 1000 Mbps internet speed.

Library and Reading Room: Library System comprises a Central Library, 8 Departmental Libraries and 5 Hostel Libraries. The Central Library, housed in the Administrative Block of the College, consists of two sections spread over 1465 Sq meters with a total seating capacity for 344 users. Comfortable study space is provided for faculty, staff and students in the form of reading hall, study cubicles, digital library and faculty reading room.

The state-of-the-art facilities of central library include KOHA Open-Source Library Management Software which also has Web Based Online Public Access Catalogue (Web OPAC) from 2014, Digital Library/Institutional Repository Server on DSpace software, Membership to DELNET and National Digital Library which has a collection of more than 6 Lac resources of Engineering, Science, Humanities available for use by all the stakeholders. The library also provides access to Wiley Engineering e-journals, Springer Nature e-journals, Taylor & Francis e-journals, EBSCO, ELSEVIER: Science Direct Engineering E-journals, Emerald: Management e-journals, Taylor & Francis e-books, BSP Books Pvt. Ltd-e-books, Cambridge University Press e-books, Pearson Education e-books through Nalanda E-Consortium membership signed under AKTU. Library subscribes to more than 25 magazines and 11 newspapers.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/infrastructure-and-physical-facilities-for-teaching-learning/

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

The college is encouraging and providing facilities for students to participate in games. Dean Student Welfare supported by a team of faculty members and sports officer look after all cultural,

sports, and extra-curricular activities of the college. The college also has a team that is actively undertaking social welfare activities e.g., blood donation camp.

Sports:

The college has always created a niche for itself in the field of sports. The college has been participating in various inter institution, state-level tournaments for a long time. In sports, our college provides facilities for both indoor and outdoor games to the students.

Outdoor Games: A spacious playground is available for outdoor games like Cricket, Football, Volleyball, Basketball, Badminton, etc.

Indoor Games: Facilities for indoor games like Badminton, Table Tennis, Chess, Carrom, etc., are provided to students on the college campus. A large number of sports activities are organized in the college aiding the students to display their talent in sports activities. One of the major sports events is the 'Ajay Kumar Garg Memorial Table Tennis Tournament'. It is a state-level tournament organized by Ghaziabad District Table Tennis Association on an annual basis at the college. Participation in this tournament is all the way from Delhi, Haryana, Punjab, and Uttar Pradesh being the major contributors. The interdepartmental annual sports meet of the college, 'SAKSHAM' is held every year in the month of September - October.

Cultural Activities:

The college has carved out a special niche for itself in the field of cultural activities. The students are organizing & participating in many cultural activities. Every year the college organizes an Annual cultural Function called 'Vibrations', where the students participate with zeal in many cultural activities. Some of the events at vibrations include face painting, mehndi, singing, dancing, collage making, t-shirt painting, pot painting, rangoli making. The active participation by a large number of students (boys and girls) in both sports and cultural activities has always resulted in generating a vibrant atmosphere on the campus.

Recreational facilities, gymnasium, yoga center, etc.:

The college provides well-furnished hostel accommodation to its students. The six campus hostels are spread over four complexes namely, the junior girls hostel complex, the girls hostel complex, the junior boys hostel complex, and the senior boys hostel complex. The hostels have a gymnasium as well as indoor and outdoor sports facilities. The gymnasium includes various equipment like rods (shoulder rods, carting rod, dumbbell rods) plates (steel & rubber) of different weights, powerlifting bullet, abs king machine, body twister treadmill, etc., The gym instructor is appointed to guide the students how to use equipment and share healthy tips. The hostels have facilities for outdoor sports like volleyball, cricket, basketball and badminton and indoor games like carrom, chess, table tennis, pool table, and music system. Yoga center is maintained in college with sufficient facilities for yoga. College celebrate Yoga Day with full enthusiasm in which faculty and students from each department participate combinedly. During Covid online Yoga Day celebration has been performed.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/facilities-for-cultural-activities-and-sports/

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

92

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/classrooms-and-seminar-halls-with-ict-enabled-facilities/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

1061.25

File Description	Documents
Upload any additional information	View File
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template)	View File

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

The AKGEC Library System comprises a Central Library, 8 Departmental Libraries and 5 Hostel Libraries.

The Central Library, housed in the Administrative Block of the College, consists of two sections spread over 1465 Sq Mtrs with a total seating capacity for 344 users. Comfortable study space is provided for faculty, staff and students in the form of reading hall, study cubicles, digital library and faculty reading room.

The library system is very user friendly with sufficient resources to meet the requirements of the users. Addition of resources as per the requirements and norms is a regular feature. Sufficient numbers of qualified staff are employed to manage the activities of the library.

The state-of-the-art facilities include KOHA Open-Source Library Management Software which also has Web Based Online Public Access Catalogue (Web OPAC) from 2014, Digital Library/Institutional Repository Server on DSpace software, Membership to DELNET and National Digital Library which has a collection of more than 6 Lac resources of Engineering, Science, Humanities available for use by all the stakeholders. The library also provides access to Wiley Engineering e-journals, Springer Nature e-journals, Taylor & Francis e-journals, EBSCO, ELSEVIER: Science Direct Engineering E-journals, Emerald: Management e-journals, Taylor & Francis e-books, BSP Books Pvt. Ltd-e-books, Cambridge University Press e-books, Pearson Education e-books through Nalanda E-Consortium

membership signed under AKTU.

The Departmental and Hostel libraries are managed and run by the respective departments and hostels with resources taken on loan from Central Library.

All students, faculty and staff of the College are entitled to take membership and make use of the library facilities.

Admission to the Central Library is through Identity/Library Card which is scanned at the entrance to keep record of the users. The library is under camera surveillance through ten cameras that have been installed at various locations.

The library attracts an average of 350 users on a regular working day.

Knowledge Resources:

The Central Library of the college has an invaluable collection of text and reference books, journals and e-books, e-journals and a variety of multi-media resources. At present, the total number of titles and volumes on Science, Technology, Humanities and Management are around one lac and thirty-one thousand respectively including book bank books (Total Book collection 131000, Lending Section Books and Reference Section Book collection 36000, Book Bank book collection 95000). The library subscribes to over 5800 E-resources/International Journals, 14000 E-books and over 106 National Journals. The digital library has a diverse collection of over 5,700 multimedia resources. In addition, the library maintains seminar reports, project reports and thesis of students. A separate section with more than 1000 books on personality development and competitive examination preparation are available. All these resources are constantly getting added and increased.

The Central Library subscribes to more than 25 magazines and 11 newspapers.

Book Bank:

In addition to well-maintained Circulation and Reference Sections, the college has a rich Book Bank exclusively for students. The Book Bank is very helpful in fulfilling students' requirements for the University prescribed text books on semester basis without spending much on it.

The Book Bank, with a collection of about 95,000 books, assists the students by issuing text books on loan for the whole academic semester according to the rules framed for the purpose. Under this scheme every student is issued on loan a set of one or two books for each subject for the full semester. The books are required to be returned at the end of each semester and a set of books is issued at the beginning of next semester.

A compactor storage system has been installed recently to provide increased storage, easy access / retrieval and protection from dust etc. of a large number of books of Book Bank.

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://www.akgec.ac.in/about/infrastructure-visual-tour/library/

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources A. Any 4 or more of the above

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

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

54.3

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

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

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

116.49

File Description	Documents
Any additional information	View File
Details of library usage by teachers and students	View File

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The College believes in regular upgradation and maintenance of its IT facilities to keep pace with the changing needs of technology and the curriculum. The IT infrastructure at AKGEC takes into account all its stakeholders - students, faculty and staff. The College has a dedicated department called the Central Support Cell that has the responsibility of procurement and maintenance of the IT infrastructure.

The college provides 24*7 high speed internet connection through optical fibre link. A bandwidth of 1 Gbps is subscribed to from CJ Online with two parallel fibre cables. In addition, two radio links of 100 Kbps each are installed as standby. LAN connectivity is provided in all departments, labs, faculty cabins, sections and administrative offices. Wi-fi connectivity is provided in the academic blocks, administrative block, hostels and the faculty residences. There is a total of 206 Wi-fi access points installed at various locations.

The network infrastructure of the college is supported by L3, L2 Managed and Unmanaged Switches and the Fortinet Firewall for

network security with adequate policies applied.

For computing facilities, the College has 1421 Desktop Computer systems which are mostly i7, i5 and i3 systems and 131 laptops. These are in use in laboratories and departmental and administrative offices. The computing facilities are complemented with accessories including printers (laser and deskjet) and scanners.

All classrooms are equipped with ICT facilities, 68 classrooms being equipped with smartboards, Internet and audio system and 12 classrooms with LCD projectors, Internet and audio system.

The computer centres, seminar halls, conference room and Meeting room are all equipped with LCD / LED projectors, audio system and Internet. The Conference room is also equipped with an LED panel. Two seminar halls in the College have been connected through Video Conferencing during 2020-21.

Licensed versions of relevant software in accordance with the curriculum and for administrative requirements have been purchased. The college subscribes to the Microsoft License and the Quick Heal anti-virus software. All computer systems in the College are using the Microsoft Windows 10 Operating System. An ERP system is being used for integration of all academic and administrative activities in the College.

Sufficient number of UPS systems are installed in the college to ensure uninterrupted power supply to the academic and administrative areas.

The institution has a practice of regular upgradation of the IT facilities. Desktop computers, laptops, printers and other equipment are purchased every year as per the requirement for academics as well as administrative work Existing computers are also upgraded for RAM / SSD as and when required. Printers and other equipment are also purchased regularly.

In the year 2020-21, the LAN backbone in the college has been upgraded with higher configuration switches. The wi-fi access points in the hostels have been upgraded as well as increased in number. One Boys hostel has been equipped with LAN ports in the student rooms on a 1:1 student: LAN port basis. The Internet

Bandwidth has been increased to 1 Gbps.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/institution-frequently-updates/

4.3.2 - Number of Computers

1552

File Description	Documents
Upload any additional information	View File
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution **A. ? 50MBPS**

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

1008.29

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

Established Systems and Procedures for Maintaining and Utilizing Computers

1. Computers are purchased against requirements from Departments and Sections centrally by the Central Support Cell
2. All maintenance of computers and other IT equipment is the responsibility of the Central Support Cell
3. All complaints about repair are checked in house by the Central Support Cell and repair is completed in house, if possible; else the equipment is sent to the outside vendors for repair
4. Old computers and equipment are replaced on a periodic basis

Established Systems and Procedures for Maintaining and Utilizing sports complex

A dedicated system to ensure scheduled maintenance and repair of sports complexes and infrastructure exists in the college. The college Sports Officer is the main advisor to Dean Admin for necessary maintenance of sports associated requirements. The necessary procurement of sports items is done in consultation with Dean Hostel and Dean Students Welfare through Chief Purchase Officer.

Established Systems and Procedures for Maintaining and Utilizing classrooms

All the classrooms are cleaned daily and furniture is wiped off by the designated Safai Karamcharis in the morning before starting of the classes.

All the Electrical switches, fans, etc are checked and repaired on a requirement basis.

The mikes are distributed to faculty before starting each class. The distribution point has a sufficient number of charged batteries and mikes to meet the requirement. A buffer stock of batteries and mikes is maintained for quick replacement of unserviceable ones.

Established Systems and Procedures for Maintaining and Utilizing Library

Library Automation:

The library is managed by computerized automation through library management software KOHA, which is an integrated multi-user library management system that supports all in-house operations of the library with Barcode. The KOHA consists of modules on acquisition, cataloging, circulation, periodical, article indexing, and Web OPAC.

Requisition of Books:

Requirements of books are generated on basis of the following:

1. Requirements specified in the syllabus
2. Courses operating in colleges with a number of admitted students.
3. Requirements given by faculty/departments/students etc.

Requirements for the books from the faculty member as well as students are received on Book Requisition. The titles of books and number of copies required are sought after finding the availability of the title, number of copies in the library in consultation with Dean Library. Then approval for the purchase of the books is obtained from the Dean Library and Director-General. After that order for recommended books is prepared. Then a purchase order is placed on the book suppliers on the basis of discounts and services.

Technical Processing of Books:

After the bill is processed, the documents are subjected to technical processing. This includes:

- a) Classification through Dewey Decimal Classification Scheme, 21st edition.
- b) Feeding of book data in KOHA Library Management Software for cataloging purposes/Search.
- c) Fixing book label, barcode, due date slip, and stamping on back of the title page, secrete page of the book, and Last page of the book.
- d) Shelving of documents according to Classification.

Library Membership:

At the time of joining the college, users approach the library for membership. The user submits a form filled by them. A photograph is taken in the library by a college photographer. It is used for library cards and LMS. Based on these, the Director-General approves & a bar-coded library card is issued. Whenever a user loses his library card, he is issued a new card based on an application given by the student, and old card details are blocked and a duplicate card is activated. For this purpose, users are charged a nominal fee.

Circulation of Books:

The borrower requests an issue of the book using Requisition Slip and gives a library card for scanning.

Books are issued and received from students according to displayed rules. At the time of issuing a book to the borrower, the due date is stamped on the due date slip.

At the time of returning the books, library staff scans the accession number of the book and verifies the date of return. If the book is returned in time, the book is accepted without any fine.

At the time of returning the books after the due date, a fine is charged from the students according to the fine rules which are displayed on the central library notice board and a fine slip is issued for the realization of the fine due to late return of the book. In the case where a fine is not paid, the book is received and is posted in software. The software debar the students for further issue of books till deposits of the fine. The fine collected is deposited in the accounts department on a monthly basis. Such students may borrow books temporarily for consulting in the library only. The library/identity card is retained on such an issue of the book.

Digital Library:

E-journals & E-books: E-journals & E-books are utilized by the user in the following ways:-

1. Can browse on the digital library systems and anywhere in the campus and outside campus through MyLoft.
2. Can download and take a copy on Pen Drive, CD/DVD.
3. Can also send by email etc.

Report of the usage is collected from the publisher on yearly basis and after analysis a decision is taken for renewal of membership.

CD/DVD: CD/DVD received along with books are entered in the CD/DVD stock register and given to the student as and when they are required for viewing on the computer system.

Question Papers and Model Solutions:

AKGEC central library maintains a Question Papers & Model Solutions Bank consisting of previous question papers of Sessional, PUT (Pre-University Test), and University Examinations along with their model solutions prepared by the respective subject teachers. The collection is readily available for reference of students in electronic as well as print form in the central library and also in electronic form in departmental and hostel libraries for benefit of faculty and students respectively users are allowed to take the documents for making photocopies at

the photocopy centre.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/established-systems/

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1391

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	View File
Upload any additional information	View File
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File

5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

41

File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File

5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

C. 2 of the above

File Description	Documents
Link to Institutional website	https://www.akgec.ac.in/life-akgec/events/festival-celebrations/yoga-day/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

598

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

598

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent

A. All of the above

mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View File
Upload any additional information	View File
Details of student grievances including sexual harassment and ragging cases	View File

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

583

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

15

File Description	Documents
Upload supporting data for student/alumni	View File
Any additional information	View File
Details of student progression to higher education	View File

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

51

File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

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 year

5.3.1.1 - 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 year.

Nil

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

There are a number of departmental and extra-curricular societies which provides engagements to the students in various activities. The societies are involved in organization of various activities and in participation at various events. The organization of an event develops the administrative skills in students.

Departmental Societies are:

Society

Department

Link for more information and society activities

Conatus

Computer Science

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/conatus/>

Nirmaan

Civil Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/nirman/>

Oorja

Electrical and Electronics Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/orja/>

Phoenix

Electronics and Communication Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/phoenix/>

Samveg

Mechanical Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/samveg/>

Extra-curricular Societies:

Society

Activity

Link for more information and society activities

Euphony

Music

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/euphony/>

Footprints

Arts, Literature, Photography and Designing

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/footprints/>

Horizon

Techno- managerial society of the college that aims at enhancing both technical and managerial skills of the potential students of

the college.

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/horizon/>

Goonj

Dramatic Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/goonj/>

Renaissance

Ethical cum Patriotic Society of college

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/renaissance-2/>

Taal

Dance Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/taal/>

Verve

Fashion Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/verve/>

Besides these societies college also have student chapters of the following:

CSI

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/csi/>

ISTE

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/iste/>

SAE India

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/sae-india/>

- Along with the involvement of the students in various societies, every class have their class representatives (Class CRs) who are responsible for communications between the class and the department, the Training & Placement class representatives (T & P CRs), who are responsible for communication between class and the Training & Placement Department and coordinate in respect of the placement process.
- A Discipline Committee (DC) exists at college level involving the students of all the years except first year.
- To ensure calm and peaceful academic atmosphere in the campus.
- To avoid physical confrontation among students.
- To ensure all the students wear ID Cards while they are in the campus.
- To monitor the movement of the students in the college and prevent students loitering around in the corridors during the college working hours.
- To inculcate Value Education as an integral part of life, AKGEC, during the year 2017, established a Value Education Cell (VE Cell) under the guidelines of AKTU. The VE cell also incorporates students for various administrative roles such as conduct of
- Evening workshops on the following topics
 - "Understanding Relationships through Self-Exploration".
 - "Practicing Awareness of thoughts"
 - Mutually Fulfilling Communication
- Online Webinars
- Celebrating The Earth Day.
- Quiz of the Week
- Drishti- a short video based event where perceptions of the participants are evaluated based on holistic wisdom.
- Promoting the above event using social media
- Students are also members in Prctoral and anti-ragging squad

along with the faculty members with various administrative roles.

- Students are also part of college Software Development Centre where they themselves handle a number of projects.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

1

File Description	Documents
Report of the event	View File
Upload any additional information	View File
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	View File

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

Alumni interaction has always been directly and indirectly influencing the key Aspects of an institutional success, the various aspects in which the alumni's of the institute is reflected by suggestions towards changes in the curriculum to make the current student population in tune with the current industry requirements. The Alumni can clearly express the relevance of the curriculum in the job scenario, also the teaching learning process

and the development of Infrastructure and Learning Resources through donations and maintain donations of their Alumni which includes funds for new Physical facilities, research projects, maintenance of current facilities. There are numerous such aspects through which the alumnus can contribute to its alma mater.

One of the strengths of AKGEC is, and has always been, its alumni. To establish, maintain and nurture a sustained, lifelong, and mutually beneficial relationship with its alumni, AKGEC formed an Alumni Association in 2005.

The alumni association at AKGEC has been active since its inception and the various alumnus of college are consistently writing their success stories, and are contributing towards AKGEC, affiliated University and the progress of the country on social and economic grounds and keeping up the spirits of being an AKGECIAN.

Recently our alumni's Neeraj Srivastava, 2005-2009 B.Tech graduate from Electronics and Communication Engineering, Ankit Maheshwari, a 2006-2010 batch CSE have received AKTU distinguished alumnus award for two consecutive years 2020 and 2021.

There are many such success stories to discuss; many of them can be found on our alumni portal (www.akgec.ac.in/alumni-success-stories/) and LinkedIn network (akgec.almaconnect.com/network_details), various alumni's are invited to college frequently for the formal talks with their juniors. The success stories of the alumnus motivate the students, and their experiences help them to identify the righteous path towards their career.

Since its formation, the college has been actively involved in facilitating networking amongst alumni for social and professional synergy. AKGEC organized its first annual alumni meet on 02 April, 2005. Since then the meet is organized every year, except during 2019-20 and 2020-21 due to Covid-19.

File Description	Documents
Paste link for additional information	www.akgec.ac.in/alumni-success-stories/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year A. ? 5Lakhs

(INR in Lakhs)

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Institute Vision: To introduce undergraduate and post graduate courses for all Engineering Branches and award of PhD degree. To be one of the best Engineering Colleges in the country and to be a Deemed University.

Institute Mission: We strive to provide and maintain academic environment & systems enabling maximum learning, to produce competent professionals. We also aim at achieving this through transparent academic and administrative policies in the college. We intend to provide conducive atmosphere for research, development and consultancy services to our faculty at national and international level.

The institute is committed to accomplish its mission in all its endeavors. In accordance with vision and mission the quality policy of the institute has been designed. The institute Vision and Mission were approved in January 2014 by the Governing Council.

File Description	Documents
Paste link for additional information	https://www.akgec.ac.in/about/vision-and-mission/
Upload any additional information	View File

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

Leadership is evolved through well-defined systems and organizational structure. The institute has various Statutory bodies for development of policies, regulations & guidelines, their implementation and continuous improvement:

1. Board of Governors - The college has a well-defined board of Governors whose members have been drawn from management, faculty members from college, industry, educationists state government and nominated members of the University. The body periodically meets to evolve various policy decisions.

2. Boards of Studies- The college is affiliated to Dr. AKTU Lucknow. Following faculty of the college are members of university BoS.

(a) Dr. R.K. Agarwal Director General of college is member in university BoS for Mechanical Engineering subjects.

(b) Prof. P.K. Chopra, Director of the college is member in university BoS for Electronics and Communication Engineering subjects.

(c) Prof. Rakesh Kumar Srivastava HOD Civil Engg. department is special invitee in University BoS for Civil Engineering subjects.

3. Admission Committee- College has an approved admission committee for admitting students in Direct Management quota and lapse seats. Admissions are done based on laid down norms of university and AICTE.

4. Examination Committee- College has a well-defined examination committee for conducting university level exams and assessing students in internal examinations.

5. Anti-Ragging Committee- As per UGC guidelines ARC has been formed with members drawn from administration, police, media, parents and student's representatives.

6. Proctor Committee- College has a proctor committee to maintain discipline, punctuality and enquire all related matters in the college.

7. Training and Placement Cell- The cell is responsible to planning career development of students, inviting companies and getting them placed. The organization chart of college placement cell is enclosed.

8. Women Grievance/Redresser Committee- All issues related with women grievances are resolved through nominated committee.

9. AKGEC Skill Foundation- All skill development related

coordination with the industry and students training in various skill sets are being done by AKG Skill Foundation headed by Prof. Ashiv Shah.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The institution has initiated many activities to promote technical ventures with industry to promote R&D activities and training programs which would improve the employability of students.

The college is the first institution in U.P. to have received approval from Deptt. of Science and Technology (DST), Govt. of India, for establishment of Centre of Relevance and Excellence (CORE) in the field of Industrial Automation and Robotics under the mission reach of TIFAC. The CORE has been established at our institution with the support of TIFAC and industry partners that include reputed firms like Bosch Rexroth, KUKA Robotics, Siemens PLM Software, Altair Engineering, National Instruments, Rockwell Automation and Jackson Engineering. Under the Scheme, the industry partners will be providing state-of-art equipments for establishment of a World class centre for training, research and product development in the field of Industrial Automation and Robotics.

The institution has also become the first institution in India to establish an Industrial Robotic Training Centre in collaboration with KUKA Robotics of Germany. The centre provides world-class training upto advanced and expert level to students who receive internationally accepted joint certification from KUKA and AKGEC.

These measures further contribute towards academic excellence and improved employability, thereby not only maintaining the top ranking of the college in U.P. but creating a position for it at all India level.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	Nil
Upload any additional information	View File

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

The Director General and Director are administrative heads of the college. However most of the administrative and academic functions are delegated to various HoDs and Deans who further delegate to ensure a decentralized governance system. Additionally, every department has distributed various duties among faculty members which play an important role in various institutional functions. These duties are discussed in departmental meetings which are regularly conducted and the minutes recorded.

File Description	Documents
Paste link for additional information	Nil
Link to Organogram of the institution webpage	Nil
Upload any additional information	View File

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

B. Any 3 of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	View File
Screen shots of user inter faces	View File
Any additional information	View File
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

The College provides the following welfare activities to them: -

- In Campus faculty quarters. The college provides residential facility to some of the out -station faculty members so that they can settle down in the college. College presently have 18 quarters. Four are being used as guest rooms, one is being used as school for labour's children, one is vacant and in 12 quarters faculty are staying.
- Transport facility for Faculty, Staff and Students: The college has a good transport facility. It has its own as well as hired buses. College has two buses and 6 hired buses. These buses routes to Noida (3 buses), Ghaziabad (4 buses) and Hapur (1 bus).
- Parking lot and Security: College has sufficient number of parking lots with good space which is secured continuously through security guards.
- Conveyance facility for Deans and HoDs staying at Noida and Ghaziabad.
- Health Insurance for Students: The college provides health insurance for upto rupees one lac to all students. ESI facility is available for staff as applicable.
- All heads of departments have been empowered to estimate and propose their yearly department budget catering for yearly requirement for technical and administration requirements. Additionally, each HoD has been provided an imprest amount within the scope of their power of expenditure. The imprest amount once spent is reallocated repeatedly.
- Provident Fund & Gratuity: For the benefit of staff and

employees the college has a well-defined system of providing gratuity to faculty, whereas staff's provident fund gets transferred to EPFO.

- **Leaves:** Faculty members are entitled for following types of leaves:

(1) CL - 12 over an academic year.

(2) EL - 10 over an academic year.

(3) SL - 10 over an academic year.

(2) RH - 02 over a calendar year.

These can be accumulated upto 60 EL and 30 SL.

- **Maternity Leave:** Each regular female faculty is certified for paid maternity leave of 84 days.
- **Leave encashment** for faculty and staff upto maximum 20 days can be encashed every year.
- **Canteen, ATM & Reprographic facility:** The college has two canteens - one is situated near main block while the other is in IT block. Bank of Baroda ATM is available at college gate. Reprographic facility is also next to Library.
- **Mess facility:** Faculty of the college can have paid lunch in nominated students mess.
- **Every year** at the beginning of the session class IV employees get a pair of new shoes and a uniform.
- **Free Wi-Fi** facility is available to all.
- **Medical facility:** College has an affiliated Indo German Hospital, where all students are yearly medically examined and college has ambulance with dedicated 24 × 7 driver.
- **Open gym** for faculty and staff.
- **Adarsh Vikas Kendra,** welfare school for contract Labour children.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.3.2 - Number of teachers provided with financial support to attend conferences/ workshops and towards membership fee of professional bodies during the year

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

25

File Description	Documents
Upload any additional information	View File
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

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

11

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	View File
Reports of Academic Staff College or similar centers	View File
Upload any additional information	View File
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

184

File Description	Documents
IQAC report summary	View File
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	View File
Upload any additional information	View File
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

The information on multiple activities is appropriately captured and considered for better appraisal through:

? Periodical reviews on classroom teaching by HoD: Every semester the faculty teaching is reviewed by the HoD and a feedback form is filled. The faculty are also apprised about their teaching.

? Feedback (theory and lab) from all the students of the college is taken for both faculty as well as staff members specifically lab attendants.

? University result for both the semesters: The university result of every faculty is reviewed and based on their performance they are awarded for the same.

? Successful completion of one NPTEL course per year:

? Self-appraisal by Faculty and Staff: Every year an elaborate appraisal form is filled by faculty and staff members in which they provide details of the work done by them in a particular year.

? All Professors and Associate Professors are also evaluated based on their administrative and academic / research contribution to the college and department.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

From the year 2019-20, the college is conducting external audit from Anil Vaish and Co., Ghaziabad. The auditors visit periodically to conduct statutory audit. The observations noted by them are discussed with accounts team and if required with the Director General / Management Members. The statutory audit is based on the accounting vouchers / papers / bank statements and other relevant papers which are necessary for conducting statutory audit. The objections (if any), raised by them are settled on a real time basis.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

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

NIL

File Description	Documents
Annual statements of accounts	View File
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	View File

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

The institution always monitors the effective and efficient use of available financial resources for the infrastructural development and teaching learning process. Annual budget is made, funds allocated accordingly, expenditure monitored for deviation and reviewed periodically. Accounts are properly auditable by the chartered accountant. Student fee is received periodically through University Academic fee committee.

The College has a governing body consisting of university & AICTE nominee, management representatives and other industry and academic members. Every financial year budget proposals including income & expenditure details being submitted by the college to the governing body for their consideration and approval. The proposals are made on different heads such as laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance expenses.

The college has appointed an internal audit team for auditing the accounts and utilization of various resources periodically. These audit reports are submitted to the Director on a monthly basis and action taken to improve the system.

The annual balance sheet of the college is audited by an authorized audit team.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

AKGEC has well established IQAC. The IQAC is headed by Dean (Special projects). The IQAC prepares a detailed audit check list for each process and it is utilized by internal auditors for finding deviation from laid down system. The system is designed on requirements provided by AICTE, NBA and University and the Vision and Mission of the college. All these decisions are approved by management and such activities are implemented in the institution. Alumni and students are continuously in touch with IQAC and share

the feedback of the students which is addressed properly.

IQAC Communicates with faculty and students through the HoDs. All Heads are members of IQAC. IQAC also helps in getting accreditation by various agencies to promote quality culture in the institution. Five Engineering branches, B.Tech. (CSE, ECE, EN, IT & ME) are accredited by NBA w.e.f. 01 July, 2019 to 30 June, 2022.

The college has a well-defined structure for carrying out the audit, one professor is nominated as MR and another as Deputy MR. Besides these each department has nominated two members who are responsible to carryout internal regular audit of the department and they are also nominated to conduct the audit of other departments periodically. The report is submitted to the Director General of the college.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Response:

- The seminars and workshops conducted for the faculty
- Seminars are conducted compulsorily for fourth year.
- Examining students by conducting internal, pre-final and external test assessments
- Holding extra classes for course completion
- Arrangement of remedial classes for slow learners
- Digitalization of library
- Provision of Wi-Fi facility and smart classes
- Increased usage of ICT tools in teaching learning process

- Preparation of course plan at the beginning of every session

Methodologies of operations: Institution has assigned the role of assessing status of compliance for all requirements to external agencies to help internal teams deputed by each department. Each team prepares the compliance report and submits to Dean Special Projects. The institution regularly collects student's feedback and evaluates the teaching ability of faculty and advices on their shortcomings.

? Head of the department separately evaluates the performance of the faculty.

? Performance of the students is continuously evaluated by the dept.

? Individual counseling by class -in-charges/HoD, if required.

? Detailed subject-wise lecture notes are required to be prepared by each faculty members.

? Lab manuals are prepared by the faculty members and made available to the student.

The institution has always sincerely and seriously ensured to communicate its quality assurance policies, mechanism and outcomes to the various internal stakeholders at regular intervals. The dedicated services rendered by the management, faculty, staff and students will make this institution a strong learning and resource centre.

Response:

Recruit and retain qualified faculty and staff at various levels: To eliminate the problem of lack of good faculty, college makes special efforts for recruitment and retention of quality faculty. Our new hiring practice demands a candidate to demonstrate strong teaching ability.

Make curricular changes and introduction of new courses more frequently: All the courses and Programmes underwent revisions in 2016 and 2018 to make them outcome based. Computer Science (CS) and Computer Science & Information Technology (CSIT) UG Programmes were added in the year 2019. Computer Science & Engineering (AI &

ML) and Computer Science & Engineering (DS) have been added in the year 2020.

Governance:Our Good Governance initiatives ensure that processes and policies are followed throughout the hierarchy. We implement a tight organization structure to monitor, record and ensure compliance with agreed policies. As per UGC guidelines, Governing Body, Academic Council, Board of Studies etc., were constituted.

Teaching -Learning process:While some processes such as admission based on merit, formative and summative assessment, teaching and learning process has been enhanced in many ways. Remedial classes for slow learners, Projects, case study, learning by doing activities have been inducted into curriculum. Student mentoring system, Question paper setting based on blooms taxonomy and Entrepreneurship development course has been implemented.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

C. Any 2 of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://www.akgec.ac.in/igac/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Internal Complaints Committee

A special committee has been constituted to empower and safeguard the rights of female members; faculty staff and students of the Institution. The role of ICC is to act as Inquiry Authority on a complaint of sexual harassment and to ensure that complainant and witnesses are not victimized or discriminated because of their complaint. It promotes gender sensitivity and gender equality in the Institution and produces a harmonious environment in the campus. It promotes equality for men and women by allowing men and women to view what is stereotypical of and reasonable for their gender. Sensitizing students to gender at a young age can influence a change in children's thought processes, which positions them to break societal stigmas in childhood and throughout life.

The principle resolution of this committee:

1. To promote a healthy working environment for all our female staff, students and faculty.
2. To work towards building a gender-sensitized environment at our institute.
3. To organize workshops and awareness programs at regular intervals towards building a gender-neutral workplace.

A committee constituted by AKGEC under Sexual harassment of woman prevention, prohibition and redressal act 2013, comprise of following members:

1. Dr. Mamta Bhusry (Professor & HoD, CSE Deptt.) (Presiding officer)
2. Dr. Shiwani Singhal (Asso. Prof., AS&H Deptt.) Member
3. Dr. Anu Chaudhary (Professor, IT Deptt.) Member
4. Dr. B.K. Sharma (Dean Hostels) Member

5. Dr. Jyoti Chopra (CEO, RSGO Indo GermaHospital, Dasna, Ghaziabad) Member

Safety and Security

The important places in the institution such as Main entrance, Examination halls, Canteen and Controller of examinations office are under CCTV surveillance. Complaint and suggestion boxes are made available in every floor of all the academic blocks. The Institution has constituted women development cell and Anti Sexual Harassment Committee for the safety and security of women and girl students.

Apart from this, various important positions in AKGEC are held by female members such as:

1. Chief Account Officer
2. Registrar
3. Head of Department CSE
4. Head of Center Support Cell

File Description	Documents
Annual gender sensitization action plan	https://drive.google.com/file/d/1q215UUPcIst30cxdGAnWnlryrQ3lzytx/view?usp=sharing
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://drive.google.com/file/d/14MhIg13EK9fYbulaUk86HWYznot7LUox/view?usp=sharing

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	View File

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

Response:

Solid waste management: Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems. Solid waste can be categorized into three types: biodegradable, non-biodegradable and hazardous waste. Bio-degradable wastes include food wastes, canteen waste, wastes from toilets etc. Non-biodegradable wastes include plastic, tins and glass bottles etc. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals, acids and laboratory chemicals.

AKGEC produces a considerable amount of paper waste. Paper wastes from Academic Blocks, Library, Examination cell, Administrative office and Hostels are disposed through vendors.

The College has contracted M/s Eco-Wise Marketing for more than 5 years for waste collection, Recycling and disposal. The vendor generates sustainability reports every month for the total waste collected, waste recycled, waste disposal and Co2 Emission avoided. Moreover the college endorses the proper method for the disposal of old/ scrapped bulk examination used copies papers by getting it pulped for recycling in a paper mill at Meerut.

Liquid waste management: Liquid waste generated from canteen, laundry, and toilet is segregated as well as disinfected and let out as effluent into a common drainage facility.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus **A. Any 4 or all of the above**

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	View File

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows: **A. Any 4 or All of the above**

1. Restricted entry of automobiles
2. Use of bicycles/ Battery-powered vehicles
3. Pedestrian-friendly pathways
4. Ban on use of plastic
5. Landscaping

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	View File

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the **B. Any 3 of the above**

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

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms.

Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment

5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

B. Any 3 of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	View File

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

1. Pledge on Rashtriya Ekta Diwas: 143th Birthday of Sardar

Vallabh Bhai Patel is being celebrated as "RashtriyaEktaDiwas" Pledge Day. All faculty, staff and students wherever present take the oath on the sound of the hooter.

2. Communal Harmony Week: Communal Harmony is the most precious jewel in the crown of mother India, and to maintain this grandeur of our national pride, under the guidelines of the Ministry of Home Affairs, the college observes the Communal Harmony Campaign and Fund Raising Week from 19-25 November every year. Every year faculty, staff and students donated generously to raise some funds which were transferred to The National Foundation for Communal Harmony (NFCH), an autonomous body under the Ministry of Home Affairs, Government of India.

3. Anti-Ragging Awareness Drive: InCognizance to its status of No Ragging Campus, AKGEC conducted the annual anti-ragging drive KIRAN (Kaho India Ragging AurNahin) with the objective of spreading anti ragging message amongst the students. The Proctor of the college addressed all 2nd, 3rd & 4th year students to make them aware of the ills of ragging and the provision of strict punishment to be awarded if one is involved in any incidence of ragging.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File
Any other relevant information	View File

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

1. International Yoga day: Ajay Kumar Garg Engineering College celebrated the International Yoga Day on 21 June every year. All Heads of Department, Deans, faculty and staff performed various yoga exercises under guidance of Dr. Brij Pal, Zonal Head (East Zone) PatanjaliYogSamiti, Ghaziabad. Every year college, under guidance of yoga expert, yoga session for faculty and staff for fifteen days is conducted generally in two batches.

2. Pledge for New India: As directed by the University Grants Commission (UGC), the institution today held a 'New India Pledge' taking ceremony in commemoration of the 75th year of Quit India Movement. The students, staff and faculty pledged to build a new and clean India - free of corruption, casteism, communalism, poverty and terrorism by 2022.

3. National Voter's Day: On National Voter's day i.e. 25th Jan each students of the college take appropriate oath as received from election officer in respective class room. The copy of the oath is handed over to the faculty in each class room by discipline committee students.

4. Human Values and Professional Ethics workshop and Faculty Development program: Dr APJ Abdul Kalam Technical University established a 'Value Education Cell' and motivated affiliated institutions to develop institutional level VE Cells in a systematic effort to coordinate value education efforts at the university. This is to provide an exposure and conducive environment to students and teachers aiming at personal transformation and through that, the evolution of a humane society.

In addition, to propagate value education effectively, the university initially developed five nodal centres, and AKGEC was one of them.

1. 10 day's online family workshop on "Understanding Relationships" for family members of AGKEC FMS and staff members were organized from 5 -14 July 2020. More than 100 family members attended the workshop.
2. 10 day's online family workshop on "Understanding Relationships" for family members of students were organized in two slots (1 - 5 Aug & 12 - 16 Aug 2020). About 40 family members attended the workshop.
3. Conduct of 10 day's workshop on "Understanding Human Being Comprehensively" at AKGEC Nodal Center AKGEC from 11 - 20 Jul 2020.
4. VE Cell, AKGEC conducts 05 days evening workshop (two hours daily) for students on "Understanding Relationships through

Self- Exploration".

5. Webinar-1: (05 July 2020) Resource Person: Sh. Vijay Pal Baghel , The Greenman of India // "Impact of Covid-19 on Global Environment"
6. Webinar-2: 26 July 2020 Resource Person: Dr. Sharmila Asthana The second webinar of the Erudition' 20 series, "Holistic Health and Lifestyle"
7. Webinar-3 on 11 Oct 2020 The third webinar of the Erudition'20 series, on "Studies on the Inherent Interconnectedness and Co-existence in Nature through Ecological, Scientific and Spiritual Evidences" had been organized on October 11, 2020 Sunday.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://drive.google.com/file/d/163wtMCxRh_r1dfSX6DvZeKsX0yHjHByf8/view?usp=sharing
Any other relevant information	https://www.akgec.ac.in/life-akgec/events/festival-celebrations/yoga-day/

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff

4. Annual awareness programmes on Code of Conduct are organized

A. All of the above

File Description	Documents
Code of ethics policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

1. College celebrates important days such as Independence Day, Republic day with patriotic fervor to make the dream of a new tomorrow come true. Various competitions are conducted as part of Independence Day such as essay writing and poster making competition.

2. Various festivals such as Holi, Garba, Diwali etc., are celebrated on the campus.

3. Students organize and participate in competitions, cultural events and Institutional fests through various departmental Clubs.

4. Basant Panchami is also celebrated every year. All faculty and staff along with their families and parents of students visited the Faith Centre of the College to seek blessings of MaaSaraswati. Amidst the recital of heart touching Shlokas played in dedication to MaaSaraswati. Atmosphere of devotion and reverence to MaaSaraswati continued throughout the day.

5. As directed by the University, the institution held 'New India Pledge' taking ceremony in commemoration of the 75th year of Quit India Movement. The students, staff and faculty pledged to build a new and clean India.

6. Teachers Day is celebrated to mark birth anniversary in of Dr. SarvepalliRadhakrishnan.

7. Engineers' Day is celebrated every year remembering the engineering excellence of Sir

Mokshagundam Visweswaraiiah.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	View File

7.2 - Best Practices

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

Best Practice 1

Title of the Practice: Skill development of the students

Objectives of the Practice

The objective of this initiative is to encourage skill development in youth to align their technical competencies with manpower requirements of modern industries.

- To nurture creativity and innovation in youth to promote entrepreneurship.
- To provide national and international industrial working exposure to students.
- To provide knowledge and exposure of advanced technologies such as Robotics, Automation, 3 D Printing etc.

The Context

Globalization, knowledge and competition have intensified the need for a highly skilled workforce in India to accelerate the growth rate of the economy towards a higher trajectory. Today, there is a need for a skilled workforce to meet global standards of quality, to bring advanced technologies to domestic industries and to boost industrial and economic development. Thus, skill development becomes the major driving force of socioeconomic growth and development for our country. The AKGEC has launched various programs and activities that provide knowledge and skills of

latest technologies and promote entrepreneurship which help students to advance their careers and enhance their employment opportunities.

The Practice

In order to improve the employability of the students by improving their knowledge and skill, the various initiatives taken by AKGEC are given below:

1. AKGEC SKILLS FOUNDATION:

1. Centers of Excellence:

The College has established various centers of excellence such as Industrial Robotic Training Centre in Collaboration with Kuka Robotics, Germany, NI-LabView Academy in collaboration with National Instruments, Centre of Competence in Automation Technologies in collaboration with Bosch Rexroth AG, Germany, Industrial Pneumatic knowledge Centre in collaboration with Janatics etc.

2. Infosys Campus Connect Program

The campus connect program is run by the T & P department which is conducted by Infosys. Under this program, Infosys has designed and provided a 65 hours teaching module and a wide range of projects that students take up as a part of the final year project. This program helps students in acquiring skills related to the IT industry.

3. Personality Development Program

As soft skills play an important role in improving the employability of students. The college has introduced a well structured 100 hours Personality Development Program conducted on weekends by a professional agency.

4. Cloud Computing Cell

Cloud Computing Cell has been a part of Ajay Kumar Garg Engineering College since February 2016. The members are exposed to the latest Cloud Technologies that enable them to be market ready thereby increasing their opportunities in placements and

research. It provides a platform to the students to compute, manage and deploy the cloud.

5. Open Source Software R&D center

The establishment of this research and development centre is expected to create a unique opportunity to all stakeholders of the institute. The facility so created shall be useful to carry out research/development/training/consultancy related to open source software. The centre will customize the open source software according to the requirements. It will also train the students and facilities of our institute and will involve them in the development and customization of recent open source software.

6. Co-curricular Industry Relevant Programs:

To bridge the gap between industry requirement and academic curriculum of the college. The college has a BigData Centre of Excellence, & various Computer Aided Design (CAD) packages like Pro-E and Catia

Best Practice 2 Title of the Practice: Online Teaching Learning Program

Objectives of the Practice:

Education is the process of transferring knowledge, values, methods, skills, and beliefs from one individual to another. Online teaching offers exciting opportunities to expand the learning environment for diverse student populations. As the demand for online teaching increases during pandemic, college faculty members may be asked to consider teaching their classes' online. Online teaching shares much with face-to-face teaching.

Context

Online education provides great opportunities and great challenges. It has benefits for the students and instructors. It offers the convenience of time and space, cost-effectiveness, and flexibility. Online learning allows student to pursue an internationally recognized degree without the need to attend classes on campus. Online education is preferred by students who cannot participate in traditional classroom settings during pandemic.

Practice

Online teaching program involves problem solving, doubt clearing and topic teaching by the faculty members. An online Google Meet Link is made by each faculty member for his class. This Link is floated to their Google Classroom / WhatsApp group. As per the timetable fixed by the department, online classes are taken by the faculty member. Attendance of the students are taken by floating Google form during the class.

Evidence of Success:

The overall quality improvement is evident from the high class averages and a large number of students of the college featuring in University merit lists. The college has consistently maintained itself in the highest category of 'A+' of the University Comparative Gross Average Intellectual Attainment Chart even after Online Classes conducted during pandemic.

Problem Encountered & Resources Required:

As a whole the system is well planned and the resources like digital boards, mikes are available in college. There may be problem with the students on their personal issues like internet, laptops etc, which can be solved by proper counseling by the faculty coordinators.

For online teaching to be successful, it is recommended that the instructor should follow the following principles

- (1) encourage student participation
- (2) encourage student cooperation
- (3) encourage active learning
- (4) give prompt feedback
- (5) emphasize time on task
- (6) communicate high expectations
- (7) Respect diverse talents and ways of learning.

File Description	Documents
Best practices in the Institutional website	https://akgecskills.in
Any other relevant information	https://drive.google.com/file/d/1_Su0VFQtxCTmWi65URZdc0cvaQbFie5A/view

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Overall Best Result of AKGEC is one area distinctive to its priority and thrust. The result of students graduating during the academic year 2020-21 has been exceptionally good. In B.Tech, 95% students have passed, out of which 94.35% passed with 1st division including 60.86% with honors.

In addition to overall good results, the college has a remarkable achievement in terms of number of students in university merit lists. For the session 2020-21, the college has eight B.Tech and one M.Tech students in the top 10 merit list of AKTU with one gold and two bronze medal. The college has been consistently having the maximum number of students in merit list and number of medalists over the last few years.

AKGEC is very keen at facilitating personal commitment to the educational success of students and thus the Academic committee consisting of Director, senior faculty members and Examination Coordinator prepares the academic calendar well in advance before the commencement of the session/semester

Part B

CURRICULAR ASPECTS

1.1 - Curricular Planning and Implementation

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

Ajay Kumar Garg Engineering College, Ghaziabad (an initiative of the Indian Institute of Management and Engineering Society) is affiliated with Dr. A.P.J. Abdul Kalam Technical University, Lucknow and strictly follows the curriculum prescribed by the university. The college offers AICTE approved, B.Tech. courses in twelve disciplines and at the postgraduate level, MCA and M.Tech courses in four engineering disciplines. The IQAC team is ensuring the instructional standards for stable education and examination system required for efficient curriculum delivery. The Head of the Departments discusses their action plans in their meetings with faculty members, for optimal and effective curriculum delivery. The process of ensuring the effective curriculum delivery by the Institute is listed as follows:

Every academic semester commences with the distribution of an institute academic calendar based on the AKTU (university) calendar to students, faculty members. After allocation of the subjects, being taken from subject choice based on area expertise and previous year's performance, a master timetable is prepared and shared with students. The lecture-wise-schedule (LWS) is approved by HoDs for every subject in their department. The contents are delivered to students as per this LWS and regularly monitored by the IQAC team.

The subject course file is prepared by every faculty member of the department (reviewed by HoD and IQAC team) that includes Quality Policy, PEOs, POs, PSOs, COs, Academic Calendar, Syllabus, Class/Master time-table, Lesson Plan as per Bloom's Taxonomy, Mapping of COs and POs, Previous Year Question Papers, GAP-Analysis, Action is taken to fill the GAP, Assignments, Topic beyond the syllabus, Quizzes, Question Bank, List of Text & Reference Books, e-content. As per the university guidelines, time table of each department is prepared to seek the number of credit hours for each subject before the commencement of the semester by each department.

Due to pandemics, the institute has shifted to various online

learning platforms like Google Meet, Edu Marshal Portal (ERP software) and AKGEC YouTube channel, etc. In accordance with AICTE induction program guidelines, students are familiarized by the departments about syllabus contents, teaching pedagogy, department societies, the various center of excellence in the campus, and Universal Human Values. Students are given exposure in form of guest lectures by eminent speakers, industry visits, various activities by department societies to meet the present industry needs.

The course coverage is closely supervised by the IQAC team, HOD, and Director General regularly to ensure that faculty members complete the curriculum within the allotted time. HOD and senior faculty members regularly visit the classes and monitor the conduct of classes and corrective action is further taken. A daily roster watch is also conducted for every class to ensure the smooth conduct of classes. Online classes were also being monitored regularly by the HoD and time-table team of every department. Department arranges the mentorship classes for the subject found difficult by students and particular attention is given to slow learners by the subject faculty and faculty coordinator. Regular interaction of brilliant, slow learners and less attendance students is done with HoD along with the faculty coordinator. Class representatives and parent-teacher meetings are conducted to discuss the progress of students further.

The institute is equipped with smart boards with all required ICT facilities to facilitate the efficient delivery of the curriculum. Students' attendance is monitored regularly through the Edu Marshal Portal. As a part of continuous evaluation, three internal sessional tests (Sessional Test-1 (ST-1), Sessional Test-2 (ST2), and Pre-University Test (PUT)) are conducted centrally by the institute. The student's performance in these internal exams is uploaded on the Edu Marshal Portal and analyzed further to take action. Feedback from Students, Teachers, Employers, and Alumni are taken based on predefined parameters. Further, faculty-wise student feedback is reviewed, and Corrective and Preventive Action is taken if required. After the end semester examination, university results are declared, analyzed and corrective measures are taken accordingly

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://drive.google.com/file/d/1XPFAYMhuDAaSDUEN6_0AvGyFqipySUZD/view?usp=sharing

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institute strictly adheres to the academic calendar issued by Dr. A.P.J Abdul Kalam Technical University, Lucknow, UP, in terms of date of commencement of the Academic Session, Centralized Internal Examination (CIE), and End Semester Examinations along with the vacation period. As per the university calendar, the Institute Academic Calendar is made comprising of well-planned events by discussing in HoDs meeting with Director General. The academic calendar is made available on the college website for all students and other stakeholders.

All the academic activities such as lesson plans, the conduct of classes, internal examinations are prepared and scheduled as per the academic calendar. Monthly and over-all attendance analysis of students is taken and analyzed after uploading the student's attendance on the Edu Marshal Portal based on the academic calendar.

This ensures the successful continuous internal evaluation of syllabus coverage for faculties as well as students. With prior information about the academic activities via the academic calendar, multiple stakeholders can conduct continuous internal evaluations under their domains. For example, faculty members may make a plan of action for the revision of topics if required and may attend faculty development programs, workshops, international/national conferences, seminars, etc. This ensures professional growth and the overall development of the institute. The institute has a Centralized Internal Examination (CIE) system. During this COVID time, internal examinations were also conducted online through CODETANTRA, and students were monitored by their assigned proctors and super-proctors team. There are three internal examinations (two Sessional tests and one Pre-university test) that are conducted in a semester to evaluate the performance of the students. The student's academic progress is monitored for each subject's performance against their sessional examinations and suitable

actions are taken accordingly.

Result Analysis is done by the Department Assessment Committee after every sessional Test. The pass percentage of each course is calculated, the performance of the students is monitored by the HoD and Director General and the necessary feedback is given to the concerned faculty members.

Students are provisionally cleared or debarred from internal examinations on basis of their overall attendance. Conduction of remedial classes/extra classes/labs is done after identifying the weak students based on their performance in internal examinations to improve their performance. To tune to the already covered syllabus for lateral entry of second-year B.Tech. students, special bridge classes are conducted separately for them by every department. To strengthen students in practicals, lab experiments are conducted in accordance with the university curriculum and beyond the syllabus. Their final evaluation for the lab is done based on grading done at every lab and two internal viva voce examinations are conducted in addition to their regular lab-time judgment. Parents are informed about the performance and attendance of their ward on regular basis by every department.

At the end of every semester, the End-Semester-Examination is conducted and managed in accordance with the date-sheet given by the university for all the theory papers and practical papers. Students should satisfy the eligibility criteria of 75% attendance in each semester to appear for University Examination

Working days are strictly followed as per university guidelines and designed academic calendar. At the institute level, various academic activities e.g., guest lectures, student workshops, industry visits, internal major project viva, industrial training presentation schedule, felicitation of topper students, CR's meetings, alumni meetings, etc. are also planned in accordance with the academic calendar.

File Description	Documents
Upload relevant supporting document	View File
Link for Additional information	https://drive.google.com/file/d/1XPFAYMhuDAaSDUEN6_0AvGyFqipySUZD/view?usp=sharing

<p>1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University</p>	<p>B. Any 3 of the above</p>								
<table border="1"> <thead> <tr> <th data-bbox="95 689 531 757">File Description</th> <th data-bbox="539 689 1394 757">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="95 757 531 936">Details of participation of teachers in various bodies/activities provided as a response to the metric</td> <td data-bbox="539 757 1394 936" style="text-align: center;">View File</td> </tr> <tr> <td data-bbox="95 936 531 1003">Any additional information</td> <td data-bbox="539 936 1394 1003" style="text-align: center;">View File</td> </tr> </tbody> </table>	File Description	Documents	Details of participation of teachers in various bodies/activities provided as a response to the metric	View File	Any additional information	View File			
File Description	Documents								
Details of participation of teachers in various bodies/activities provided as a response to the metric	View File								
Any additional information	View File								
<p>1.2 - Academic Flexibility</p>									
<p>1.2.1 - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented</p>									
<p>1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented</p>									
<p>17</p>									
<table border="1"> <thead> <tr> <th data-bbox="95 1339 531 1406">File Description</th> <th data-bbox="539 1339 1394 1406">Documents</th> </tr> </thead> <tbody> <tr> <td data-bbox="95 1406 531 1473">Any additional information</td> <td data-bbox="539 1406 1394 1473" style="text-align: center;">View File</td> </tr> <tr> <td data-bbox="95 1473 531 1574">Minutes of relevant Academic Council/ BOS meetings</td> <td data-bbox="539 1473 1394 1574" style="text-align: center;">View File</td> </tr> <tr> <td data-bbox="95 1574 531 1675">Institutional data in prescribed format (Data Template)</td> <td data-bbox="539 1574 1394 1675" style="text-align: center;">View File</td> </tr> </tbody> </table>	File Description	Documents	Any additional information	View File	Minutes of relevant Academic Council/ BOS meetings	View File	Institutional data in prescribed format (Data Template)	View File	
File Description	Documents								
Any additional information	View File								
Minutes of relevant Academic Council/ BOS meetings	View File								
Institutional data in prescribed format (Data Template)	View File								
<p>1.2.2 - Number of Add on /Certificate programs offered during the year</p>									
<p>1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)</p>									
<p>20</p>									

File Description	Documents
Any additional information	View File
Brochure or any other document relating to Add on /Certificate programs	View File
List of Add on /Certificate programs (Data Template)	View File

1.2.3 - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

1648

File Description	Documents
Any additional information	View File
Details of the students enrolled in Subjects related to certificate/Add-on programs	View File

1.3 - Curriculum Enrichment

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

Response:

The institute is following Dr.A.P.J. Abdul Kalam Technical University's curriculum.

Professional Ethics & Human Values: The curriculum of UG/PG programs includes courses to encourage Human Values and Professional Ethics in students. This course is included to inculcate human values and professional ethics among all the students. The core courses on the Constitution of India, Law, and Engineering/Indian Tradition, Culture, and Society are also running in the B.Tech program. Courses on Professional Communication Lab, Soft Skills-I, Soft Skills-II are taught in B.Tech, Technical Communication, Universal Human values are included in B.Tech 2nd year. In addition to the above institution core course, multiple workshops have been organized to address Universal Human values among students and faculty members. Value Education (VE) Cell at institute level and Nodal center of AKTU, Lucknow is also constituted to familiarize and

equip students as well as faculty and staff to the importance and need of values & ethics for the development of self & society as a whole. Various activities are conducted at the institute level as follows:

Details of Events Organized by HVPE Cell

S.No.

Date

Event

Resource Person

Remarks

1

05-Jul-20

Erudition'20

Sh. Vijay Pal Baghel

A talk by Vijay on "Impact of Covid-19 on Global Environment"

2

5 - 14 July 2020

Family workshop for FMs/Staff

Dr. Gopal Babu

Workshop on Understanding Relationships.

3

26-Jul-20

Erudition'20:

Dr.Sharmila Asthana

Dr.Sharmila Asthana

The second webinar of the Erudition' 20 series, "Holistic Health and Lifestyle"

4

1 - 5 & 12 - 16 Aug 2020

Family workshop for students

Dr. Gopal Babu, Mr. B N Pandey,

Dr. Parul Verma

About 40 family members of students and staff attended the workshop.

5

11-Oct-20

Erudition'20:

Dr. Gopal Babu

Dr. Gopal Babu

On "Studies on the Inherent Interconnectedness and Co-existence in Nature through Ecological, Scientific and Spiritual Evidence"

6

9, 10 & 12 Dec 2020

Student Induction Program (SIP)

Dr. Gopal Babu and His team

1st Year Students benefitted from the SIP program

7

01-Dec-20

Formation of C-PICE Club

Prof.V.K.Parashar,

Dr. Gopal Babu,

Mr. B N Pandey

The club would aim to undertake activities showcasing the Interests of the students, Creative work vis-à-vis talent, Networking & teamwork, Organizational & Management skills

8

8 -15 Feb 2021

Level 1 AICTE approved FDP

Dr. Gopal Babu, & Mr. B N Pandey

FMs of AKGEC attended the FDP

9

20 -24 Feb 2021

Alumni's workshop

Dr. Gopal Babu

Alumni attended with good feedback.

10

05-Jun-21

Combined class of all second-year students on Relationships

Dr. Gopal Babu

All second-year students attended the session.

11

20-Jun-21

"Transforming Stress into Strength"

BK Sangeeta Didi.

The webinar was focused on finding our innate potential where we can ensure stress-free life.

Courses to address Gender: At present, the curricular structure does not include any specific course that addresses cross-cutting issues related to gender. All students are treated equally by the Institute management, administration, and faculty irrespective of their gender and social status. Therefore, the Institute has a Students Grievance Committee (SGC) to address the grievances of students and handle gender-related issues. The SGC provides an exclusive platform for women employees and girl students to share their grievances either in person or in writing that helps to maintain a positive, harmonious and conducive atmosphere in the college. The NFCH (National Foundation for Communal Harmony) organizes various fund collections and conduct essay competition on events like-World Communal Harmony Day. The Institute campus is safe and provided with full CCTV coverage. Institute has a separate hostel for both girls and boys which is comfortably furnished and makes a good home away from home. To promote gender equality various senior posts such as Chief Account officer, Registrar, Head center support cell, Deputy dean R&D, Deputy Dean T&P, Head Computer Science & Engineering by female members.

Courses to address Environment and Sustainability: The curriculum includes different courses that address the Environment and its related issues. For example, the B. Tech Civil Engineering program includes courses on Environmental Engineering, Environmental Engineering Lab, River Engineering, Air and Noise Pollution Control, Geotechnical Engineering, Engineering Geology, Engineering Hydrology, GIS, and Advance remote sensing.

The institute is oriented towards environmental sustenance and eco-friendliness. The architecture, design, and construction of institute buildings are made maintenance-free by using maximum bricks and stones and less cement plastering.

The architecture of buildings ensures maximum sunlight on all floors. This allows the high circulation of natural air and green plantations to flourish inside and outside buildings. The buildings are thermally insulated which keeps the temperature lower in summers and higher in winters, thereby reducing the

need for power consumption. Each block and building is surrounded by large open areas on which green lawns, hedges, and planters maintain a healthy balance with the environment.

A network of rainwater harvesting systems ensures continuous recharging of the groundwater table. The sewage treatment plant recycles the water filtered through its beds for use of horticulture, green lawns, hedges, and plantations of college. There is a high focus on the conservation of natural resources. Automatic water dispensers are used in toilets/urinals to avoid continuous running of water and ensure its usage when needed.

Conservation of electricity is also ensured by the use of solar water heaters for providing hot water in all the hostels of the college. A rooftop solar power plant of 330 KW capacity has been installed on the college campus. This power plant is linked with the electric grid of the electricity department where surplus power generated is fed back through a meter installed for this purpose.

Conservation of fossil fuels is ensured by making special efforts to coordinate and club various trips of vehicles required by different departments and their usage optimized. The waste management area is given high priority. The recyclable garbage waste and non-recyclable wastes are dumped in specified containers/dustbins. A separate agency with specialized expertise and dealing in waste collection and disposal has been hired to collect the wastes on daily basis. This company processes the bio-degradable waste to make manure and dispose of cyclable & non-recyclable wastes as per established norms of the Government.

File Description	Documents
Any additional information	View File
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	View File

1.3.2 - Number of courses that include experiential learning through project work/field work/internship during the year

167

File Description	Documents
Any additional information	View File
Programme / Curriculum/ Syllabus of the courses	View File
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View File
MoU's with relevant organizations for these courses, if any	View File
Institutional Data in Prescribed Format	View File

1.3.3 - Number of students undertaking project work/field work/ internships

3020

File Description	Documents
Any additional information	View File
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	View File

1.4 - Feedback System

**1.4.1 - Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders
Students Teachers Employers Alumni**

A. All of the above

File Description	Documents
URL for stakeholder feedback report	https://drive.google.com/file/d/1vnrRIFvrWxKydxT8mFgGbFdTrQESEswh/view
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View File
Any additional information	View File

1.4.2 - Feedback process of the Institution may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	View File
URL for feedback report	https://drive.google.com/file/d/15hqPSzpLToyWhfE4q0QlulGH61KAzL/view

TEACHING-LEARNING AND EVALUATION

2.1 - Student Enrollment and Profile

2.1.1 - Enrolment Number Number of students admitted during the year

2.1.1.1 - Number of students admitted during the year

1394

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

2.1.2.1 - Number of actual students admitted from the reserved categories during the year

421

File Description	Documents
Any additional information	View File
Number of seats filled against seats reserved (Data Template)	View File

2.2 - Catering to Student Diversity

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

Learning levels of the students are not only assessed by the marks secured by them in various internal and external examinations but also through class and laboratory interactions with the faculty members. These students are closely monitored and appropriate actions are taken to provide assistance to weak students and encourage advanced learners. Various programs are being made part of the academic process for these advanced and slow learners.

Assistance to weak students

Buddy Program:

All Departments conduct a buddy program in which top 5 students from each section are made as buddy of bottom 5 students to help them in their studies and to provide them technical assistance. Regular meetings of these buddy partners with respective department heads are also conducted to motivate the students. Thus, peer teaching enhances teaching learning process as:

- Students get sufficient time for individualized learning.
- Direct interaction between students promote active and faster learning.
- Students feel more comfortable and open when interacting with a peer buddy.
- Peers and students share a similar discourse, allowing for greater understanding.

Mentorship Program:

In Mentorship programme weak students of 2nd year and 3rd year across the sections are provided extra classes by the senior students for some difficult subjects (depending on the

difficulty level of the subject). Minimum one class per week is scheduled for a subject during working hour.

Extra classes for lateral entry students:

Lateral entry students in 2nd year generally take admission 10-15 days after the commencement of the academic session. Extra classes are arranged for them during the first sessional exam. A minimum of 3-4 classes of 55 minutes each are scheduled for all technical subjects. For the session 2020-21 due to covid -19 pandemic the admission of students got delayed by approximately 2 months and hence faculty members were assigned and allotted for teaching the subjects as individual section of lateral entry students.

Special MCQ sessions

Due to Covid 19 pandemic and complete transformation of examination pattern to online mode and miscellaneous question paper pattern, special multiple choice question practice sessions were organized. These sessions were organized by every department, for week students separately so that they are able to solve the question paper in the given time frame at the time of their internal and external assessment.

Encouraging bright students

Reward for highest marks in internal and external examinations:

Meritorious students are given cash awards for internal exams called sessional 1, 2 and pre university test. Eligibility criterion to qualify for this award is a minimum of 80% marks in all subjects of a particular exam. Reward money for each internal exam is as follows:

ST1-Rs 1000

ST2- Rs. 2000

PUT- Rs. 3000

Advance learners are motivated to join various departmental societies, which foster activity-based learning. These societies are:

Department

Society Name

Year of Establishment

CSE & IT

Conatus

2011

CE

Nirmaan

2014

ECE & EI

Phoenix

2005

EN

Oorja

2006

ME

Samveg

2006

All these societies aim to conduct technical seminars, competitions, webinars etc. at national or international level.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

Number of Students	Number of Teachers
4356	249

File Description	Documents
Any additional information	View File

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

The major activities that enhance the learning experiences of students are as follows:

Experiential learning

Lab experiments -Experiential learning is the process of learning through experiences. Few lab experiments are conducted beyond syllabus.

Cloud Computing Cell has been a part of AKGEC since February 2016. The members are exposed to the latest Cloud technologies that enable them to be market ready thereby increasing their opportunities in placements and research. It provides a platform to the students to compute, manage and deploy the cloud.

Research and Industrial Consultancy Centre (RICC) has been established in the college to promote industrial consultation and extend consultancy and research as per industry needs.

Virtual laboratories provide real time learning experience. Students have the liberty to perform the virtual experiments by changing the parameters and experience different results.

Software Incubator is the research and development centre established within the premises of AKGEC, to develop skills in our students in the areas of software development, web-based enterprise solutions, mobile development, web application and website development. The Centre conducts training programs on the latest software technologies which is instrumental in keeping our students technologically ahead of others.

Big Data Centre of Excellence is the Research and Development centre of AKGEC. It is the first "Centre of Excellence" in AKTU, working in the field of Big Data. It was established in 2013 and for 4 years it has been motivating and guiding the students into the world of Big Data.

Patent by the Government of India- In this regard the unique design and development of FDM based 3-D Printer which has been granted a patent by the Government of India. The 3-D printer developed with minimal expenditure is expected to be fabricated and supplied to various schools and engineering institutions at a very reasonable price to promote experiential learning in the emerging technology of additive manufacturing. During the Covid 19 pandemic, AKGEC FabLab developed a low cost yet environmentally friendly and reusable products - Respirator and Face shield using 3D printing Technology.

Internships and industrial exposure provide students with an opportunity to share industry experiences. Also, field trips broaden their understanding and provide them with knowledge about practical working environment. Various internship programs are also conducted for the students by the college.

Participative learning

Various student societies are as follows:

Departmental societies

Conatus, Nirmaan, Oorja, Phoenix, Samveg

Extra-curricular Societies

Euphony, Footprints, Horizon, Goonj, Renaissance, taal, verve

Student Chapters

CSI (Computer Society of India) , ISTE, SAE India

These societies aim to conduct technical events, workshops, seminars, webinars and paper presentations.

To inculcate personality related skills there are various extra-curricular societies in the college as mentioned above.

Problem-solving methodologies

1. Providing assignments on regular basis and discuss them in tutorial sessions/classes.
2. Conducting quizzes through google forms.
3. Encouraging students to join MOOC courses.
4. By organizing alumni talk and guest lectures.

File Description	Documents
Upload any additional information	View File
Link for additional information	Nil

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

Modernized Lecture theatres

All lecture theatres are equipped with multimedia projectors, chalk-boards and microphone & speaker facility.

Classrooms with Smartboards

There are total of 87 classrooms which are equipped with smartboards.

- Improves student-teacher interaction
- Encourages teachers to teach in real-time with audios and videos lessons, visual multimedia & PPT presentations, 2D & 3D virtual space, etc.
- Paperless advantages
- Creates web and Internet-based teaching and learning platform for teacher and students respectively

Google-Classroom Learning Management System (LMS) is a platform of course management system and it is a free, flexible and open-source software package designed to help educators to create effective online learning environment which can be personalized.

Model Solution of all Internal and University exams in soft copy and hard copy are available in college library.

Due to Covid-19 pandemic, college has taken necessary initiatives so that teaching-learning process is not affected.

College started online classes for students from April 2020.

- Effective Methodology has been used for class conduct at online platform. Explanation of topic using power point presentation, use of smart board, regular class and lab checking by the Head of Department, uploading of presentations on google class room, providing the hand written notes have been the special tools for the faculty members.

G-suite email ids as common platform for sharing information amongst faculty and students.

All faculty members are using Google Classroom for

- Sharing notes
- Assignments
- Video lecture

Google Meet chosen as the lecture delivery platform also.

Lecture recording at AKGEC digital studio - Faculties from all departments record their contents and lectures related to various subjects at digital studio. These recorded lectures are available at different platforms accessible to the students.

Online MCQ Test Practice - To support online examinations special Multiple choice question practice sessions have been arranged for students. These MCQ sessions have been organized at departmental level.

File Description	Documents
Upload any additional information	View File
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	View File

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

2.3.3.1 - Number of mentors

156

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	View File
Circulars pertaining to assigning mentors to mentees	View File
Mentor/mentee ratio	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full time teachers against sanctioned posts during the year

249

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	View File
Any additional information	View File
List of the faculty members authenticated by the Head of HEI	View File

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

84	
File Description	Documents
Any additional information	View File
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	View File
2.4.3 - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)	
2.4.3.1 - Total experience of full-time teachers	
1849	
File Description	Documents
Any additional information	View File
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	View File
2.5 - Evaluation Process and Reforms	
2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.	
Marks scheme for internal evaluation	
S. No.	
Exam Name	
Marks	
1st year	
2nd Year	
3rd Year	
4th Year	

Syllabus Coverage

1.

Class Test 1 (CT1)

10

Yes

No

No

No

Course covered

2.

Sessional Test 1 (ST1)

25

Yes

Yes

Yes

Yes

20%

3.

Class Test 2 (CT2)

10

Yes

No

No

No

Course covered

4.

Sessional Test 2 (ST2)

50

Yes

Yes

Yes

Yes

Next 40% after ST1

5.

Pre-University Test (PUT)

100

Yes

Yes

Yes

Yes

100%

Process for setting internal Question papers:

- Question papers for all exams are prepared a week before in consultation with faculty members teaching same subject in various sections. The paper is checked by faculty expert followed by Head of the Department.

Process for evaluation of answer scripts:

- To ensure the uniformity in the evaluation of answer scripts, answer sheets are distributed evenly among the faculty members who all are teaching the same subject code.
- For no discrepancy in totaling of marks, the evaluated answer scripts are cross-checked for totaling errors by faculty other than the one teaching that subject.
- Evaluated answer scripts are then shown to students to settle any grievances. Finalized marks thereafter are uploaded on the college e-learning portal which is used to calculate students' internal assessment marks at the end of the semester.
- Final sessional marks are displayed on the respective department notice board for information of the students. In case of any ambiguity/doubt in the mind of the students. In case of any ambiguity/doubt in the mind of the students, he can approach his subject teacher/HoD.

Lab Assessment:

One experiment is conducted every week. Students complete the writing work of lab record and submit it at the subsequent laboratory class. Two viva-tests are also conducted for each lab. Based on their performance in lab record and viva-voce internal marks are awarded.

Project Monitoring and Evaluation

1. Project groups have to maintain a log book which consists of the details of all the meetings with their project guide. The log book is submitted to the project section In-charge on weekly basis for monitoring of attendance.
2. Project presentations schedule

Project Presentation

Target

Semester

I

Approval of the project topic

7th

II

To complete the project up to PCB level and mounting the components over it

7th

III

Demonstration of fully functional project

8th

IV

Project into final product like shape which is ready to be used in real time.

8th

File Description	Documents
Any additional information	View File
Link for additional information	Nil

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, time-bound and efficient

AKGEC has a centralized examination cell comprised of faculty and staff members. This Examination cell is headed by Deans Examinations/Center Superintendent in case of internal/external examinations respectively. The responsibilities of exam cell include planning, execution and smooth conduction of internal and external examination. All the activities are followed under the guidance of the Director and the instructions issued by the affiliating university.

The mechanism to deal with internal examination related grievances is as follows:

- In case of Internal Exam related grievance students can contact the college examination cell during the examination period. The grievances/issues are taken up as highest priority and exam cell clears the issues in a transparent manner.
- Student late entry is not allowed after 30 minutes of start of exam. Genuine cases issues are considered only by the direction of Dean of Examination and respective Department Head.
- Unfair Means (UFM) cases are handled by the exam cell along with the respective Department Head.
- Issues related to question paper are cleared by the subject faculty/ department head just after the reporting.

- After each internal exam, evaluated answer sheets are also shown to the students to settle any grievances related to evaluation.
- If any student missed any of the internal exam due to genuine reason related to health, placement etc. then students are allowed to appear in re- examination. The process for re-exam is as follows:
 1. Submission of re-exam application with the reason of absence within two days.
 2. Preparation of consolidated list of the genuine cases for the approval of Director.
 3. Conduct of re-exam of all the approved cases within 7 days at the department level.
 4. Evaluation of re-exam answer scripts just after the exam.

External Examinations:

In case of University Exam related grievance:

- The University issues the draft of date sheet well in time on the University portal and share with the college to check thoroughly. Once there is no discrepancy received from any of the college then final date sheet is issued on University website.
- Late entry in external examination is allowed only after 30 minutes of the commencement of exam by special permission of center superintendent in genuine cases only. After that no student is allowed to enter the

examination hall.

- UFM cases during external examinations are immediately reported to affiliating university as per university guidelines.
- University related issues/ discrepancy reported by the students are communicated to University representatives within 30 minutes of examination.
- Students can check the Result Grievance Portal on the university's website <https://aktu.ac.in> and can register complaints using their login id. They will have to submit their documents along with an email id and phone number while registering the complaint. The university has provided the choice to the students to apply for re totaling of the marks secured by the student on each question/answer and /or reevaluations of the answer sheet.

File Description	Documents
Any additional information	View File
Link for additional information	Nil

2.6 - Student Performance and Learning Outcomes

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

In accordance with the guidelines of Outcome Based Education (OBE), the Program Outcomes (POs), Program Specific Outcomes (PSOs), and Course Outcomes (COs) are framed by the department offering the relevant program, following extensive consultation with all faculty and stakeholders. Following the achievement of consensus, the statements are extensively disseminated and advertised via different channels of presentation and/or communication mentioned below.

- Website
- Curriculum /regulations books
- Laboratories
- Department Notice Boards
- Student Induction Programs
- Meetings/ Interactions with employers
- Parents meetings
- Faculty meetings
- Alumni meetings

- **Library**

While addressing the students, the faculty members, class teachers, mentors inform the students, create awareness and emphasize the need to attain the outcomes.

Course outcomes (COs) are the statements that articulate the essential and persistent discipline knowledge, abilities that students should have, and level of learning that is expected upon course completion. They are specified and communicated explicitly. The COs are an integral part of the year-wise curriculum document provided by the university.

Program outcomes (POs) are broad statements that summarize the professional accomplishments that the program aspires for and that students are expected to achieve by the end of the program. POs include a wide range of interconnected information, abilities, and personality attributes that students must acquire before graduating.

Program specific outcomes (PSOs) are the precise skill criteria and accomplishments that students must meet at the micro and macro levels by the end of the program. The PSOs, which are normally two to four in number, are prepared by the program assessment committee. The BoS, which includes the Head of the Department and subject matter experts from each department, discuss the matter and approve it after the approval of the Director.

COs, POs and PSOs are available on the institute's website.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	https://www.akgec.ac.in/departments/
Upload COs for all Programmes (exemplars from Glossary)	View File

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

CO Attainment Process:

The attainment of COs is assessed through direct evaluations. The direct attainment is measured based on the performance of the students in internal and external examinations conducted during the semester:

College conducts two mid-term sessional exams namely: ST-1 (Sessional Test-1) and ST-2 (Sessional Test-2) and one Pre-University Test (PUT). rCO-attainment Results are extracted from the above mentioned exams in the following manner:

Exam Name

Units Covered

CO's Attainment Extracted

ST1

1

CO1

ST2

2,3

CO2 & CO3

PUT

1 to 5

CO4 & CO5

Each Faculty teaching the subject in a particular section calculates the CO Attainment for his/her section. Finally, CO attainment results of all the sections are averaged out to calculate the final CO attainment for that subject.

The calculated CO attainments in percentage are then converted into levels. The assigned levels vary session by session and are progressive in

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CO4 & CO5

Each Faculty teaching the subject in a particular section calculates the CO Attainment for his/her section. Finally, CO attainment results of all the sections are averaged out to calculate the final CO attainment for that subject.

The calculated CO attainments in percentage are then converted into levels. The assigned levels vary session by session and are progressive in nature.

1. Attainment level 3 will be assigned if 60% students score more than 40% marks out of relevant maximum marks.

2. Proportional attainment levels will be assigned if the target achieved is below 60%. e.g. if 50% students score more than set target of 40% marks then the attainment level will be: $(3/60)*50 = 2.5$
3. Similar Process of calculating the attainments is adopted for external examinations which forms the external CO attainment.

The final CO attainment will be calculated by proportionally adding the Internal and External Co attainments in proportion of 20:80.

PO Attainment Process:

Following Assessment Tools are used for attainment of POs and PSOs:

S.No.

TOOL

CATEGORY

1.

CO attainment results of all Theory & Practical Courses
(Internal)

Direct Assessment

2.

CO attainment results of all Theory & Practical Courses
(External)

3.

Student Feedback

In-direct Assessment

PO/PSO Attainment (Direct)

Direct PO attainment is derived from course-PO/PSO mapping table. Mapping strengths between the courses and the POs/PSOs are replaced by their proportional CO attainments (Cumulative assessment of direct and in-direct CO attainments).

PO/PSO Attainment (In-direct)

In-direct PO attainment is derived from course-PO/PSO mapping table. Mapping strengths between the courses and the POs/PSOs are replaced by their proportional student feedback.

PO/PSO Attainment (Final)

To calculate the final PO/PSO attainments Direct and In-Direct attainments are added in proportion of 80:20.

File Description	Documents
Upload any additional information	View File
Paste link for Additional information	Nil

2.6.3 - Pass percentage of Students during the year

2.6.3.1 - Total number of final year students who passed the university examination during the year

885

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	View File
Upload any additional information	View File
Paste link for the annual report	https://www.akgec.ac.in/wp-content/uploads/2022/01/SAMPARK-20-21.pdf

2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a weblink)

<https://drive.google.com/drive/folders/1KjtYlqkYerxGSQGWbfqg5rTYyGZjbp0I?usp=sharing>

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 year (INR in Lakhs)

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

1667.9

File Description	Documents
Any additional information	View File
e-copies of the grant award letters for sponsored research projects /endowments	View File
List of endowments / projects with details of grants(Data Template)	View File

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

3.1.2.1 - Number of teachers recognized as research guides

9

File Description	Documents
Any additional information	View File
Institutional data in prescribed format	View File

3.1.3 - Number of departments having Research projects funded by government and non government agencies during the year

3.1.3.1 - Number of departments having Research projects funded by government and non-government agencies during the year

5

File Description	Documents
List of research projects and funding details (Data Template)	View File
Any additional information	View File
Supporting document from Funding Agency	View File
Paste link to funding agency website	Nil

3.2 - Innovation Ecosystem

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The Institute has taken many steps to improve innovation and research at its campus in recent times. It established the Institution's Innovation Council (IIC) in the year 2018 for promoting different activities related to Innovation, IPR, start-up, and entrepreneurship. Faculties and students are active members of IIC, which is supported by 26 IIC members, nine innovation ambassadors, and five faculty mentors. The Institute has a Pre-incubation Unit called FAB lab, an Incubation Unit called IDEA lab, and an IP Facilitation Unit called IPR Cell. The college has a well-defined policy for promoting research through incentives for publication and supports participation in reputed conferences. The college has the distinction of being the only Engineering College in the State of U.P. to have received approval from the Department of Science and Technology (DST), for establishment of Centre of Relevance and Excellence (CORE) in the field of Automation & Robotics. The College has established nine Centre of Excellence's in partnership with international industries to promote research, consultancy, project development and training in the emerging technologies. Additionally, the college also has the research and development centers named SOFTWARE INCUBATOR and Big Data Centre of Excellence.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	Nil

3.2.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year**3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during the year**

18

File Description	Documents
Report of the event	View File
Any additional information	View File
List of workshops/seminars during last 5 years (Data Template)	View File

3.3 - Research Publications and Awards**3.3.1 - Number of Ph.Ds registered per eligible teacher during the year****3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year**

14

File Description	Documents
URL to the research page on HEI website	https://www.akgec.ac.in/
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	View File
Any additional information	View File

3.3.2 - Number of research papers per teachers in the Journals notified on UGC website during the year**3.3.2.1 - Number of research papers in the Journals notified on UGC website during the year**

41

File Description	Documents
Any additional information	View File
List of research papers by title, author, department, name and year of publication (Data Template)	View File

3.3.3 - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

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

18

File Description	Documents
Any additional information	View File
List books and chapters edited volumes/ books published (Data Template)	View File

3.4 - Extension Activities

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

True to the lofty ideals of the National Service Scheme movement, our institute seeks to actively involve students in voluntary social service activities for the socio-economic development of the area surrounding our institution as well as the nation at large. Through our innovatively designed NSS program and other initiatives, we provide opportunities to students to empathetically understand and appreciate the problems of the communities, awaken social consciousness and inculcate in them a sense of dignity of labour and fellow feeling.

Our regular social service activities include cleanliness drives, environmental protection, healthcare support and educational support among others. Some of the initiatives taken by our college are as follows:

- Adopted a refugee camp at Adarsh Nagar, Delhi with 111 families consisting of about 700 people.

- Adopted five villages in Ghaziabad.
- Established 'Nature Club' which is committed not only to spreading awareness about the problems but also to motivate students to find solutions to real problems.
- The college is running a primary school named "Adarsh Vikas Kendra" to provide free primary education to children of economically weaker sections of society.
- The college organizes annual Blood Donation Camp.
- College conducts Skill Development Programme under the PMKVY.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

3.4.2 - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

3.4.2.1 - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

1

File Description	Documents
Any additional information	View File
Number of awards for extension activities in last 5 year (Data Template)	View File
e-copy of the award letters	View File

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

10

File Description	Documents
Reports of the event organized	View File
Any additional information	View File
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	View File

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

3266

File Description	Documents
Report of the event	View File
Any additional information	View File
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	View File

3.5 - Collaboration

3.5.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

3.5.1.1 - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

204

File Description	Documents
e-copies of related Document	View File
Any additional information	View File
Details of Collaborative activities with institutions/industries for research, Faculty	View File

3.5.2 - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

3.5.2.1 - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

7

File Description	Documents
e-Copies of the MoUs with institution./ industry/corporate houses	View File
Any additional information	View File
Details of functional MoUs with institutions of national, international importance, other universities etc during the year	View File

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 - Physical Facilities

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

Ajay Kumar Garg Engineering College campus is spread over a 1,18,313 Sq. M. with 84960.14 Sq. M. built up area. It has excellent infrastructure with well-planned complexes for each department. These department complexes have spacious laboratories, smart classrooms, department libraries, and faculty cabins. The college has state-of-the-art computing facilities with over 1400 computers networked through broadband for internet access. The institute focuses on developing good infrastructure like smart classrooms, well-equipped laboratories, a central library with 131000 books and reading rooms, a Wi-Fi campus, canteen, transport facility, playgrounds, power backup, etc. Wi-Fi enabled campus includes faculty residences and three boys and three girl's hostels accommodating over 1500 students. Hostels have a library, TV room, canteen, general store, well equipped gymnasium as well as indoor and outdoor sports facilities. All the academic blocks have ramps/ lifts to make it convenient for physically challenged people.

Classrooms/Tutorial Rooms: College has spacious 87 classrooms with more than 60 sitting capacities, all classrooms are

equipped with ICT facilities like smart boards, LCD projectors, and sound system.

During COVID-19, the Institution shifted to an online teaching learning process through Google classroom, and institute's LMS (Edumarshal). Hybrid mode teaching learning also has been done during some duration from smart classrooms. Assessment and evaluation of internal examinations have been done online using Google classroom and institute's LMS.

Laboratories/Workshops: The college has well-equipped 101 laboratories and 5 workshops. The institute has established innovation/ development center facilities to inculcate research habits among the student fraternity.

1. Software Development Center
2. Bigdata Center of Excellence
3. Open-Source Software and R&D Center
4. Cloud Computing Cell
5. College Societies
6. Centers of Excellence

Seminar Hall: The college has 5 seminar halls. These halls are regularly used for conducting seminars at the college, state, and national levels.

Computer Center: The college has 3 computer centers with all modern configured computers with 1000 Mbps internet speed.

Library and Reading Room: Library System comprises a Central Library, 8 Departmental Libraries and 5 Hostel Libraries. The Central Library, housed in the Administrative Block of the College, consists of two sections spread over 1465 Sq meters with a total seating capacity for 344 users. Comfortable study space is provided for faculty, staff and students in the form of reading hall, study cubicles, digital library and faculty reading room.

The state-of-the-art facilities of central library include KOHA Open-Source Library Management Software which also has Web Based Online Public Access Catalogue (Web OPAC) from 2014, Digital Library/Institutional Repository Server on DSpace software, Membership to DELNET and National Digital Library which has a collection of more than 6 Lac resources of Engineering, Science, Humanities available for use by all the stakeholders. The library also provides access to Wiley

Engineering e-journals, Springer Nature e-journals, Taylor & Francis e-journals, EBSCO, ELSEVIER: Science Direct Engineering E-journals, Emerald: Management e-journals, Taylor & Francis e-books, BSP Books Pvt. Ltd-e-books, Cambridge University Press e-books, Pearson Education e-books through Nalanda E-Consortium membership signed under AKTU. Library subscribes to more than 25 magazines and 11 newspapers.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/infrastructure-and-physical-facilities-for-teaching-learning/

4.1.2 - The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.

The college is encouraging and providing facilities for students to participate in games. Dean Student Welfare supported by a team of faculty members and sports officer look after all cultural, sports, and extra-curricular activities of the college. The college also has a team that is actively undertaking social welfare activities e.g., blood donation camp.

Sports:

The college has always created a niche for itself in the field of sports. The college has been participating in various inter institution, state-level tournaments for a long time. In sports, our college provides facilities for both indoor and outdoor games to the students.

Outdoor Games: A spacious playground is available for outdoor games like Cricket, Football, Volleyball, Basketball, Badminton, etc.

Indoor Games: Facilities for indoor games like Badminton, Table Tennis, Chess, Carrom, etc., are provided to students on the college campus. A large number of sports activities are organized in the college aiding the students to display their

talent in sports activities. One of the major sports events is the ?Ajay Kumar Garg Memorial Table Tennis Tournament. It is a state-level tournament organized by Ghaziabad District Table Tennis Association on an annual basis at the college. Participation in this tournament is all the way from Delhi, Haryana, Punjab, and Uttar Pradesh being the major contributors. The interdepartmental annual sports meet of the college, ? "SAKSHAM" is held every year in the month of September - October.

Cultural Activities:

The college has carved out a special niche for itself in the field of cultural activities. The students are organizing & participating in many cultural activities. Every year the college organizes an Annual cultural Function called ? Vibrations, where the students participate with zeal in many cultural activities. Some of the events at vibrations include face painting, mehndi, singing, dancing, collage making, t-shirt painting, pot painting, rangoli making. The active participation by a large number of students (boys and girls) in both sports and cultural activities has always resulted in generating a vibrant atmosphere on the campus.

Recreational facilities, gymnasium, yoga center, etc.:

The college provides well-furnished hostel accommodation to its students. The six campus hostels are spread over four complexes namely, the junior girls hostel complex, the girls hostel complex, the junior boys hostel complex, and the senior boys hostel complex. The hostels have a gymnasium as well as indoor and outdoor sports facilities. The gymnasium includes various equipment like rods (shoulder rods, carting rod, dumbbell rods) plates (steel & rubber) of different weights, powerlifting bullet, abs king machine, body twister treadmill, etc., The gym instructor is appointed to guide the students how to use equipment and share healthy tips. The hostels have facilities for outdoor sports like volleyball, cricket, basketball and badminton and indoor games like carrom, chess, table tennis, pool table, and music system. Yoga center is maintained in college with sufficient facilities for yoga. College celebrate Yoga Day with full enthusiasm in which faculty and students from each department participate combinedly. During Covid online Yoga Day celebration has been performed.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/facilities-for-cultural-activities-and-sports/

4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

92

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/classrooms-and-seminar-halls-with-ict-enabled-facilities/
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	View File

4.1.4 - Expenditure, excluding salary for infrastructure augmentation during the year (INR in Lakhs)

4.1.4.1 - Expenditure for infrastructure augmentation, excluding salary during the year (INR in lakhs)

1061.25

File Description	Documents
Upload any additional information	View File
Upload audited utilization statements	View File
Upload Details of budget allocation, excluding salary during the year (Data Template)	View File

4.2 - Library as a Learning Resource

4.2.1 - Library is automated using Integrated Library Management System (ILMS)

The AKGEC Library System comprises a Central Library, 8 Departmental Libraries and 5 Hostel Libraries.

The Central Library, housed in the Administrative Block of the College, consists of two sections spread over 1465 Sq Mtrs with a total seating capacity for 344 users. Comfortable study space is provided for faculty, staff and students in the form of reading hall, study cubicles, digital library and faculty reading room.

The library system is very user friendly with sufficient resources to meet the requirements of the users. Addition of resources as per the requirements and norms is a regular feature. Sufficient numbers of qualified staff are employed to manage the activities of the library.

The state-of-the-art facilities include KOHA Open-Source Library Management Software which also has Web Based Online Public Access Catalogue (Web OPAC) from 2014, Digital Library/Institutional Repository Server on DSpace software, Membership to DELNET and National Digital Library which has a collection of more than 6 Lac resources of Engineering, Science, Humanities available for use by all the stakeholders. The library also provides access to Wiley Engineering e-journals, Springer Nature e-journals, Taylor & Francis e-journals, EBSCO, ELSEVIER: Science Direct Engineering E-journals, Emerald: Management e-journals, Taylor & Francis e-books, BSP Books Pvt. Ltd-e-books, Cambridge University Press e-books, Pearson Education e-books through Nalanda E-Consortium membership signed under AKTU.

The Departmental and Hostel libraries are managed and run by the respective departments and hostels with resources taken on loan from Central Library.

All students, faculty and staff of the College are entitled to take membership and make use of the library facilities.

Admission to the Central Library is through Identity/Library Card which is scanned at the entrance to keep record of the users. The library is under camera surveillance through ten cameras that have been installed at various locations.

The library attracts an average of 350 users on a regular working day.

Knowledge Resources:

The Central Library of the college has an invaluable collection of text and reference books, journals and e-books, e-journals and a variety of multi-media resources. At present, the total number of titles and volumes on Science, Technology, Humanities and Management are around one lac and thirty-one thousand respectively including book bank books (Total Book collection 131000, Lending Section Books and Reference Section Book collection 36000, Book Bank book collection 95000). The library subscribes to over 5800 E-resources/International Journals, 14000 E-books and over 106 National Journals. The digital library has a diverse collection of over 5,700 multimedia resources. In addition, the library maintains seminar reports, project reports and thesis of students. A separate section with more than 1000 books on personality development and competitive examination preparation are available. All these resources are constantly getting added and increased.

The Central Library subscribes to more than 25 magazines and 11 newspapers.

Book Bank:

In addition to well-maintained Circulation and Reference Sections, the college has a rich Book Bank exclusively for students. The Book Bank is very helpful in fulfilling students' requirements for the University prescribed text books on semester basis without spending much on it.

The Book Bank, with a collection of about 95,000 books, assists the students by issuing text books on loan for the whole academic semester according to the rules framed for the purpose. Under this scheme every student is issued on loan a set of one or two books for each subject for the full semester. The books are required to be returned at the end of each semester and a set of books is issued at the beginning of next semester.

A compactor storage system has been installed recently to provide increased storage, easy access / retrieval and protection from dust etc. of a large number of books of Book Bank.

File Description	Documents
Upload any additional information	View File
Paste link for Additional Information	https://www.akgec.ac.in/about/infrastructure-visual-tour/library/

4.2.2 - The institution has subscription for the following e-resources e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access toe-resources

A. Any 4 or more of the above

File Description	Documents
Upload any additional information	View File
Details of subscriptions like e-journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	View File

4.2.3 - Expenditure for purchase of books/e-books and subscription to journals/e-journals during the year (INR in Lakhs)

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

54.3

File Description	Documents
Any additional information	View File
Audited statements of accounts	View File
Details of annual expenditure for purchase of books/e-books and journals/e- journals during the year (Data Template)	View File

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

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

116.49

File Description	Documents
Any additional information	View File
Details of library usage by teachers and students	View File

4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The College believes in regular upgradation and maintenance of its IT facilities to keep pace with the changing needs of technology and the curriculum. The IT infrastructure at AKGEC takes into account all its stakeholders - students, faculty and staff. The College has a dedicated department called the Central Support Cell that has the responsibility of procurement and maintenance of the IT infrastructure.

The college provides 24*7 high speed internet connection through optical fibre link. A bandwidth of 1 Gbps is subscribed to from CJ Online with two parallel fibre cables. In addition, two radio links of 100 Kbps each are installed as standby. LAN connectivity is provided in all departments, labs, faculty cabins, sections and administrative offices. Wi-fi connectivity is provided in the academic blocks, administrative block, hostels and the faculty residences. There is a total of 206 Wi-fi access points installed at various locations.

The network infrastructure of the college is supported by L3, L2 Managed and Unmanaged Switches and the Fortinet Firewall for network security with adequate policies applied.

For computing facilities, the College has 1421 Desktop Computer systems which are mostly i7, i5 and i3 systems and 131 laptops. These are in use in laboratories and departmental and administrative offices. The computing facilities are complemented with accessories including printers (laser and deskjet) and scanners.

All classrooms are equipped with ICT facilities, 68 classrooms being equipped with smartboards, Internet and audio system and 12 classrooms with LCD projectors, Internet and audio system.

The computer centres, seminar halls, conference room and Meeting room are all equipped with LCD / LED projectors, audio system and Internet. The Conference room is also equipped with an LED panel. Two seminar halls in the College have been connected through Video Conferencing during 2020-21.

Licensed versions of relevant software in accordance with the curriculum and for administrative requirements have been purchased. The college subscribes to the Microsoft License and the Quick Heal anti-virus software. All computer systems in the College are using the Microsoft Windows 10 Operating System. An ERP system is being used for integration of all academic and administrative activities in the College.

Sufficient number of UPS systems are installed in the college to ensure uninterrupted power supply to the academic and administrative areas.

The institution has a practice of regular upgradation of the IT facilities. Desktop computers, laptops, printers and other equipment are purchased every year as per the requirement for academics as well as administrative work Existing computers are also upgraded for RAM / SSD as and when required. Printers and other equipment are also purchased regularly.

In the year 2020-21, the LAN backbone in the college has been upgraded with higher configuration switches. The wi-fi access points in the hostels have been upgraded as well as increased in number. One Boys hostel has been equipped with LAN ports in the student rooms on a 1:1 student: LAN port basis. The Internet Bandwidth has been increased to 1 Gbps.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/institution-frequently-updates/

4.3.2 - Number of Computers

1552

File Description	Documents
Upload any additional information	View File
List of Computers	View File

4.3.3 - Bandwidth of internet connection in the Institution **A. ? 50MBPS**

File Description	Documents
Upload any additional Information	View File
Details of available bandwidth of internet connection in the Institution	View File

4.4 - Maintenance of Campus Infrastructure

4.4.1 - Expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the year (INR in Lakhs)

4.4.1.1 - Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component during the year (INR in lakhs)

1008.29

File Description	Documents
Upload any additional information	View File
Audited statements of accounts	View File
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	View File

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

Established Systems and Procedures for Maintaining and Utilizing Computers

1. Computers are purchased against requirements from Departments and Sections centrally by the Central Support Cell

2. All maintenance of computers and other IT equipment is the responsibility of the Central Support Cell

3. All complaints about repair are checked in house by the Central Support Cell and repair is completed in house, if possible; else the equipment is sent to the outside vendors for repair

4. Old computers and equipment are replaced on a periodic basis

Established Systems and Procedures for Maintaining and Utilizing sports complex

A dedicated system to ensure scheduled maintenance and repair of sports complexes and infrastructure exists in the college. The college Sports Officer is the main advisor to Dean Admin for necessary maintenance of sports associated requirements. The necessary procurement of sports items is done in consultation with Dean Hostel and Dean Students Welfare through Chief Purchase Officer.

Established Systems and Procedures for Maintaining and Utilizing classrooms

All the classrooms are cleaned daily and furniture is wiped off by the designated Safai Karamcharis in the morning before starting of the classes.

All the Electrical switches, fans, etc are checked and repaired on a requirement basis.

The mikes are distributed to faculty before starting each class. The distribution point has a sufficient number of charged batteries and mikes to meet the requirement. A buffer stock of batteries and mikes is maintained for quick replacement of unserviceable ones.

Established Systems and Procedures for Maintaining and Utilizing Library

Library Automation:

The library is managed by computerized automation through

library management software KOHA, which is an integrated multi-user library management system that supports all in-house operations of the library with Barcode. The KOHA consists of modules on acquisition, cataloging, circulation, periodical, article indexing, and Web OPAC.

Requisition of Books:

Requirements of books are generated on basis of the following:

1. Requirements specified in the syllabus
2. Courses operating in colleges with a number of admitted students.
3. Requirements given by faculty/departments/students etc.

Requirements for the books from the faculty member as well as students are received on Book Requisition. The titles of books and number of copies required are sought after finding the availability of the title, number of copies in the library in consultation with Dean Library. Then approval for the purchase of the books is obtained from the Dean Library and Director-General. After that order for recommended books is prepared. Then a purchase order is placed on the book suppliers on the basis of discounts and services.

Technical Processing of Books:

After the bill is processed, the documents are subjected to technical processing. This includes:

- a) Classification through Dewey Decimal Classification Scheme, 21st edition.
- b) Feeding of book data in KOHA Library Management Software for cataloging purposes/Search.
- c) Fixing book label, barcode, due date slip, and stamping on back of the title page, secrete page of the book, and Last page of the book.
- d) Shelving of documents according to Classification.

Library Membership:

At the time of joining the college, users approach the library for membership. The user submits a form filled by them. A photograph is taken in the library by a college photographer. It is used for library cards and LMS. Based on these, the Director-General approves & a bar-coded library card is issued. Whenever a user loses his library card, he is issued a new card based on an application given by the student, and old card details are blocked and a duplicate card is activated. For this purpose, users are charged a nominal fee.

Circulation of Books:

The borrower requests an issue of the book using Requisition Slip and gives a library card for scanning.

Books are issued and received from students according to displayed rules. At the time of issuing a book to the borrower, the due date is stamped on the due date slip.

At the time of returning the books, library staff scans the accession number of the book and verifies the date of return. If the book is returned in time, the book is accepted without any fine.

At the time of returning the books after the due date, a fine is charged from the students according to the fine rules which are displayed on the central library notice board and a fine slip is issued for the realization of the fine due to late return of the book. In the case where a fine is not paid, the book is received and is posted in software. The software debars the students for further issue of books till deposits of the fine. The fine collected is deposited in the accounts department on a monthly basis. Such students may borrow books temporarily for consulting in the library only. The library/identity card is retained on such an issue of the book.

Digital Library:

E-journals & E-books: E-journals & E-books are utilized by the user in the following ways:-

1. Can browse on the digital library systems and anywhere in the campus and outside campus through MyLoft.
2. Can download and take a copy on Pen Drive, CD/DVD.
3. Can also send by email etc.

Report of the usage is collected from the publisher on yearly basis and after analysis a decision is taken for renewal of membership.

CD/DVD: CD/DVD received along with books are entered in the CD/DVD stock register and given to the student as and when they are required for viewing on the computer system.

Question Papers and Model Solutions:

AKGEC central library maintains a Question Papers & Model Solutions Bank consisting of previous question papers of Sessional, PUT (Pre-University Test), and University Examinations along with their model solutions prepared by the respective subject teachers. The collection is readily available for reference of students in electronic as well as print form in the central library and also in electronic form in departmental and hostel libraries for benefit of faculty and students respectively users are allowed to take the documents for making photocopies at the photocopy centre.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://www.akgec.ac.in/established-systems/

STUDENT SUPPORT AND PROGRESSION

5.1 - Student Support

5.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year

1391	
File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	View File
Upload any additional information	View File
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	View File
5.1.2 - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year	
5.1.2.1 - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year	
41	
File Description	Documents
Upload any additional information	View File
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	View File
5.1.3 - Capacity building and skills enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills	C. 2 of the above

File Description	Documents
Link to Institutional website	https://www.akgec.ac.in/life-akgec/events/festival-celebrations/yoga-day/
Any additional information	View File
Details of capability building and skills enhancement initiatives (Data Template)	View File

5.1.4 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

598

5.1.4.1 - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

598

File Description	Documents
Any additional information	View File
Number of students benefitted by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View File
Upload any additional information	View File
Details of student grievances including sexual harassment and ragging cases	View File

5.2 - Student Progression

5.2.1 - Number of placement of outgoing students during the year

5.2.1.1 - Number of outgoing students placed during the year

583

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File
Details of student placement during the year (Data Template)	View File

5.2.2 - Number of students progressing to higher education during the year

5.2.2.1 - Number of outgoing student progression to higher education

15

File Description	Documents
Upload supporting data for student/alumni	View File
Any additional information	View File
Details of student progression to higher education	View File

5.2.3 - Number of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State

government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

51

File Description	Documents
Upload supporting data for the same	View File
Any additional information	View File
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	View File

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 year

5.3.1.1 - 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 year.

Nil

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national/international level (During the year) (Data Template)	View File

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms)

There are a number of departmental and extra-curricular societies which provides engagements to the students in various

activities. The societies are involved in organization of various activities and in participation at various events. The organization of an event develops the administrative skills in students.

Departmental Societies are:

Society

Department

[Link for more information and society activities](#)

Conatus

Computer Science

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/conatus/>

Nirmaan

Civil Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/nirman/>

Oorja

Electrical and Electronics Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/oorja/>

Phoenix

Electronics and Communication Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental-societies/phoenix/>

Samveg

Mechanical Engineering

<https://www.akgec.ac.in/life-akgec/societies/departmental->

[societies/samveg/](#)

Extra-curricular Societies:

Society

Activity

Link for more information and society activities

Euphony

Music

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/euphony/>

Footprints

Arts, Literature, Photography and Designing

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/footprints/>

Horizon

Techno- managerial society of the college that aims at enhancing both technical and managerial skills of the potential students of the college.

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/horizon/>

Goonj

Dramatic Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/goonj/>

Renaissance

Ethical cum Patriotic Society of college

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular->

societies/renaissance-2/

Taal

Dance Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/taal/>

Verve

Fashion Society

<https://www.akgec.ac.in/life-akgec/societies/extra-curricular-societies/verve/>

Besides these societies college also have student chapters of the following:

CSI

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/csi/>

ISTE

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/iste/>

SAE India

<https://www.akgec.ac.in/life-akgec/societies/student-chapters/sae-india/>

- Along with the involvement of the students in various societies, every class have their class representatives (Class CRs) who are responsible for communications between the class and the department, the Training & Placement class representatives (T & P CRs), who are responsible for communication between class and the Training & Placement Department and coordinate in respect of the placement process.
- A Discipline Committee (DC) exists at college level involving the students of all the years except first

year.

- To ensure calm and peaceful academic atmosphere in the campus.
- To avoid physical confrontation among students.
- To ensure all the students wear ID Cards while they are in the campus.
- To monitor the movement of the students in the college and prevent students loitering around in the corridors during the college working hours.
- To inculcate Value Education as an integral part of life, AKGEC, during the year 2017, established a Value Education Cell (VE Cell) under the guidelines of AKTU. The VE cell also incorporates students for various administrative roles such as conduct of
 - Evening workshops on the following topics
 - "Understanding Relationships through Self-Exploration".
 - "Practicing Awareness of thoughts"
 - Mutually Fulfilling Communication
 - Online Webinars
 - Celebrating The Earth Day.
 - Quiz of the Week
 - Drishti- a short video based event where perceptions of the participants are evaluated based on holistic wisdom.
 - Promoting the above event using social media
- Students are also members in Prctoral and anti-ragging squad along with the faculty members with various administrative roles.
- Students are also part of college Software Development Centre where they themselves handle a number of projects.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

5.3.3 - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

5.3.3.1 - Number of sports and cultural events/competitions in which students of the Institution participated during the year

1

File Description	Documents
Report of the event	View File
Upload any additional information	View File
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions) (Data Template)	View File

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

Alumni interaction has always been directly and indirectly influencing the key Aspects of an institutional success, the various aspects in which the alumni's of the institute is reflected by suggestions towards changes in the curriculum to make the current student population in tune with the current industry requirements. The Alumni can clearly express the relevance of the curriculum in the job scenario, also the teaching learning process and the development of Infrastructure and Learning Resources through donations and maintain donations of their Alumni which includes funds for new Physical facilities, research projects, maintenance of current facilities. There are numerous such aspects through which the alumnus can contribute to its alma mater.

One of the strengths of AKGEC is, and has always been, its alumni. To establish, maintain and nurture a sustained, lifelong, and mutually beneficial relationship with its alumni, AKGEC formed an Alumni Association in 2005.

The alumni association at AKGEC has been active since its inception and the various alumnus of college are consistently

writing their success stories, and are contributing towards AKGEC, affiliated University and the progress of the country on social and economic grounds and keeping up the spirits of being an AKGECIAN.

Recently our alumni's Neeraj Srivastava, 2005-2009 B.Tech graduate from Electronics and Communication Engineering, Ankit Maheshwari, a 2006-2010 batch CSE have received AKTU distinguished alumnus award for two consecutive years 2020 and 2021.

There are many such success stories to discuss; many of them can be found on our alumni portal (www.akgec.ac.in/alumni-success-stories/) and LinkedIn network (akgec.almaconnect.com/network_details), various alumni's are invited to college frequently for the formal talks with their juniors. The success stories of the alumnus motivate the students, and their experiences help them to identify the righteous path towards their career.

Since its formation, the college has been actively involved in facilitating networking amongst alumni for social and professional synergy. AKGEC organized its first annual alumni meet on 02 April, 2005. Since then the meet is organized every year, except during 2019-20 and 2020-21 due to Covid-19.

File Description	Documents
Paste link for additional information	www.akgec.ac.in/alumni-success-stories/
Upload any additional information	View File

5.4.2 - Alumni contribution during the year (INR in Lakhs) **A. ? 5Lakhs**

File Description	Documents
Upload any additional information	View File

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Institute Vision: To introduce undergraduate and post graduate courses for all Engineering Branches and award of PhD degree. To be one of the best Engineering Colleges in the country and to be a Deemed University.

Institute Mission: We strive to provide and maintain academic environment & systems enabling maximum learning, to produce competent professionals. We also aim at achieving this through transparent academic and administrative policies in the college. We intend to provide conducive atmosphere for research, development and consultancy services to our faculty at national and international level.

The institute is committed to accomplish its mission in all its endeavors. In accordance with vision and mission the quality policy of the institute has been designed. The institute Vision and Mission were approved in January 2014 by the Governing Council.

File Description	Documents
Paste link for additional information	https://www.akgec.ac.in/about/vision-and-mission/
Upload any additional information	View File

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

Leadership is evolved through well-defined systems and organizational structure. The institute has various Statutory bodies for development of policies, regulations & guidelines, their implementation and continuous improvement:

1. Board of Governors - The college has a well-defined board of Governors whose members have been drawn from management, faculty members from college, industry, educationists state government and nominated members of the University. The body periodically meets to evolve various policy decisions.

2. Boards of Studies- The college is affiliated to Dr. AKTU Lucknow. Following faculty of the college are members of university BoS.

(a) Dr. R.K. Agarwal Director General of college is member in

university BoS for Mechanical Engineering subjects.

(b) Prof. P.K. Chopra, Director of the college is member in university BoS for Electronics and Communication Engineering subjects.

(c) Prof. Rakesh Kumar Srivastava HOD Civil Engg. department is special invitee in University BoS for Civil Engineering subjects.

3. Admission Committee- College has an approved admission committee for admitting students in Direct Management quota and lapse seats. Admissions are done based on laid down norms of university and AICTE.

4. Examination Committee- College has a well-defined examination committee for conducting university level exams and assessing students in internal examinations.

5. Anti-Ragging Committee- As per UGC guidelines ARC has been formed with members drawn from administration, police, media, parents and student's representatives.

6. Proctor Committee- College has a proctor committee to maintain discipline, punctuality and enquire all related matters in the college.

7. Training and Placement Cell- The cell is responsible to planning career development of students, inviting companies and getting them placed. The organization chart of college placement cell is enclosed.

8. Women Grievance/Redresser Committee- All issues related with women grievances are resolved through nominated committee.

9. AKGEC Skill Foundation- All skill development related coordination with the industry and students training in various skill sets are being done by AKG Skill Foundation headed by Prof. Ashiv Shah.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

The institution has initiated many activities to promote technical ventures with industry to promote R&D activities and training programs which would improve the employability of students.

The college is the first institution in U.P. to have received approval from Deptt. of Science and Technology (DST), Govt. of India, for establishment of Centre of Relevance and Excellence (CORE) in the field of Industrial Automation and Robotics under the mission reach of TIFAC. The CORE has been established at our institution with the support of TIFAC and industry partners that include reputed firms like Bosch Rexroth, KUKA Robotics, Siemens PLM Software, Altair Engineering, National Instruments, Rockwell Automation and Jackson Engineering. Under the Scheme, the industry partners will be providing state-of-art equipments for establishment of a World class centre for training, research and product development in the field of Industrial Automation and Robotics.

The institution has also become the first institution in India to establish an Industrial Robotic Training Centre in collaboration with KUKA Robotics of Germany. The centre provides world-class training upto advanced and expert level to students who receive internationally accepted joint certification from KUKA and AKGEC.

These measures further contribute towards academic excellence and improved employability, thereby not only maintaining the top ranking of the college in U.P. but creating a position for it at all India level.

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	Nil
Upload any additional information	View File

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

The Director General and Director are administrative heads of the college. However most of the administrative and academic functions are delegated to various HoDs and Deans who further delegate to ensure a decentralized governance system. Additionally, every department has distributed various duties among faculty members which play an important role in various institutional functions. These duties are discussed in departmental meetings which are regularly conducted and the minutes recorded.

File Description	Documents
Paste link for additional information	Nil
Link to Organogram of the institution webpage	Nil
Upload any additional information	View File

6.2.3 - Implementation of e-governance in areas of operation Administration Finance and Accounts Student Admission and Support Examination

B. Any 3 of the above

File Description	Documents
ERP (Enterprise Resource Planning) Document	View File
Screen shots of user inter faces	View File
Any additional information	View File
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	View File

6.3 - Faculty Empowerment Strategies

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

The College provides the following welfare activities to them:

-

- In Campus faculty quarters. The college provides residential facility to some of the out -station faculty members so that they can settle down in the college.

College presently have 18 quarters. Four are being used as guest rooms, one is being used as school for labour's children, one is vacant and in 12 quarters faculty are staying.

- **Transport facility for Faculty, Staff and Students:** The college has a good transport facility. It has its own as well as hired buses. College has two buses and 6 hired buses. These buses routes to Noida (3 buses), Ghaziabad (4 buses) and Hapur (1 bus).
- **Parking lot and Security:** College has sufficient number of parking lots with good space which is secured continuously through security guards.
- **Conveyance facility for Deans and HoDs staying at Noida and Ghaziabad.**
- **Health Insurance for Students:** The college provides health insurance for upto rupees one lac to all students. ESI facility is available for staff as applicable.
- **All heads of departments have been empowered to estimate and propose their yearly department budget catering for yearly requirement for technical and administration requirements. Additionally, each HoD has been provided an imprest amount within the scope of their power of expenditure. The imprest amount once spent is reallocated repeatedly.**
- **Provident Fund & Gratuity:** For the benefit of staff and employees the college has a well-defined system of providing gratuity to faculty, whereas staff's provident fund gets transferred to EPFO.
- **Leaves:** Faculty members are entitled for following types of leaves:

(1) CL - 12 over an academic year.

(2) EL - 10 over an academic year.

(3) SL - 10 over an academic year.

(2) RH - 02 over a calendar year.

These can be accumulated upto 60 EL and 30 SL.

- **Maternity Leave:** Each regular female faculty is certified for paid maternity leave of 84 days.
- **Leave encashment for faculty and staff upto maximum 20**

days can be encashed every year.

- **Canteen, ATM & Reprographic facility:** The college has two canteens - one is situated near main block while the other is in IT block. Bank of Baroda ATM is available at college gate. Reprographic facility is also next to Library.
- **Mess facility:** Faculty of the college can have paid lunch in nominated students mess.
- **Every year at the beginning of the session class IV employees get a pair of new shoes and a uniform.**
- **Free Wi-Fi facility is available to all.**
- **Medical facility:** College has an affiliated Indo German Hospital, where all students are yearly medically examined and college has ambulance with dedicated 24 x 7 driver.
- **Open gym for faculty and staff.**
- **Adarsh Vikas Kendra, welfare school for contract Labour children.**

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.3.2 - Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the year

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

25

File Description	Documents
Upload any additional information	View File
Details of teachers provided with financial support to attend conference, workshops etc during the year (Data Template)	View File

6.3.3 - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

6.3.3.1 - Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff during the year**11**

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	View File
Reports of Academic Staff College or similar centers	View File
Upload any additional information	View File
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	View File

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)**6.3.4.1 - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year****184**

File Description	Documents
IQAC report summary	View File
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	View File
Upload any additional information	View File
Details of teachers attending professional development programmes during the year (Data Template)	View File

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

The information on multiple activities is appropriately captured and considered for better appraisal through:

? Periodical reviews on classroom teaching by HoD: Every semester the faculty teaching is reviewed by the HoD and a feedback form is filled. The faculty are also apprised about their teaching.

? Feedback (theory and lab) from all the students of the college is taken for both faculty as well as staff members specifically lab attendants.

? University result for both the semesters: The university result of every faculty is reviewed and based on their performance they are awarded for the same.

? Successful completion of one NPTEL course per year:

? Self-appraisal by Faculty and Staff: Every year an elaborate appraisal form is filled by faculty and staff members in which they provide details of the work done by them in a particular year.

? All Professors and Associate Professors are also evaluated based on their administrative and academic / research contribution to the college and department.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

From the year 2019-20, the college is conducting external audit from Anil Vaish and Co., Ghaziabad. The auditors visit periodically to conduct statutory audit. The observations noted by them are discussed with accounts team and if required with the Director General / Management Members. The statutory audit

is based on the accounting vouchers / papers / bank statements and other relevant papers which are necessary for conducting statutory audit. The objections (if any), raised by them are settled on a real time basis.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

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

NIL

File Description	Documents
Annual statements of accounts	View File
Any additional information	View File
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the year (Data Template)	View File

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

The institution always monitors the effective and efficient use of available financial resources for the infrastructural development and teaching learning process. Annual budget is made, funds allocated accordingly, expenditure monitored for deviation and reviewed periodically. Accounts are properly auditable by the chartered accountant. Student fee is received periodically through University Academic fee committee.

The College has a governing body consisting of university & AICTE nominee, management representatives and other industry and academic members. Every financial year budget proposals including income & expenditure details being submitted by the college to the governing body for their consideration and approval. The proposals are made on different heads such as

laboratory equipment, library expenses, salary payments, building infrastructure and other maintenance expenses.

The college has appointed an internal audit team for auditing the accounts and utilization of various resources periodically. These audit reports are submitted to the Director on a monthly basis and action taken to improve the system.

The annual balance sheet of the college is audited by an authorized audit team.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

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

AKGEC has well established IQAC. The IQAC is headed by Dean (Special projects). The IQAC prepares a detailed audit check list for each process and it is utilized by internal auditors for finding deviation from laid down system. The system is designed on requirements provided by AICTE, NBA and University and the Vision and Mission of the college. All these decisions are approved by management and such activities are implemented in the institution. Alumni and students are continuously in touch with IQAC and share the feedback of the students which is addressed properly.

IQAC Communicates with faculty and students through the HoDs. All Heads are members of IQAC. IQAC also helps in getting accreditation by various agencies to promote quality culture in the institution. Five Engineering branches, B.Tech. (CSE, ECE, EN, IT & ME) are accredited by NBA w.e.f. 01 July, 2019 to 30 June, 2022.

The college has a well-defined structure for carrying out the audit, one professor is nominated as MR and another as Deputy MR. Besides these each department has nominated two members who are responsible to carryout internal regular audit of the department and they are also nominated to conduct the audit of other departments periodically. The report is submitted to the

Director General of the college.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

Response:

- The seminars and workshops conducted for the faculty
- Seminars are conducted compulsorily for fourth year.
- Examining students by conducting internal, pre-final and external test assessments
- Holding extra classes for course completion
- Arrangement of remedial classes for slow learners
- Digitalization of library
- Provision of Wi-Fi facility and smart classes
- Increased usage of ICT tools in teaching learning process
- Preparation of course plan at the beginning of every session

Methodologies of operations: Institution has assigned the role of assessing status of compliance for all requirements to external agencies to help internal teams deputed by each department. Each team prepares the compliance report and submits to Dean Special Projects. The institution regularly collects student's feedback and evaluates the teaching ability of faculty and advices on their shortcomings.

? Head of the department separately evaluates the performance of the faculty.

? Performance of the students is continuously evaluated by the

dept.

? Individual counseling by class -in-charges/HoD, if required.

? Detailed subject-wise lecture notes are required to be prepared by each faculty members.

? Lab manuals are prepared by the faculty members and made available to the student.

The institution has always sincerely and seriously ensured to communicate its quality assurance policies, mechanism and outcomes to the various internal stakeholders at regular intervals. The dedicated services rendered by the management, faculty, staff and students will make this institution a strong learning and resource centre.

Response:

Recruit and retain qualified faculty and staff at various levels: To eliminate the problem of lack of good faculty, college makes special efforts for recruitment and retention of quality faculty. Our new hiring practice demands a candidate to demonstrate strong teaching ability.

Make curricular changes and introduction of new courses more frequently: All the courses and Programmes underwent revisions in 2016 and 2018 to make them outcome based. Computer Science (CS) and Computer Science & Information Technology (CSIT) UG Programmes were added in the year 2019. Computer Science & Engineering (AI & ML) and Computer Science & Engineering (DS) have been added in the year 2020.

Governance:Our Good Governance initiatives ensure that processes and policies are followed throughout the hierarchy. We implement a tight organization structure to monitor, record and ensure compliance with agreed policies. As per UGC guidelines, Governing Body, Academic Council, Board of Studies etc., were constituted.

Teaching -Learning process:While some processes such as admission based on merit, formative and summative assessment, teaching and learning process has been enhanced in many ways. Remedial classes for slow learners, Projects, case study,

learning by doing activities have been inducted into curriculum. Student mentoring system, Question paper setting based on blooms taxonomy and Entrepreneurship development course has been implemented.

File Description	Documents
Paste link for additional information	Nil
Upload any additional information	View File

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

C. Any 2 of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://www.akgec.ac.in/iqac/
Upload e-copies of the accreditations and certifications	View File
Upload any additional information	View File
Upload details of Quality assurance initiatives of the institution (Data Template)	View File

INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Internal Complaints Committee

A special committee has been constituted to empower and safeguard the rights of female members; faculty staff and

students of the Institution. The role of ICC is to act as Inquiry Authority on a complaint of sexual harassment and to ensure that complainant and witnesses are not victimized or discriminated because of their complaint. It promotes gender sensitivity and gender equality in the Institution and produces a harmonious environment in the campus. It promotes equality for men and women by allowing men and women to view what is stereotypical of and reasonable for their gender. Sensitizing students to gender at a young age can influence a change in children's thought processes, which positions them to break societal stigmas in childhood and throughout life.

The principle resolution of this committee:

1. To promote a healthy working environment for all our female staff, students and faculty.
2. To work towards building a gender-sensitized environment at our institute.
3. To organize workshops and awareness programs at regular intervals towards building a gender-neutral workplace.

A committee constituted by AKGEC under Sexual harassment of woman prevention, prohibition and redressal act 2013, comprise of following members:

1. Dr. Mamta Bhusry (Professor & HoD, CSE Deptt.) (Presiding officer)
2. Dr. Shiwani Singhal (Asso. Prof., AS&H Dept.) Member
3. Dr. Anu Chaudhary (Professor, IT Deptt.) Member
4. Dr. B.K. Sharma (Dean Hostels) Member
5. Dr. Jyoti Chopra (CEO, RSGO Indo GermaHospital, Dasna, Ghaziabad) Member

Safety and Security

The important places in the institution such as Main entrance, Examination halls, Canteen and Controller of examinations office are under CCTV surveillance. Complaint and suggestion

boxes are made available in every floor of all the academic blocks. The Institution has constituted women development cell and Anti Sexual Harassment Committee for the safety and security of women and girl students.

Apart from this, various important positions in AKGEC are held by female members such as:

1. Chief Account Officer
2. Registrar
3. Head of Department CSE
4. Head of Center Support Cell

File Description	Documents
Annual gender sensitization action plan	https://drive.google.com/file/d/1q215UUPcIst30cxdGAnWnlryrQ3lzytx/view?usp=sharing
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	https://drive.google.com/file/d/14MhIgl3EK9fYbulaUk86HWYznot7LUox/view?usp=sharing

7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment

A. 4 or All of the above

File Description	Documents
Geo tagged Photographs	View File
Any other relevant information	View File

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid

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

Response:

Solid waste management: Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems. Solid waste can be categorized into three types: biodegradable, non-biodegradable and hazardous waste. Bio-degradable wastes include food wastes, canteen waste, wastes from toilets etc. Non-biodegradable wastes include plastic, tins and glass bottles etc. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals, acids and laboratory chemicals.

AKGEC produces a considerable amount of paper waste. Paper wastes from Academic Blocks, Library, Examination cell, Administrative office and Hostels are disposed through vendors.

The College has contracted M/s Eco-Wise Marketing for more than 5 years for waste collection, Recycling and disposal. The vendor generates sustainability reports every month for the total waste collected, waste recycled, waste disposal and Co2 Emission avoided. Moreover the college endorses the proper method for the disposal of old/ scrapped bulk examination used copies papers by getting it pulped for recycling in a paper mill at Meerut.

Liquid waste management: Liquid waste generated from canteen, laundry, and toilet is segregated as well as disinfected and let out as effluent into a common drainage facility.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	View File
Geo tagged photographs of the facilities	View File

7.1.4 - Water conservation facilities available in the Institution: Rain water

A. Any 4 or all of the above

harvesting Bore well /Open well recharge
Construction of tanks and bunds Waste
water recycling Maintenance of water
bodies and distribution system in the
campus

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Any other relevant information	View File

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

- 1. Restricted entry of automobiles**
- 2. Use of bicycles/ Battery-powered vehicles**
- 3. Pedestrian-friendly pathways**
- 4. Ban on use of plastic**
- 5. Landscaping**

A. Any 4 or All of the above

File Description	Documents
Geo tagged photos / videos of the facilities	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	View File

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

B. Any 3 of the above

File Description	Documents
Reports on environment and energy audits submitted by the auditing agency	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has disabled-friendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

B. Any 3 of the above

File Description	Documents
Geo tagged photographs / videos of the facilities	View File
Policy documents and information brochures on the support to be provided	View File
Details of the Software procured for providing the assistance	View File
Any other relevant information	View File

7.1.8 - Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 200 words).

1. Pledge on Rashtriya Ekta Diwas: 143th Birthday of Sardar Vallabh Bhai Patel is being celebrated as "RashtriyaEktaDiwas" Pledge Day. All faculty, staff and students wherever present take the oath on the sound of the hooter.

2. **Communal Harmony Week:** Communal Harmony is the most precious jewel in the crown of mother India, and to maintain this grandeur of our national pride, under the guidelines of the Ministry of Home Affairs, the college observes the Communal Harmony Campaign and Fund Raising Week from 19-25 November every year. Every year faculty, staff and students donated generously to raise some funds which were transferred to The National Foundation for Communal Harmony (NFCH), an autonomous body under the Ministry of Home Affairs, Government of India.

3. **Anti-Ragging Awareness Drive:** InCognizance to its status of No Ragging Campus, AKGEC conducted the annual anti-ragging drive KIRAN (Kaho India Ragging AurNahin) with the objective of spreading anti ragging message amongst the students. The Proctor of the college addressed all 2nd, 3rd & 4th year students to make them aware of the ills of ragging and the provision of strict punishment to be awarded if one is involved in any incidence of ragging.

File Description	Documents
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View File
Any other relevant information	View File

7.1.9 - Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

1. **International Yoga day:** Ajay Kumar Garg Engineering College celebrated the International Yoga Day on 21 June every year. All Heads of Department, Deans, faculty and staff performed various yoga exercises under guidance of Dr. Brij Pal, Zonal Head (East Zone) PatanjaliYogSamiti, Ghaziabad. Every year college, under guidance of yoga expert, yoga session for faculty and staff for fifteen days is conducted generally in two batches.

2. **Pledge for New India:** As directed by the University Grants

Commission (UGC), the institution today held a 'New India Pledge' taking ceremony in commemoration of the 75th year of Quit India Movement. The students, staff and faculty pledged to build a new and clean India - free of corruption, casteism, communalism, poverty and terrorism by 2022.

3. National Voter's Day: On National Voter's day i.e. 25th Jan each students of the college take appropriate oath as received from election officer in respective class room. The copy of the oath is handed over to the faculty in each class room by discipline committee students.

4. Human Values and Professional Ethics workshop and Faculty Development program: Dr APJ Abdul Kalam Technical University established a 'Value Education Cell' and motivated affiliated institutions to develop institutional level VE Cells in a systematic effort to coordinate value education efforts at the university. This is to provide an exposure and conducive environment to students and teachers aiming at personal transformation and through that, the evolution of a humane society.

In addition, to propagate value education effectively, the university initially developed five nodal centres, and AKGEC was one of them.

1. 10 day's online family workshop on "Understanding Relationships" for family members of AGKEC FMS and staff members were organized from 5 -14 July 2020. More than 100 family members attended the workshop.
2. 10 day's online family workshop on "Understanding Relationships" for family members of students were organized in two slots (1 - 5 Aug & 12 - 16 Aug 2020). About 40 family members attended the workshop.
3. Conduct of 10 day's workshop on "Understanding Human Being Comprehensively" at AKGEC Nodal Center AKGEC from 11 - 20 Jul 2020.
4. VE Cell, AKGEC conducts 05 days evening workshop (two hours daily) for students on "Understanding Relationships through Self- Exploration".
5. Webinar-1: (05 July 2020) Resource Person: Sh. Vijay Pal

Baghel , The Greenman of India // "Impact of Covid-19 on Global Environment"

6. Webinar-2: 26 July 2020 Resource Person: Dr. Sharmila Asthana The second webinar of the Erudition' 20 series, "Holistic Health and Lifestyle"

7. Webinar-3 on 11 Oct 2020 The third webinar of the Erudition'20 series, on "Studies on the Inherent Interconnectedness and Co-existence in Nature through Ecological, Scientific and Spiritual Evidences" had been organized on October 11, 2020 Sunday.

File Description	Documents
Details of activities that inculcate values; necessary to render students in to responsible citizens	https://drive.google.com/file/d/163wtMCxRhrlfSX6DvZeKsX0yHjHByf8/view?usp=sharing
Any other relevant information	https://www.akgec.ac.in/life-akgec/events/festival-celebrations/yoga-day/

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff

4. Annual awareness programmes on Code of Conduct are organized

A. All of the above

File Description	Documents
Code of ethics policy document	View File
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	View File
Any other relevant information	View File

7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

1. College celebrates important days such as Independence Day, Republic day with patriotic fervor to make the dream of a new tomorrow come true. Various competitions are conducted as part of Independence Day such as essay writing and poster making competition.

2. Various festivals such as Holi, Garba, Diwali etc., are celebrated on the campus.

3. Students organize and participate in competitions, cultural events and Institutional fests through various departmental Clubs.

4. Basant Panchami is also celebrated every year. All faculty and staff along with their families and parents of students visited the Faith Centre of the College to seek blessings of MaaSaraswati. Amidst the recital of heart touching Shlokas played in dedication to MaaSaraswati. Atmosphere of devotion and reverence to MaaSaraswati continued throughout the day.

5. As directed by the University, the institution held 'New India Pledge' taking ceremony in commemoration of the 75th year of Quit India Movement. The students, staff and faculty pledged to build a new and clean India.

6. Teachers Day is celebrated to mark birth anniversary in of Dr. SarvepalliRadhakrishnan.

7. Engineers' Day is celebrated every year remembering the engineering excellence of Sir

Mokshagundam Visweswaraiyah.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	View File
Geo tagged photographs of some of the events	View File
Any other relevant information	View File

7.2 - Best Practices

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

Best Practice 1

Title of the Practice: Skill development of the students

Objectives of the Practice

The objective of this initiative is to encourage skill development in youth to align their technical competencies with manpower requirements of modern industries.

- To nurture creativity and innovation in youth to promote entrepreneurship.
- To provide national and international industrial working exposure to students.
- To provide knowledge and exposure of advanced technologies such as Robotics, Automation, 3 D Printing etc.

The Context

Globalization, knowledge and competition have intensified the need for a highly skilled workforce in India to accelerate the growth rate of the economy towards a higher trajectory. Today, there is a need for a skilled workforce to meet global standards of quality, to bring advanced technologies to domestic industries and to boost industrial and economic

development. Thus, skill development becomes the major driving force of socioeconomic growth and development for our country. The AKGEC has launched various programs and activities that provide knowledge and skills of latest technologies and promote entrepreneurship which help students to advance their careers and enhance their employment opportunities.

The Practice

In order to improve the employability of the students by improving their knowledge and skill, the various initiatives taken by AKGEC are given below:

1. AKGEC SKILLS FOUNDATION:

1. Centers of Excellence:

The College has established various centers of excellence such as Industrial Robotic Training Centre in Collaboration with Kuka Robotics, Germany, NI-LabView Academy in collaboration with National Instruments, Centre of Competence in Automation Technologies in collaboration with Bosch Rexroth AG, Germany, Industrial Pneumatic knowledge Centre in collaboration with Janatics etc.

2. Infosys Campus Connect Program

The campus connect program is run by the T & P department which is conducted by Infosys. Under this program, Infosys has designed and provided a 65 hours teaching module and a wide range of projects that students take up as a part of the final year project. This program helps students in acquiring skills related to the IT industry.

3. Personality Development Program

As soft skills play an important role in improving the employability of students. The college has introduced a well structured 100 hours Personality Development Program conducted on weekends by a professional agency.

4. Cloud Computing Cell

Cloud Computing Cell has been a part of Ajay Kumar Garg

Engineering College since February 2016. The members are exposed to the latest Cloud Technologies that enable them to be market ready thereby increasing their opportunities in placements and research. It provides a platform to the students to compute, manage and deploy the cloud.

5. Open Source Software R&D center

The establishment of this research and development centre is expected to create a unique opportunity to all stakeholders of the institute. The facility so created shall be useful to carry out research/development/training/consultancy related to open source software. The centre will customize the open source software according to the requirements. It will also train the students and facilities of our institute and will involve them in the development and customization of recent open source software.

6. Co-curricular Industry Relevant Programs:

To bridge the gap between industry requirement and academic curriculum of the college. The college has a BigData Centre of Excellence, & various Computer Aided Design (CAD) packages like Pro-E and Catia

Best Practice 2 Title of the Practice: Online Teaching Learning Program

Objectives of the Practice:

Education is the process of transferring knowledge, values, methods, skills, and beliefs from one individual to another. Online teaching offers exciting opportunities to expand the learning environment for diverse student populations. As the demand for online teaching increases during pandemic, college faculty members may be asked to consider teaching their classes' online. Online teaching shares much with face-to-face teaching.

Context

Online education provides great opportunities and great challenges. It has benefits for the students and instructors. It offers the convenience of time and space, cost-effectiveness, and flexibility. Online learning allows student to pursue an internationally recognized degree without the need

to attend classes on campus. Online education is preferred by students who cannot participate in traditional classroom settings during pandemic.

Practice

Online teaching program involves problem solving, doubt clearing and topic teaching by the faculty members. An online Google Meet Link is made by each faculty member for his class. This Link is floated to their Google Classroom / WhatsApp group. As per the timetable fixed by the department, online classes are taken by the faculty member. Attendance of the students are taken by floating Google form during the class.

Evidence of Success:

The overall quality improvement is evident from the high class averages and a large number of students of the college featuring in University merit lists. The college has consistently maintained itself in the highest category of ?+3? of the University Comparative Gross Average Intellectual Attainment Chart even after Online Classes conducted during pandemic.

Problem Encountered & Resources Required:

As a whole the system is well planned and the resources like digital boards, mikes are available in college. There may be problem with the students on their personal issues like internet, laptops etc, which can be solved by proper counseling by the faculty coordinators.

For online teaching to be successful, it is recommended that the instructor should follow the following principles

- (1) encourage student participation
- (2) encourage student cooperation
- (3) encourage active learning
- (4) give prompt feedback
- (5) emphasize time on task

(6) communicate high expectations

(7) Respect diverse talents and ways of learning.

File Description	Documents
Best practices in the Institutional website	https://akgecskills.in
Any other relevant information	https://drive.google.com/file/d/1_Su0VFOt_xCTmWi65URZdc0cva0bFie5A/view

7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Overall Best Result of AKGEC is one area distinctive to its priority and thrust. The result of students graduating during the academic year 2020-21 has been exceptionally good. In B.Tech, 95% students have passed, out of which 94.35% passed with 1st division including 60.86% with honors.

In addition to overall good results, the college has a remarkable achievement in terms of number of students in university merit lists. For the session 2020-21, the college has eight B.Tech and one M.Tech students in the top 10 merit list of AKTU with one gold and two bronze medal. The college has been consistently having the maximum number of students in merit list and number of medalists over the last few years.

AKGEC is very keen at facilitating personal commitment to the educational success of students and thus the Academic committee consisting of Director, senior faculty members and Examination Coordinator prepares the academic calendar well in advance before the commencement of the session/semester

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

7.3.2 - Plan of action for the next academic year

To monitor online classes an academic monitoring committee needs to be formed who will monitor the online classes, video lectures, notes and other study materials. 2. To utilize tech support for effective online classes modern teaching ICT tools such as (pantab), smart boards are to be incorporated in taking online classes. 3. For the preparation of good quality video lectures of theory and labs IQAC members suggested that good quality videos for theory and labs are to be prepared by every department for each course. Preparation of good quality video lectures of theory and labs will be continued as previous semester. More faculty members are motivated to participate in the preparation of video at AKGEC skill studio or AKTU digital studio. 4. To develop econtent for the improvement of online teaching learning department should deliver good quality e content (PPTs, PDFs of courses, Videos) under the supervision of senior faculty members of monitoring committee. 5. To plan summer internship for B. Tech I, II and III year students departments are advised to plan in house summer internship program for B. Tech I, II and III year students. 6. The IQAC is decided to revise the benchmarks of those parameters to meet the current scenario of Higher Education and strategic 5 year planning of the Institute. Review on further improvement of faculty pursuing PhD new PhD registrations and quality publications.