

FOR 1st CYCLE OF ACCREDITATION

ALLENHOUSE INSTITUTE OF TECHNOLOGY

PLOT NO. 176, KULGAON ROAD, ROOMA, KANPUR, UTTAR PRADESH 208008

www.aiot.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Superhouse Education Foundation (SHEF) established in 1996, is a leading educational group of North India and is registered under Society Acts 1860. The foundation is owned by a large Industrial house in Kanpur known as "Superhouse Group", a multinational company internationally recognized as the leading exporters and producers of leather, footwear, accessories, garments etc. The Group has subsidiaries in five countries and has received awards from the Council for Leather Exports, GOI.

Allenhouse Institute of Technology, Kanpur was established in 2009 as an offshoot of the educational vertical of Superhouse Group and is a well-known engineering college, located on Kanpur-Allahabad highway in Rooma area in the suburbs of Kanpur city. The institution enjoys locational advantage being situated in the heart of the largest State in the country i.e. Uttar Pradesh, hence, attracts students from across the state, with an impressive participation of 151 girls and 19 women faculty members.

The institute is spread over a sprawling area of 5.11 Acre with lush green lawns, beautiful landscape, Aesthetic Architecture and high-grade infrastructure. The environment friendly ambiance of the institute provides an excellent learning atmosphere.

AIT is an AICTE approved institution and is affiliated to AKTU, Lucknow, Uttar Pradesh.

The institute offers six UG programs (Civil, Mechanical, ECE, CSE and CSE & AIML) with a total sanctioned intake of 300 and diploma awarding programs in Civil Engineering, Electrical Engineering and Mechanical Engineering (Production) with an intake of 60 each.

The Objective and Outcome based education system with continuous assessment system is in place with well-defined learning outcomes aligned with the Vision and Mission of the institute and Programs.

The institution has an impressive record of placements and a significant number of pass outs are currently working in many reputed corporates and multinational companies in India and abroad like Infosys, Capgemini, Cognizant, Accenture, Aricent, TCS, HCL, Shriram Pistons, EMKOR and contributing to economy of the country and over the years a significant number of students have opted for higher studies. Few have chosen to be entrepreneurs and job providers.

The institute is currently initiating activities to adopt NEP 2020 through a systematic plan.

Vision

To become a nationally known institute that produces technically sound graduates and responsible citizens capable of catering to the ever-changing needs of the nation and the world.

Mission

- M1: To promote student centric teaching learning methods by strengthening state-of-art facilities and resources to facilitate quality education.
- M2: To promote technological research, development, and innovation.
- M3: To establish collaboration with industry and academics to learn best practices of industries and corporate.
- M4: To enhance placement of students by providing employability and entrepreneurial skills with ethical values.
- M5: To create an environment of internal revenue generation for sustenance and growth of institutions.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Well defined Vision & Mission.
- Well-developed infrastructure.
- Qualified and experienced faculty & staff.
- Curriculum delivered to attain well-defined Program Education Objectives (PEOs) and Program Outcomes along with Program Specific Outcomes (PSOs) and Course Outcomes (COs)
- Good academic culture, ambience and working environment leading to high students and faculty satisfaction.
- Campus placements are strong and career counselling for students is well organized and structured.
- Students are given awards and rewards for merit achievement.
- Institute location-accessible to all the Stakeholders.
- Owned by old reputed industrial house therefore, linked with corporate operating at national and international levels. Management enjoys exposure to international world and practices followed world over
- Good Labs & Workshops to meet curricular requirements
- Industry training and Software/Soft Skills Training for Students
- Curricular & Co-curricular activities conducted as per norms
- Large alumni base excelling professionally in many leading organizations with active networking and

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mentoring

- Associated with various academic projects like NPTEL funded by MHRD, Govt. of India
- Membership of:
 - o National Digital Library of India,
 - Imperial Society for Innovative Engineers,
 - Active DELNET membership
- Entrepreneur Cell: A separate cell for Entrepreneurship Development in the Institution to create awareness on entrepreneurship and encourage students to be entrepreneurs.
- Faculty conscious of quality, hence actively involved in taking online training programs to keep their knowledge updated
- The sponsoring industry has setup State of the art, computer center, Allen Informatics Centre to encourage innovation and offering digital services to the community
- Realizing the strength of the institution, AICTE has given approval to start UG program in emerging technology in the field of artificial intelligence and machine learning

Institutional Weakness

- Less number of faculty with Ph.D.
- R & D and consultancy activities are limited.
- Limited Industry-Institute interaction.
- Common library for the entire campus

Institutional Opportunity

- By becoming autonomous, the institute would be able to address the shortcomings under affiliation system.
- Industry Institute collaboration in the field of leather and related technology can provide especial characteristics to AIT, being a major R&D center and new product developer and service provider
- New NEP 2020 gives opportunities for diversification and multi-disciplinary programs offering creating wider reach and avenues of institutional growth

• Computer based new technology courses may be introduced such as CS and Design, Mechatronics and Design, CS and Finance, Digital Society and Technology, Data Mining and Machine Learning etc.

Institutional Challenge

- Tough competition in research funding opportunities.
- Availability of quality faculty interested in teaching.
- Recent trends of students not opting for engineering programs except computer science
- Affiliating university curriculum becomes obsolete and little freedom for faculty to go beyond syllabus due to lack of time
- Mushroom growth of institutions in the area
- Lack of utilization of high potential of Superhouse Group with already existing well performing image

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The curricula for the six undergraduate programs of engineering have been formulated by AKTU in accordance with the guidelines of AICTE and are Choice Based Credit System (CBCS).

The core subjects in the curriculum provide technical knowledge in the respective programs. The Important concepts are offered in professional core subjects and advanced concepts in professional elective subjects.

Considering the current employment needs and global standards, the institution lays special emphasis on providing professional skills to students through student centric learning approaches such as collaborative learning, problem-based learning, flipped classroom etc. along with providing entrepreneurial inputs. Human Values and Professional Ethics, Skill Development courses - Soft skills, Communication skills and Technical skills are included as beyond syllabus initiatives wherever gaps and needs are identified.

The Objective and Outcome based education system with continuous assessment system is in place with well-defined learning outcomes aligned with the Vision and Mission of the institute and Programs.

The curriculum requires students to participate in major and minor projects, laboratory and technical report writing along with training in the latest software and technologies. The Project lab set up by Superhouse provides beyond curriculum scope of learning and innovation to students.

To promote lifelong learning attitude among students and to imbibe knowledge of new cutting-edge technologies, the institution provides access to SWAYAM/COURSERA/ATAL/ NPTEL, Ed Ex and online courses offered by IITs to students. The faculty members also constantly make use of these sites and other

online learning portals for upgrading their knowledge and grow academically.

The students are also encouraged to participate in technical fests, competitions, and extracurricular activities. Internship and industrial training in the parent industry as well as other industries are encouraged. The annual institution fests and activities are organized for holistic development of students.

IQAC plays an active role in ensuring adherence to well-defined processes related to curriculum delivery planning, continuous assessment with impact analysis and corrective action.

Well established student feedback system is in place both to evaluate the teaching learning process at the end of semester and facilities etc.

Teaching-learning and Evaluation

Since, the students are from diverse backgrounds, the institution provides constant academic and other support such as remedial classes and peer to peer interaction and mentoring and guidance to slow learners and bridge courses are organized for lateral entry students. Tutorials form part of the timetable for doubt clearing among students. Well performing students are encouraged to use the project labs set up by Superhouse to take up challenging projects under the guidance of the faculty and to participate in technical fests and competitions.

Effective mentoring system is in place, where each teacher is assigned 20 students to mentor. The faculty is required to maintain records of mentoring and issues tackled and corrective action taken.

Well qualified and experienced faculty, following AICTE norms are recruited by the institute management through transparent mechanisms and well-defined processes. Care is taken to at least meet AICTE norms of teacher pupil ratio if not better. Eight faculty members hold Ph D degree and remaining all essentially have Masters' degree. Ten faculty members are currently pursuing Ph. D. and are likely to complete their doctoral programs by the year 2025.

The Objective and Outcome based education system (OBJ) is in place with well-defined learning outcomes aligned with the Vision and Mission of the institute and Programs along with needs of the stakeholders and placement records which provide uniqueness while addressing the learning outcomes within the prescribed Program Outcomes.

The courses are assigned to the faculty based on their competencies and specializations. Each faculty is required to prepare and maintain course files before the commencement of the semester and provide a copy of the course description to students within the first week of commencement of the new semester and discuss the same. COs and POs are aligned with Bloom's taxonomy.

The examination system is followed as per the AKTU norms; however, the internal examinations, tests, assignments, labs etc. are based on the requirements of OBE system and are guided by the course objectives and outcomes designed and delivered by faculty and on the basis of continuous monitoring and corrective action taken, wherever necessary.

Research, Innovations and Extension

In AIT, as part of the mechanical engineering program, while providing extra facilities to students to undertake innovative projects, an advanced research and testing lab was established in 2017 with the modern equipment which provides various testing for polymers, plastics and composites and best services to the Shoe/Plastic and allied industries. Such facilities are open for students working for Ph.D. from other institutes also.

Some of the main tests which can be carried out in advanced research and testing lab are as follows:

- Flexural Testing
- Tensile Testing
- Compressive Testing
- Hardness Testing (Shore-A and Shore-D)
- Impact Testing
- Low Temperature testing (-70°C)
- Heat Treatment Facility (300°C)

Two industry specific labs are established in collaboration with Superhouse group for advanced level shoe designing and refurbishment and design of machines used in the leather industry.

Extension activities: Students of AIT are extensively involved in community service and societal activities, Students spend a special day in a year with the residents of old age homes and distribute warm clothes, food and share their experiences to ease their loneliness and needs of the senior citizens. Students participate in Swachchh Bharat Abhiyaan and conducted Survey on request of IIT, Kanpur ``Catch the rain', project by Jal Shakti Mantralaya. It was conducted by 40 students on old unfunctional water bodies in 5 adopted villages. The report was submitted to IIT Kanpur.

A special drive by female faculty to create awareness among the rural women in nearby village Kulgaon on personal hygiene and cleanliness (05 female faculty members) on World Population day on 11th July 2021. Medical camps are organized in the institute to address medical issues among the rural population. The institute regularly organizes blood donation camps. Tree plantation is done regularly on many occasions by students and visitors.

Infrastructure and Learning Resources

The institute has an adequate number of ICT enabled classrooms and seminar halls, well equipped laboratories, sports facilities, and good infrastructure spread over 5.11 acres with green lawns and eco-friendly environment. The institute has a water harvesting facility and installed solar panels subsidized by the Government of Uttar Pradesh.

Allen Informatic Center has been created by AIT with state of the art 270 computers for teaching learning as well as public examinations announced by central and state governments from time to time emerging from

facilities such as railways, defense, state service commission, UPSC etc.

The institute meets AICTE norms of classroom space and ambiance with good lighting and ventilation. There are indoor and outdoor sports facilities for students along with ample hostel rooms for girls and boys managed by trained wardens.

There is a designated office of placement cell with placement officers, wherein the employers are invited to interact with graduating students.

The college has two seminar halls and one conference hall to accommodate 300 people. All seminar halls are equipped with ICT facilities.

CCTVs are installed at strategic places that help to monitor the campus activities. The Institution has two diesel generators with 525 kVA to ensure uninterrupted power supply and maintenance of electrical assets. The maintenance of equipment like Diesel Generator Sets, Power Distribution Systems, Air-conditioners, Fire-Fighting Equipment, Drinking water, Water-coolers and Solar Panels etc. is undertaken by authorized vendors under annual maintenance contract(AMC). The Institution has a Cafeteria, and Transport facilities which include 08 buses for all students and staff. The library is equipped with 27397 technical books, Delnet and AKTU-Nalanda journals are subscribed and (Elsevier, Sage. Oxford, Springer etc.), e-books and learning resources available. The library has digitized system Koha. The library has 10 computers with wi-fi facilities. The institution has earmarked the budget for the library based on the requirements received from each department. Each year the library is replenished with new learning resources recommended by the faculty. Library is open from 0800 to 2000 Hrs

Student Support and Progression

The faculty keep record of student progression when they arrive in first year and monitor their performance throughout four years of study.

Tracing the progress of alumni through their career progression and interaction with them provides valuable inputs for further improving the teaching learning processes and thereby providing more meaningful and holistic development avenues to the students.

The State as well as Central Government Agencies under Equity Action Plan, provide financial support to economically weak and students belonging to disadvantaged groups. The institute also provides scholarships to meritorious students and freeships to economically disadvantaged students.

Remedial classes are offered for slow performing students during off hours as well as peer to peer interaction is encouraged. The well performing students are encouraged to participate in challenging projects, competitions and technical fests.

The institution has a dedicated language lab as well as special short course are offered to improve language and communication skills and personality development classes are conducted through external experts.

A system of mentor mentee is in place wherein each teacher is assigned 20 students to mentor. The mentor meets the students under their charge whenever the students need help. The institution also has a transparent mechanism for redressal of student grievances.

Annual fests are organized and conducted by the students and students are encouraged to participate in curricular and extracurricular activities, participate in sports events, competitions etc.

Since the Superhouse owns numerous industries, industrial visits, training and internship form a part of regular features of the institution.

The above initiatives have witnessed improvements in student performance, seeking employment in better rated companies, higher education and becoming employment generators.

Governance, Leadership and Management

The Board of governors (BOG) is headed by the Chairman who is also a renowned industrialist and the members are as per the AICTE prescribed norms. All academic, research, administrative and other activities of the institute are reported to BOG and resource mobilization and educational quality control is assured.

BOG takes policy decisions in matters related to planning human resources, recruitment of faculty and staff, training of faculty, staff and students, performance appraisal of all the employees and finance mobilization and management.

The BOG ensures participation in decision-making to achieve the mission and vision of the institution. BOG delegates financial and administrative powers to various institutional functionaries including director/HODs and others.

Apart from BOG, the day to day functioning of the institute is taken care of by various cells and committees such as academic cell, exam cell, proctorial board, institute grievance cell, cultural committee, sports committee, entrepreneurship and incubation cell etc.

The institution has strong welfare policies in place for its teaching and non-teaching employees in order to sustain the high levels of motivation and satisfaction. The various welfare schemes and policies are implemented such as maternity leaves, EPF, health insurance, subsidized bus transportation Facility for students, staff, research and development incentives etc. Institute has a well-defined performance appraisal mechanism in which faculty share a self-appraisal report and on the basis of the report, yearly appraisals are done.

The director prepares the institute budget before the financial year starts. The members of the BOG review and approve the budget. Accounting professionals who certify the financial statements for each fiscal year are hired and an audit report is prepared on an annual basis, the same has been shared on the website of the institute.

AIT has an IQAC which works towards monitoring quality on basis, continuously improving and maintaining the quality of teaching learning process, identifying and suggesting new ways of teaching using modern aids and ICT tools.

Institutional Values and Best Practices

To inculcate ethics and values in the students, Institute does a lot of activities such as organizing National festivals as well as Anniversaries for the great Indian personalities like Teacher's Day on 5th Sept, Engineer's

day on 15th Sept, International Women's Day on 8th March, International Yoga Day on 21st June, Independence Day on 15th August, Republic Day on 26th Jan, World Environment Day on 5th June and birth anniversary of Mahatma Gandhi on 2nd Oct, Dr. B. R. Ambedkar on 14th April and Maharshi Valmiki Jayanti on 24th Oct.

These functions help in developing tolerance harmony towards culture, region and linguistics and also communal social economics and other diversities. The Institution promotes Gender Equality & Sensitization in curricular and co-curricular activities, and provides facilities for women on campus. Institute offers one compulsory course named as Universal Human Values and professional ethics (KVE 301/401) in 2nd year and three open elective courses named as Human values in Madhyasthdarshan (KOE 089), Human Values in Buddha and Jain Darshan (KOE 098) and Human Values in Vedic Darshan(KOE 099) in final year for the development of values and ethics in the students. For the understanding of constitutional aspects, one compulsory course named as Constitution of India, law and engineering (KMC 501/601) is taught in the third year of the degree program.

Regular cultural activities are organized in the institute such as REETH, nukkad natak, poster making competition etc. to make an inclusive environment.

Best Practices: "Experiential learning to students with live problems from industry through Institute Industry Interaction" and "Employability Enhancement and Skill Development" are the two best practices through which faculty and students get an opportunity to gain real life problem solving experience and students get trainings on the skill set needed by the industry.

These skill based training courses are floated just after the completion of first year and attending these courses are mandatory for every student. Some prominent training programs to be mentioned are Advance Python programming with Machine Learning, PRIMAVERA, ANSYS, AUTOCAD, CAM etc.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	ALLENHOUSE INSTITUTE OF TECHNOLOGY		
Address	PLOT NO. 176, KULGAON ROAD, ROOMA, KANPUR, UTTAR PRADESH		
City	KANPUR		
State	Uttar pradesh		
Pin	208008		
Website	www.aiot.ac.in		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	SOMENDRA SHUKLA	512-2304122	9935147753	-	director@allenhous e.ac.in
Associate Professor	DEV SINGH	-	8318983896	-	dev@allenhouse.ac .in

Status of the Institution	
Institution Status	Self Financing

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution	
If it is a recognized minroity institution	No

Establishment Details		

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State	University name	Document
Uttar pradesh	Dr Apj Abdul Kalam Technical University Uttar Pradesh Lucknow	View Document

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

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)						
Statutory Regulatory Authority	Regulatory roval details Inst year(dd-mm- months					
AICTE	View Document	03-07-2022	12			

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

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	PLOT NO. 176, KULGAON ROAD, ROOMA, KANPUR, UTTAR PRADESH	Urban	5.11	17165.76	

2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)					
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Comp uter Science And Engineering	48	Twelfth Pass	English	60	60
UG	BTech,Civil Engineering	48	Twelfth Pass	English	30	18
UG	BTech,Electr onics And C ommunicatio n Engineering	48	Twelfth Pass	English	30	9
UG	BTech,Mech anical Engineering	48	Twelfth Pass	English	60	21
UG	BTech,Comp uter Science And Engineering Artificial Intelligence And Machine Learning	48	Twelfth Pass	English	120	120

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	essor			Asso	ciate Pr	ofessor		Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government		1	1	0		1		0		1		0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies		3						6				51
Recruited	2	0	0	2	5	0	0	5	51	0	0	51
Yet to Recruit		-	1	1		,	1	1		1	1	0

	Non-Teaching Staff						
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				27			
Recruited	20	7	0	27			
Yet to Recruit				0			

	Technical Staff						
	Male	Female	Others	Total			
Sanctioned by the UGC /University State Government				0			
Recruited	0	0	0	0			
Yet to Recruit				0			
Sanctioned by the Management/Society or Other Authorized Bodies				14			
Recruited	14	0	0	14			
Yet to Recruit				0			

Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Professor		Assoc	Associate Professor		Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	0	0	3	2	0	0	0	0	7
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	41	10	0	51
UG	0	0	0	0	0	0	0	0	0	0

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

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

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

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	531	3	0	0	534
	Female	153	0	0	0	153
	Others	0	0	0	0	0
Diploma	Male	21	5	0	0	26
	Female	18	0	0	0	18
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	23	16	13	34
	Female	4	3	2	4
	Others	0	0	0	0
ST	Male	1	0	1	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	71	51	37	47
	Female	22	15	10	14
	Others	0	0	0	0
General	Male	85	57	74	59
	Female	25	14	26	12
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		231	156	163	170

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

a) Delineate the vision/plan of institution to transform itself into a holistic multidisciplinary institution. The institutional strategic plan has been prepared to adopt NEP 2020; However, action will be initiated after obtaining NAAC and autonomy. The Superhouse Group has two institutions i.e. Allenhouse Institute of Technology offering UG and Diploma programs and Management Institution called Allenhouse Institute of Management offering MBA. After NAAC, the institution will initiate the process of conducting need analysis on diversifying and transforming itself into holistic multidisciplinary institution. Areas under consideration are Pharmacy, Arts, Law, Commerce, teacher education etc. College has developed the state of the art shoe design facility for training the students to enhance employability. As per NEP 2020, the institute has collaborated with leather industry and providing solutions such as development of new machines and refurbishing of old machines. b) Delineate the Institutional approach towards the integration of humanities and science with STEM and provide the detail of programs with combinations. The institution is offering STEM related programs; however, programs that provide vertical expansion in terms of post graduate and doctoral programs will be initiated. Humanity and Science related programs such as UG programs in specific social science programs, languages, fine arts and performing arts, Science etc. will also be initiated based on the need analysis. c) Does the institution offer flexible and innovative curricula that includes credit-based courses and projects in the areas of community engagement and service, environmental education, and value-based towards the attainment of a holistic and multidisciplinary education. Explain Since the institution is affiliated to AKTU, offers limited creditbased education system in which courses related to ethics and environment have been included. Recently institute has conducted an environment audit so that students are exposed to environmental issues understand the subject easily. d) What is the institutional plan for offering a multidisciplinary flexible curriculum that enables multiple entry and exits at the end of 1st, 2nd and 3rd years of undergraduate education while maintaining the rigor of learning? Explain with examples. As an affiliated institute, the guidelines of the affiliating University are followed. The institution will attempt to obtain

academic autonomy and thereafter flexibility in curriculum offering with multidisciplinary approach. e) What are the institutional plans to engage in more multidisciplinary research endeavors to find solutions to society's most pressing issues and challenges? As an autonomous institute, efforts will be made to involve in multidisciplinary research and essential and pressing issues addressing societal challenges through consultancy, projects obtained from funding agencies and other industries. Such activities will fully involved faculty with heterogeneous academic background. f) Describe any good practice/s of the institution to promoteMultidisciplinary / interdisciplinary approach in view of NEP 2020. The affiliated university AKTU has introduced major and minor degree to UG engineering students. The minor degree programs have been designed along with major degree such as all branches except CSE and ECE related branches can opt for Minor degree in Artificial intelligence and Machine Learning/Data Science/IOT etc.

2. Academic bank of credits (ABC):

a) Describe the initiatives taken by the institution to fulfil the requirement of Academic bank of credits as proposed in NEP 2020. The institution is affiliated to AKTU, therefore, the institution is not required to register with ABC. Once the institution is autonomous and degree awarding institution, the registration will be taken in ABC. b) Whether the institution has registered under the ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen programme? Provide details. Being an affiliated Institution ABC provision is not available however, once autonomy is granted all efforts will be made to register with ABC. c) Describe the efforts of the institution for seamless collaboration, internationalization of education, joint degrees between Indian and foreign institutions, and to enable credit transfer. Internationalization of education, joint degrees between the institution and foreign institutions will be taken up once the institution is autonomous academically. This feature is included in the strategic plan of the institution. Affiliated institutes are not allowed to do such collaborations. d) How faculties are encouraged to design their own curricular and pedagogical approaches within the approved framework, including textbook, reading material selections,

assignments, and assessments etc. Since the institution is affiliated, designing own curricula is not possible except filing the gaps between curriculum and Program Outcomes by taking up topics beyond syllabus and latest development in respective programs. Latest pedagogy approaches to encourage student centric learning are adopted such as collaborative learning, problem based learning etc. However, the gaps identified in the curriculum are informed to the University on regular basis. e) Describe any good practice/s of the institution pertaining to the implementation of Academic bank of credits (ABC) in the institution in view of NEP 2020. Membership of ABC is not available to our institution as this authority is available to degree awarding institutions. However, the institution is fully ready with data and statistics to provide the comprehensive support to ABC scheme and in this context the ERP being maintained by the institution would provide the required information and support.

3. Skill development:

a) The institution has signed MOUs with 03 vocational training institutes (Lernsys, Softronics and Geekster) and 02 MOUS with leather industry (Superhouse Ltd.) to train the students in the fields aligned with National Skills Qualifications Framework. So far through these MOUs approximately 1100 students have been benefitted over a period of 05 years. Through a well established Language lab, language skill training is being offered to almost all the students as part of curricular requirement and students are also assessed to determine the language skill acquired. b) A total of 23 programs have been organized which are integrated to main stream education. The details have been provided in 1.2.1. In last 05 years around 1300 students are benefited. The prominent areas are Advance Python programming with Machine Learning, PRIMVEERA, ANSYS, AUTOCAD, CAM etc. c) Institute offers one compulsory course named as Universal Human Values and professional ethics (KVE 301/401) in 2nd year and three open elective courses named as Human values in Madhyasthdarshan (KOE 089), Human Values in Buddha and Jain Darshan (KOE 098) and Human Values in Vedic Darshan (KOE 099) in final year. For the understanding constitutional aspects one compulsory course named as Constitution of India

(KNC 501/601) are taught in third year of the degree program. d) The institution's efforts: i. Institute has credit structure as per AKTU. However some additional vocational courses such as automation, drone technology, software programming etc. ii. As a regular practice the institution invites master craftsmen from the field as and when required, especially from the parent industry Superhouse Ltd. In the field of leather technology, production of leather goods, machine repairs and refurbishment of old machines. iii. The training programs are designed in both modes, on campus and ODL. However ODL is limited to students of the institution only. The training program offered by LERNSYS is in blended mode with substantially on line and partly on campus. iv. So far the institution is not active to undertake the NSDC programs but in future under the implementation of NEP2020 this activity will become prominent and quite useful for the students. v. As per the strategic plan (2022-27) of the institution, a large number of activities related to employability enhancement skill training have been envisaged and the prominent areas are Industry focused curriculum, multi-skill development & certification opportunities etc. e) Visualizing the future trends of NEP2020 the institution has undertaken following important activities leading to support good practices that has direct relationship with the industry and industrial growth in and around Kanpur: I) Conducting need analysis for current and future workforce and accordingly set up technology based labs. II) Kanpur being a hub of leather industry, so far advance level computerized shoe designing is not done in Kanpur. The institution has setup a lab in collaboration with leather industry, and gives training on shoe master software. III) A lab has been setup for refurbishment of old leather manufacturing machines to provide refurbishment and maintenance skills to the students.

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

a) Delineate the strategy and details regarding the integration of the Indian Knowledge system (teaching in Indian Language, culture etc.) into the curriculum using both offline and online courses. One compulsory course is taught to the third year students named as, Indian tradition, culture and society (KNC 502/602). This course provide substantial base to students about Indian culture and integration of India

which is multilingual, cross-cultural and knowledge about people of India. This course is offered on campus being part of curriculum prescribed by AKTU, Lucknow. b) What are the institutions plans to train its faculties to provide the classroom delivery in bilingual mode (English and vernacular)? Provide the details. The medium of instructions in the institution is at present bilingual but as prescribed by the university the examinations are conducted in English only. The institution is planning to become bilingual with the following action plans: I) Teachers will be allowed to teach in both English and Hindi. II) Teachers will be provided extra training to learn technical jargons in Hindi. III) The institution will acquire books, literature and journals published in Hindi language to facilitate learning in both Hindi and English. IV) Special permissions will be obtained from the university to conduct examination in Hindi to promote Hindi as an additional language of the institution. c) Provide the details of the degree courses taught in Indian languages and bilingually in the institution. As per the current practice of the AKTU, Lucknow since the examinations are conducted in English, the degrees are also awarded in English only. As per the future plan the university will be pursued to award degree according to medium of the examination. d) Describe the efforts of the institution to preserve and promote the following: i. Indian languages (Sanskrit, Pali, Prakrit and classical, tribal and endangered etc.) ii. Indian ancient traditional knowledge iii. Indian Arts iv. Indian Culture and traditions. One compulsory course to make the students aware about our rich cultural heritage is floated in third year named as Indian tradition, culture and society (KNC 502/602), regular cultural activities are organized in the institute such as REETH, Hindi divas, nukkadnatak, poster making competition etc. e) Describe any good practice/s of the institution pertaining to the appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course) in view of NEP 2020. The future plan of the institution is to acquaint all teachers to teach their respective subjects in Hindi and English for the benefit of students, this effort will propagate to use of Hindi language and repertoire of knowledge based will be created in Hindi oriented technical jargons. This will tantamount to a culture of supporting Indian

5. Focus on Outcome based education (OBE):

knowledge system.

i. Describe the institutional initiatives to transform its curriculum towards Outcome based Education (OBE)? AKTU being the affiliating university is responsible for Curriculum is provided by the University and lately the university is prescribing the curriculum with objective an outcome based education features. Explain the efforts made by the institution to capture the Outcome based education in teaching and learning practices. • The institute runs 6 programs and all programs have clearly defined Program Educational Objective, Program Outcomes, Program Specific Outcomes, Course Outcomes. • The Vision and Mission statements of the institute as well as the programs are displayed on the institute website as well as on the prominent places of institute premises. • At the beginning of every academic semester, the course objectives & outcomes are provided to the students in the form of Course description (hardcopy) & thereafter in the respective orientations & verbally discussed with the students by respective teachers. • COs are framed by the each faculty & discussed in departmental meeting. The course outcomes are based on brainstorming among the faculty and drafted according to the Bloom's Taxonomy learning level & aligned to POs • The course outcomes and their mapping with program outcomes and program-specific outcomes are elaborately discussed and derived by all faculty members. • COs and PSOs are displayed in the Department, Laboratories, and Department library. • Mapping of COs with POs and PSOs is done by the faculty members. • Each faculty mandatorily prepares a course file ahead of commencement of semester which includes departmental vision and mission, PEOs, Pos, PSOs, Course Objectives & Course Outcomes. The Course file also contains complete scheduling of course content delivery, its timings according to prescribed timetable along with necessary assessment tools such as question papers, assignment, quiz etc aligned to Cos with target of achievement. • Through a well established mechanism relationship with course outcomes & program outcomes/ program specific outcomes are assessed. ii. Describe any good practice/s of the institution pertaining to the Outcome based education (OBE) in view of NEP 2020. a) The teacher's role

has been transformed largely to be a facilitator with learning largely achieved through approaches of student centric mechanism. Hence, accountability of learning is shared with students. b) The course description is circulated to each student at the beginning of each semester and discussed in details about the objective of the course, what the student is expected to demonstrate at the end of the course and its possible usage in the profession in the core program as well as in diverse fields since, the current technology has phased disciplinary boundaries. c) The adoption of criterion referenced measurement along with norm based measurement has been introduced to ensure each student's learning levels. d) The assessment of abstract concepts is conducted through Rubrics. The Rubrics and the evaluation criteria are discussed with students before using the Rubrics so that the student is aware of fairness and transparency in assessment and his/her level of achievement on each criterion.

6. Distance education/online education:

a) Delineate the possibilities of offering vocational courses through ODL mode in the institution. The vocational courses are designed in both modes, on campus and ODL. However ODL is limited to students of the institution only. The vocational courses offered by LERNSYS are in blended mode with substantially on line and partly on campus. b) Describe about the development and use of technological tools for teaching learning activities. Provide the details about the institutional efforts towards the blended learning. Faculty teaches a course using various tools such as using short videos, NPTEL lectures, role play, flipped classroom, educational software such as ANSYS, PRIMVEERA, AUTOCAD, SOLID WORKS etc. The teachers make efforts to structure their instructions in a blended form through various simulation exercises using the aforesaid software to facilitate learning. c) Describe any good practice/s of the institution pertaining to the Distance education/online education in view of NEP 2020. Online educational facilities work extensively offered during COVID19 period to the students however after, resumption of regular classes' online teaching is limited to assignment and Homework. Once in a week (Saturday) teachers hold classes through online mode. As envisaged the strategic plan (2022-27) of the institution, a large number of

activities related to employability enhancement skill
training have been envisaged and the prominent areas
are Industry focused curriculum, multi-skill
development & certification opportunities etc. such
services may be extended through online mode as
part of implementation of NEP2020.

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
687	612	636	656	682

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

2 Teachers

2.1

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

Response: 58

File Description	Document
Institutional data in the prescribed format	View Document

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
58	63	64	62	64

3 Institution

3.1

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

2021-22	2020-21	2019-20	2018-19	2017-18
363.21	299.52	442.38	447.25	554.79

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

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

Response:

Curricular Planning and Implementation

AIT follows the affiliating university's curriculum. However, the strategy of curriculum implementation rests with the institution for which the teachers are trained internally or externally to ensure that teaching learning process is given high priority, endorse innovative techniques for teaching, research, and overall development of students.

The Academic Council of monitors efficieny of curriculum delivery with a structured set of regulations. The Academic Cell examines all information to ensure the proper operation of the upcoming semester after receiving requests for additional faculty and infrastructure from all departments.

The institute develops its own academic calendar in advance at the beginning of the semester based on the AKTU calendar and the same is displayed on notice board and uploaded on website of the College.

HODs discuss their action plans and create timetables following the subject allocation and upload it on the college ERP. Each faculty develops a course filewith well-defined course objectives and COs with strategy to implement and evaluate the same according to a well-defined plan of relating COs with POs and PSOs. The uniqueness of curriculum delivery is reflected through use of ICT Tools inclusion.

The Bloom's Taxonomy is adopted while planning the COs to ensure coverage of all levels of skills and knowledge, the students are expected to demonstrate. The course files contain the course objectives and COs developed by each faculty through brainstorming along with aligned internal assessment, strategies. gap analysis is conducted to determine the extent of university curricula viz-a-viz the POs and PSOs and strategies beyond syllabus are formulated to ensure achievement of all POs and PSOs.

Academic Flexibility

AKTUcurriculum follows AICTE guidelines on Choice-Based Credit Systemto provide opportunity for the students to choose courses from the prescribed courses comprising core, elective and open elective courses. The curriculum follows uniform grading system. AKTU allows institute freedom to make its own pool of subjects with total no of credits not exceeding 28 per semester.

Curriculum Enrichment

The curriculum consists of Humanities, Basic and Engineering Sciences, Professional Core subjects, Open and Professional Electives, skill development courses, mini-projects, laboratory work and project work. Technical report writing and Language laboratory enhance written and verbal communication skills. Study

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of fundamental concepts of basic sciences enables the students to understand and apply them to solve engineering problems. Use of ICT Tools and self-learning through NPTEL, MOOC etc. is extensively used by students.

The curricular gaps identified in achieving POs and PSOs are covered with contents/activities beyond syllabus for curricular enrichment as well as meeting the highest levels of Bloom's Taxonomy.

Student Centric Learning strategies such as collaborative assignments, problem-based learning etc. are used along with inviting guest lectures, industrial trips, and seminars, students gain exposure to the real world.

Feedback System

A systematic feedback is conducted at the end of every semester as well as at the completion of each batch, to assess achievements of courses and programs. Feedback also includes infrastructures facilities and teaching learning process.

File Description	Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1 Number of Add on /Certificate/Value added programs offered during the last five years

Response: 30

File Description Document Institutional data in the prescribed format **View Document**

1.2.2 Percentage of students enrolled in Certificate/ Add-on/Value added programs as against the total number of students during the last five years

Response: 30.49

1.2.2.1 Number of students enrolled in subject related Certificate/ Add-on/Value added programs year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
243	00	269	241	245

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

1.3 Curriculum Enrichment

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

Response:

The course curriculum of UG programs contains some courses to inculcate human values and professional ethics among students. The courses named Soft Skills I & II – Theory (KNC101/201), Communication Lab (KAS154/254) Practical, Universal Human Values and Professional Ethics (KVE301/401), and Technical Communication (KAS301/401) are added to inculcate human values and professional ethics among all the students. Compulsory courses on the Constitution of India, Law, and Engineering (KNC501/601)/Indian Tradition Culture, and Society (KNC502/602) are also added to the B.Tech program. Three open elective courses named as Human values in Madhyasthdarshan (KOE 089), Human Values in Buddha and Jain Darshan (KOE 098) and Human Values in Vedic Darshan (KOE 099) in final year for the development of the humanistic and ethical values in the students.

Courses related to the environment are also included in the curriculum to make students aware about the issues and challenges being faced in saving the environment. In first year of the B.Tech. degree program a compulsory course, Environment and Ecology BAS 104/204 is taught.

Apart from curriculum, the institute organizes sessions and workshops on gender equality and women empowerment with involvement of students, faculty and staff. In the current academic year 03 such events have been organized so far.

Institute conducts regular green audits for analyzing the environment related issues being faced by the institution and take corrective actions based on the impact outlined in the audit.

In addition to that institution's core courses, multiple workshops and FDPs are organized to address universal human values among students and faculty members.

Courses to deal with Gender:

Our institute organized some special programs associated with gender equality and a series of invited talks for the Women's Safety Programme, a guidance lecture for female students, and a programme on women's empowerment.

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

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

Response: 19.94

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

Response: 137

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

1.4 Feedback System

1.4.1 Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website (Yes or No)

Response: No

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

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Enrolment percentage

Response: 59.4

2.1.1.1 Number of students admitted year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
231	156	163	170	171

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
300	300	300	300	300

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

2.1.2 Percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (Exclusive of supernumerary seats)

Response: 86.08

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

2021-22	2020-21	2019-20	2018-19	2017-18
102	85	63	99	90

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

2021-22	2020-21	2019-20	2018-19	2017-18
102	102	102	102	102

File Description	Document
Institutional data in the prescribed format	View Document

2.2 Student Teacher Ratio

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

Response: 11.84

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 using ICT tools

Response:

The traditional teaching-learning methods are supplemented by adopting innovative student centric methods such as Collaborative Learning, Workshops, Seminars, Simulation, Student Presentations, Demonstration, Hands on experience, Problem based learning, Flipped Classroom, guest lecture, debate and competitions, MOOCs, Project- based learning, Video &PPTs, Proto-type model, Research projects, Language games, Viva, to encourage Participative, Problem solving and Experiential learning. Regular visits to nearby industries and other places of importance is part of the teaching process. MOUs are done with training institutes of various domains and industries for understanding the specific requirements of different industries.

The institute uses ICT-enabled technologies, such as online resources, in addition to the chalk-and-talk mode of instruction extensively for effective teaching and learning. To expose the students to cutting-edge information and practical learning, the faculty uses ICT-enabled classrooms with LCD projectors, Wi-Fi access, software, and PowerPoint presentations created by teachers.

Through the significant use of ICT resources and other computing and storage capabilities like Cloud-based Google Drive, the college is "becoming green" and saving paper. Depending on the needs of the students and the subject being taught, the faculty employs a variety of teaching techniques. They employ traditional techniques like teacher-centered lectures as well as interactive, team-based, and ICT-enabled techniques like Microsoft Teams and Google Classroom. In addition to sending reading materials and lab guides via email and other methods, the university uses IT-enabled learning resources like PPT, video clippings, animations, and video demos from web sources.

The teaching learning method used by teachers is summarized below:

- 1. Virtual Labs
- 2. Demonstration

- 3. Flipped Classroom
- 4. Guest Lectures
- 5. Industrial Training
- 6.MOOC
- 7.PPTs
- 8. Viva
- 9. Workshops
- 10. Peer Learning Groups

File Description	Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

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

Response: 97.19

2.4.1.1 Number of Sanctioned posts / required positions for teaching staff/ full time teachers year wise during the last five years:

2021-22	2020-21	2019-20	2018-19	2017-18
64	64	64	64	64

File Description	Document
Upload supporting document	View Document

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

Response: 15.11

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D. / D.M. / M.Ch. / D.N.B

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Superspeciality / D.Sc. / D.Litt. year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
9	10	10	10	8

File Description	Document
Institutional data in the prescribed format	View Document

2.5 Evaluation Process and Reforms

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

Response:

AIT Kanpur follows transparent internal assessment through the following strategies:

Direct Assessment

- AIT follows mechanism of internal assessment as per the academic calendar of the college.
- The common test is conducted twice in a particular semester to measure the performance and knowledge of the students as midterm 1 and midterm 2.
- The midterm exams are designed to cover course outcomes that are pre-determined by the teachers.
- If choices are given between questions, care is taken to design questions with same complexity so that each course outcome is attempted by all students and none of the course outcomes are missed out.
- Each course outcome related to question is aligned to pre-planned target by the teacher to assess the extent of achievement with the student performance in the exam. The result analysis and future course of corrective actions are determined based on the comparisons between targets and achievements.
- The results of course outcomes are mapped to the POs/PSOs they are aligned to and achievement against the pre-established targets is mapped.
- The students are also evaluated on the basis of assignments, lab work, quiz or any other examinable area aligned to COs and POs/PSOs.
- All the scores obtained by the students are compiled to determine their overall performance.
- After result analysis the answer sheets are circulated to the students and discussed so that the

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student can work on their weaknesses and improve their performance

• The students are required to maintain a minimum of 75% attendance to appear to appear in the examination.

Indirect Assessment

• At the end of the semester, students provide a feedback on their assessment of course objectives and outcomes and extent of learning and benefit accrued by them as well as assessment of extent of overall course coverage.

While preparing overall achievement, 80% of direct and 20% of indirect assessments are considered and impact analysis conducted for future corrective actions.

The Institute also conducts the pre-University test for the students before the University Exams to provide practice the students and measure their performance and knowledge. In the Pre-University test, the marks are shown to the students, and the class related to revision, doubt- clearing and remedial testing was conducted in the college.

AKTU conducts common exams at the end of the semester. The results of two internal exams are forwarded to the university.

Since the examination are conducted by AKTU does not cover a course outcomes as designed by the teachers. Therefore, analysis of university results is conducted separately.

Grievance Redressal of Examination:

Internal: Grievances emerging from students is submitted through an application which is reviewed by the Director and Controller of Examination (COE) and the issue is resolved within one week.

External: The grievance is submitted through AKTU ERP and the help is offered within 30 days by the university. The students is also entitled to see his/her answer sheets and if the grievance is further continued, the matter is resolved by COE of AKTU.

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

2.6 Student Performance and Learning Outcomes

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

Response:

Teachers and students are aware of the stated Program and Course outcomes of the Programs offered by the institution. The POs and the COs are displayed on the institutional website under a separate section under each department.

The evaluation mechanism of POs and PSOs through COs is well defined and each teacher through various mechanisms of examinations assesses the progress of the students in achieving COs, POs and PSOs.

The assessment is conducted in such a manner that both methods of examination are given equal weightage i.e. summative and formative assessment. Hence, assessment and evaluation is continuous process.

- At the beginning of every semester, the COs are shared with the students by teachers.
- POs and PSOs are displayed in the Department, Laboratories, and Department library.
- POs and PSOs are communicated to employers and Alumni by sending mail and during the Alumni Meeting.
- During the IQAC meeting and faculty meeting, POs and PSOs are discussed.

Course Outcomes (COs)

- COs are framed by each faculty.
- The COs and their mapping with POs and PSOs are discussed by the faculty and finalized.
- COs are communicated to the students during the introduction class.
- Course descriptions are shared with the students in advance.

Attainment of POs and COs are evaluated by the institution.

- The level of attainment of POs, PSOs and COs are measured using indicators throughout the semester of the academic year.
- The faculty records the performance of each student with the help of the specified COs through a continuous evaluation process. The faculty provides home assignments to students, conducts internal tests, viva voce, surprise tests, quiz, projects etc. To assess the POs and PSOs attained by each student

Some of the key indicators of measuring attainment are:

1. **End Semester University Examination:** Being a affiliated college of AKTU, the students of AIT take examinations as per the semester pattern, through which the institution measures POs based on the course attainment level fixed by the faculty.

- 2. **Internal Assessment:** The students are given assignments designed in alignment with the POs of the respective subject. Additionally, internal/class tests, quiz, viva etc. are conducted repeatedly in a semester to judge the performance of students regularly.
- 3. **Practical Assessment/ External Assessment:** Practical assessments are evaluated by inviting external experts appointed by the university to evaluate each student by conducting Practical examinations, taking Viva-Voce and evaluating the practical files.
- 4. **Result Analysis:** At the end of each semester, a result analysis of each course is carried out indicating the percentage of students falling in different categories of Percentage and CGPA obtained. This is an effective indicator to evaluate the level of attainment of POs, PSOs and COs as specified by the university.

File Description	Document
Provide Link for Additional information	View Document

2.6.2 Pass percentage of Students during last five years

Response: 80.48

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

2021-22	2020-21	2019-20	2018-19	2017-18
164	140	134	99	98

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

2021-22	2020-21	2019-20	2018-19	2017-18
178	153	174	144	140

File Description	Document
Institutional data in the prescribed format	View Document

2.7 Student Satisfaction Survey

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2.7.1 Online student satisfaction survey regarding teaching learning process Response: 3.26 File Description Document Upload database of all students on roll View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

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

Response: 4

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

2021-22	2020-21	2019-20	2018-19	2017-18
3.50	0.50	0	0	0

File Description	Document
Institutional data in the prescribed format	View Document

3.2 Innovation Ecosystem

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

Response:

AIT has setup an innovation lab and has organized following prominent activities to inculcate innovative mindset among students with collaborative approach within the institutional departments and interinstitutions:

- **Toycathon:** Students make innovative toys using basic science principles. Selected innovative toys are sent to parent industry (Superhouse Ltd.) for large scale manufacturing recognizing the effort of the students.
- **Robowar:** Special training is given to the students with specific purpose to design robots especially for robowar competition.
- **Tech Erica:** Students developed products out of waste material in an inter college competition winning cash prizes.
- **Tech Afisa:** Students participate in poster making competition at institutional level events. Best posters are awarded with a medal and gifts.
- Roll the Reel: Students participate in photography competition, an institution level event. Best

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photographs are awarded with a medal and gifts.

• Drone making workshop: As an experiential learning, students developed two drones and made them operational.

AIT has incubation and entrepreneurship cell which regularly conduct workshops and seminars for the development of entrepreneurial spirit in the students. In the current year three events were organized with the participation of approximately 500 students. Recently AIT incubation cell has entered into an MOU with ANEXPRIME, a startup involved in development of drones and robots. The institution will provide technical support and usage of laboratories and machinery facilities. In return the ANEXPRIME will train and involve students in development of robots and drones.

The faculty members have filed 05 patents in the last 05 years in the area of computer communication, Biomedical and mechanical engineering.

Community service: Students are extensively involved in following community and societal activities:

- 1. Students spend a special day in a year with the residents of old age homes and distribute warm clothes, food and share their experiences to ease their loneliness and needs of the senior citizens
- 2. Students participate in Swachchh Bharat Abhiyaan and undertook following activities:
 - Survey on request of IIT, Kanpur ``Catch the rain", project by Jal Shakti Mantralaya was conducted by 40 students on old unfunctional water bodies in 5 adopted villages. The report was submitted to IIT Kanpur.
 - A special drive by female faculty to create awareness among the rural women in nearby village Kulgaon on personal hygiene and cleanliness (05 female faculty members) on World Population day on 11th July 2021.
 - One medical camp was organized in the institute to address medical issues among the rural population.
 - On the world literacy day 8th September 2021, a camp was organized in Kulgaon by the students of AIT for school students to explain the Importance of Education through 'Nukkad Natak'.
 - Awareness camp about medical and Covid-19 prevention practices was organized and the instructions were disseminated through whatsapp and a report has been shared with officials of Unnat Bharat Abhiyan.
- 3. The details of MOUs and activities related to Collaboration with Industries and prominent training bodies are reported in criteria 1.2.1 & 3.5.1.
- 4. The faculty members of AIT published 39 papers in the last 05 years.

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

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

Response: 16

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

2021-22	2020-21	2019-20	2018-19	2017-18
02	01	04	05	04

File Description	Document
Institutional data in the prescribed format	View Document

3.3 Research Publications and Awards

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

Response: 0.6

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

2021-22	2020-21	2019-20	2018-19	2017-18
13	5	3	11	03

File Description	Document
Institutional data in the prescribed format	View Document

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

Response: 0.07

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

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	1	0	1

File Description	Document
Institutional data in the prescribed format	View Document

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 last five years.

Response:

AIT Kanpur is situated away from the city in Rooma Area where lots of agricultural activities are taking place; there are small industrial setups also. To realize the vision and mission of the institution and holistic development of the students, the students are given opportunities to work in the community setup by visit and interaction with the local community and the students offer technical services that includes repair of equipment, fault identification and offering remedial measures. The students are also involved in the following activities:

- 1. Students spend a special day in a year with the residents of old age home and distribute warm clothes, food and share their experiences ease their loneliness and needs of the senior citizens. The senior citizens appreciate the efforts of the students and some of the students continue to visit the facilities and support their needs which is a big learning opportunities for the students to understand the needs of senior citizens and contribute to their holistic development and sensitivity towards the needy
- 2. Students participate in Swachchh Bharat Abhiyaan and undertook following activities:
- Under the guidance of Jal Shakti Mantryalaya and IIT, Kanpur students conducted a Survey under "Catch the rain" project on old unfunctional water bodies in 5 adopted villages. The report was submitted to IIT Kanpur.
- A special drive by female faculty to create awareness among the rural women in nearby village Kulgaon on personal hygiene and cleanliness (05 female faculty members) on World Population day on 11th July 2021.
- To sensitize the students on environment and green issues, students are encouraged to plant trees on the campus and take care of them during their stay in the college. Each year over 500 trees are planted by the students.
- On the world literacy day, a camp was organized in Kulgaon by the students of AIT for school students to explain Importance of Education through 'Nukkad Natak'.
- Awareness camp about medical and Covid-19 prevention practices was organized and the

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instructions were disseminated through whatsapp and report has been shared with officials of Unnat Bharat Abhiyan.

- Women empowerment program on International women day is organized by the students with full participation which is relevant in not only sensitizing students on gender issues but also help empower girl students to prepare themselves for world of work.
- All institutional events are organized by the students providing them opportunities of acquiring team work, leadership, presentation and communication skills.

File Description	Document
Provide Link for Additional information	View Document

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

Response:

The Institute has associations with various prestigious organizations to help the students in enhancing their employability skills while providing them an insight into a real time industry environment.

The collaborative relationship between the industry and Allenhouse Institute of Technology creates interactive strategies like content development and delivery by faculty of AIT and relevant experts from Industry. New training modules are incorporated from time to time which are delivered jointly by faculty and subject matter experts from Industry. The enrichment and specialized programs established through productive alliances with pioneers in their industry helps us in guiding students and achieving academic excellence. The alliance enables the students to get Industrial Readiness, Professional Competencies and Soft Skills Development.

In order to bridge the academia-industry gap, we have also signed MOUs with various corporates.

Owing to its consistent endeavor Allenhouse Institute of Technology has been conferred with various Awards and Recognitions such as:

- Outstanding Career Building support for the Students by the Imperial Society of Innovative Engineers (ISIE) India, 2020-21
- Allenhouse Institute of Technology has been ranked 7 th in India &1st in U.P. in the category of "Quality of Campus Life" in the Education World India Higher Education Grand Jury Awards 2022-23.
- The institute is appreciated for blood donation camps organized in the campus by Henry Horseman Ursula Hospital, a UP Government entity.

File Description	Document
Provide Link for Additional information	View Document

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 organised in collaboration with industry, community and NGOs) during the last five years

Response: 3

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., year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	0	0	0

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

3.5 Collaboration

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

Response: 8

File Description	Document
Institutional data in the prescribed format	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 Availability of adequate infrastructure and physical facilities viz., classrooms, laboratories, ICT facilities, cultural activities, gymnasium, yoga centre etc. in the institution

Response:

The institute has the necessary academic and physical resources to carry out the various programs following AICTE regulations. The college campus spans 5.11 acres. The numerous departments, including those for mechanical engineering, electronics & communication engineering, computer science & engineering, and computer science-AIML and civil engineering are housed in separate blocks. The seminar halls, laboratories, and classrooms are all well-equipped. The college features a large playground for sports in addition to the building. The college has created a culture that values extracurricular activities.

The institute campus is kept in an orderly and tidy manner. The physical and technological infrastructure of the institution is excellent for supporting the seamless operation of the current academic programs and administration.

Labs are fully equipped with the latest equipment and the number is adequate to meet the curricular requirements. Continuous upgradation of infrastructure and lab is a regular feature. Maintenance of building and equipments is through a structured mechanism ensuring continuous support to teaching-learning process without hindrances.

The library is equipped with 27397 technical books, Delnet and AKTU-Nalanda journals subscribed and (Elsevier, Sage. Oxford, Springer etc.), e-books and learning resources available. The library has digitized system Koha in place. The library has 10 computers with wi-fi facilities. The institution has earmarked budget for the library based on the requirements received from each department. Each year the library is replenished with new learning resources recommended by the faculty. Library is open from 0800 to 2000 Hrs.

Hostel facilities for boys and girls are located on campus housing 120 boys and 48 girls. The hostel has wifi, common room, mess, gym and indoor games. The hostel has First-aid facility and arrangement with local hospital for hostel students.

The institute has 32 class rooms, 04 Tutorial rooms, 02 seminar halls, 01 conference hall and 01 auditorium, in which 04 class rooms, auditorium and seminar halls are equipped with ICT facilities.

The institute has well equipped canteen with the capacity of 100+ students and staff. Hygiene and cleanliness is well maintained.

100% drinking RO water is available students and staff and is well maintained. Power backup supports 400+ KVA is available. The entire institution is covered by LAN networking and limited wi-fi hubs are available for the benefit of the students at strategic locations.

The campus is well-equipped with numerous cameras that are operational around the clock to ensure the safety of students and staff. This proactive measure enables staff to react to circumstances promptly and

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avoid accidents. Every building at AIT has a fire suppression system in place.

File Description	Document
Provide Link for Additional information	View Document

4.1.2 Percentage of expenditure, excluding salary for infrastructure augmentation during last five years (INR in Lakhs)

Response: 6.58

4.1.2.1 Expenditure for infrastructure augmentation, excluding salary during the last five years (INR in lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
35.66	1.21	30.26	47.15	24.3

File Description	Document
Institutional data in the prescribed format	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS), subscription to eresources, amount spent on purchase of books, journals and per day usage of library

Response:

The college library is made up of a central library called Sir Syed Ahmad Khan and many departmental libraries, all of which work together to support the institution's teaching, research, and outreach programs.

Library is automated using Integrated Library Management System (ILMS) called KOHA. This is one of the popular in world over and most of the institutions are used.

AIT has subscription of DELNET & NALANDA e-consortium for e-journals and e-books. The advantage of DELNET and NALANDA is that it provides unlimited access a large number of international journals with latest edition which includes a large number of SCOUPS; SCI; e-SCI and UGC-care journals etc. These journals are extensively used by faculty for academic delivery and for their research/project work. All students and staff members including teaching faculty have access to e-journals through DELNET & NALANDA e-consortium from anywhere.

Expenditure for purchase of books/e-books and subscription to journals/e- journals in past 5 years the year (INR)

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Year (2021-2022)

Expenditure on the purchase of books/e-books:

Books: 5,12,456/-

e-books/e-journals: 13,570/-

Subscription of Library software: 11,800/-

Year (2020-2021)

Expenditure on the purchase of books/e-books:

Books: 1,04,421/-

e-books/e-journals: 63,570/-

Year (2019-2020)

Expenditure on the purchase of books/e-books:

Books: 5,46,968/-

e-books/e-journals: 38,570/-

Year (2018-2019)

Expenditure on the purchase of books/e-books:

Books: 4,42,619/-

e-books/e-journals: 13,570/-

Printed Journal: 1,62,563/-

Year (2017-2018)

Expenditure on the purchase of books/e-books:

Books: 3,62,662/-

e-books/e-journals: 11,500/-

Printed Journal: 1,07,656/-

An average footfall in the library on a per day basis is around 80.

File Description	Document
Provide Link for Additional information	View Document

4.3 IT Infrastructure

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

Response:

AIT has well equipped labs with 508 computers and networking equipment. All the departments are also having sufficient computers for departmental requirements.

Entire institute is internet enabled. The networking is provided by the LAN and on prominent places wi-fi hubs are available which can be accessed by the students and teacher.

AIT has four internet connections having 50 MBPS, 30MBPS, 48 MBPS and 20 MBPS bandwidth. Institute has all required software such as:

- MSDN (Microsoft Dream Spark)
- M.S.Office,
- Antivirus
- C++ and
- EWL English Language (Communication Lab)

Sufficient number of printers, overhead projectors and reprography machines are available for supporting the teaching learning process.

The institution has recently created "Allen Informatics Center" with a capacity 270 state of the art computers well connected with internet facility. Though the access is available to the students but system is well equipped to conduct a large scale public online examination for recruitment in the national services such as defense, railways etc.. The center is also utilized by the public for competitive examination. These examinations are organized and arranged by faculty and staff of the AIT. This center is maintained by the administration department of AIT whereas the CSE department maintains the center technically. This is one of the important revenue generating activity of AIT.

File Description	Document
Provide Link for Additional information	View Document

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

Response: 1.35

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

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year:

Response: 508

4.4 Maintenance of Campus Infrastructure

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

Response: 14.55

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

2021-22	2020-21	2019-20	2018-19	2017-18
42.66	45.20	58.87	49.58	110.34

File Description	Document	
Institutional data in the prescribed format	View Document	

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Percentage of students benefited by scholarships and freeships provided by the Government and Non-Government agencies during last five years

Response: 60.98

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government and Non-Government agencies year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
368	377	366	431	454

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

5.1.2 Capacity building and skills enhancement initiatives taken by the institution include the following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4. ICT/computing skills

Response: A. All of the above

File Description	Document
Institutional data in the prescribed format	View Document

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

Response: 18.82

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

2021-22	2020-21	2019-20	2018-19	2017-18
65	78	173	190	110

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

5.1.4 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

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

Response: A. All of the above

File Description	Document	
Upload supporting document	View Document	

5.2 Student Progression

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

Response: 75.19

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

2021-22	2020-21	2019-20	2018-19	2017-18
124	124	118	142	86

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

2021-22	2020-21	2019-20	2018-19	2017-18
141	145	173	153	178

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

5.2.2 Percentage of students qualifying in state/national/international level examinations during the

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last five years (eg: JAM/CLAT/GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 8.86

5.2.2.1 Number of students qualifying in state/national/international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ Judicial Services/Public Prosecution services/All India Bar Exams/State government examinations) year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	3	1	0

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

2021-22	2020-21	2019-20	2018-19	2017-18
19	23	18	11	8

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

5.3 Student Participation and Activities

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

Response: 0

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

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

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

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

Response: 0.6

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	1	0	1	0

File Description	Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

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

Response:

Alumni are a very important reflection of the success of any institute as after being qualified they serve the economy of the country. Alumni of AIT are always willing to give back to their alma-mater. For AIT, they help to solve the problems of employability, quality of education. Institute makes all efforts to nurture the relationship with the alumni. AIT started using an advanced alumni networking portal "Vaave", to leverage the power of our alumni. Through the use of this portal alumni of the institute are connected just like any other social media platform. Institute shares the information of events, activities and placement information with the alumni. If some company has requirements of experienced candidates, the information is sent to pass out students. The portal has a discussion forum where alumni can share their views and discuss the relevant issues.

Alumni who are achieved good positions are invited for taking student sessions and students/ alumni can attend the session via this portal.

All the expenditure on VAAVE portal membership is borne by AIT.

AIT is making concerted efforts to ensure that the alumni association is registered with the appropriate authority for which required documentations have been prepared. Except the COVID-19 period, alumni meets are held on annual basis and in last five years three such meetings have been held which resulted

into fruitful outcomes such as a regular interaction between alumni and existing students on technical guidance and propagating newer technological concepts for the existing students.

The link of the alumni portal is https://alumni.superhouseeducation.com

File Description	Document
Provide Link for Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance and leadership is in accordance with vision and mission of the institution and it is visible in various institutional practices such as decentralization and participation in the institutional governance

Response:

The vision and mission statements of the institute are as follows:

Vision statement of Institute

"To become a nationally known institute that produces technically sound graduates and responsible citizens capable of catering to the ever-changing needs of the nation and the world."

Mission Statement of the Institute

- M1: To promote student centric teaching learning methods by strengthening state-of-art facilities and resources to facilitate quality education.
- M2: To promote technological research, development, and innovation.
- M3: To establish collaboration with industry and academics to learn best practices of industries and corporate.
- M4: To enhance placement of students by providing employability and entrepreneurial skills with ethical values.
- M5: To create an environment of internal revenue generation for sustenance and growth of institutions.

AIT has a Board of governors (BOG), headed by the Chairman who is also a renowned industrialist and the members are as the AICTE prescribed norms. BOG has representation per industry/academicians/Government representative/Faculty and Director being a member secretary. BOG is the supreme decision making body that takes decisions on agenda issues raised by the director. All academic, research, administrative and other activities of the institute are reported to BOG and resource mobilization with educational quality control is assured.

BOG takes policy decisions in matters related to planning human resources, recruitment of faculty and staff, training of faculty, staff and students, performance appraisal of all the employees and finance mobilization and management.

The BOG ensures participation in decision-making process to achieve the mission and vision of the institution. BOG develops strategy for development and deployment of functions of various institutional units, directives and guidelines with specific plan of implementation aligned to academic and

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administrative improvements and quality of institution. The financial audit of the institution is reported to the BOG by the Director.

BOG delegates financial and administrative powers to various institutional functionaries including director/HODs and others.

File Description	Document
Provide Link for Additional information	View Document

6.2 Strategy Development and Deployment

6.2.1 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, deployment of institutional Strategic/ perspective/development plan etc

Response:

The institute has clearly defined code of conduct, rulebook and procedures. Full transparency is maintained as the copy of the same is kept in the library accessible to all employees of the institution. The participatory approach is adopted by the management with the representation of faculty in the BOG on rotation basis. The BOG meets once a year as per the agenda items prepared by the member secretary to provide single window clearance.

The Institute stakeholders have been involved in preparation of the strategic plan (2022-2027) and approved by the BOG. The strategic plan has been developed to achieve the mission and vision of the institute. As per the strategic plan institute took the first step in obtaining the NAAC accreditation. The institute is taking action in line with the long term and short term goals provided in the strategic plan.

The Institute has developed SOPs and guidelines for day to day functioning. The Organizational Chart's link is given herewith showing the hierarchy and reporting system:

All the duties and responsibilities are clearly defined in the rule book along with the function of BOG and other committees as part of the governance of the institution.

Functions of BOG:

Form committees, sub committees and advisory committees.

- Evolve proper set of rules and regulations including the service rules for all group of staff, salary norms, promotion norms etc
- Delegate the financial powers to various levels of functionaries
- Define clearly the powers of the senior administrative personnel.

- Fix the fees and other charges payable by the students of the college on the recommendations of the Finance Committee subject to the approval of govt fee fixation committee.
- Approve institution of scholarships, fellowships, studentships, medals, prizes and certificates on the recommendations of the Academic cell.
- Perform such other functions, as may be necessary and deemed fit for the proper development, and fulfill the objectives, vision and mission of the institute.

Frequency of meetings: Once/twice in a year.

Major institutional committees:

- 1. AMC/Advisory/Quality Assurance Cell
- 2. Examination Cell
- 3. Library committee
- 4. Sports Committee
- 5. Cultural committee
- 6. Industry- Institute Interaction Committee
- 7. Entrepreneurship and incubation Cell
- 8. Disciplinary Committee etc.

File Description	Document
Provide Link for Additional information	View Document

6.2.2 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Upload supporting document	View Document

6.3 Faculty Empowerment Strategies

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

Response:

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The AIT management assures that staff commitment and ownership is maintained to ensure the growth of the Institute. The institution has strong welfare policies in place for its teaching and non-teaching employees in order to sustain the high levels of motivation and satisfaction. The various welfare schemes and policies in favor of employees are as follows:

Common Welfare Schemes:

- 1. The Institute provides special leave (sabbatical leave etc.) and out duty leave, to facilitate all its employees as per the institute policy.
- 2. Maternity benefits as per norms
- 3. Leave Travel Concession
- 4. All the non-doctoral staff members are encouraged to get enrolled for a part-time Ph.D. program.
- 5. On campus First Aid medical facilities.
- 6.EPF facility is provided to its employees as per labor laws.
- 7. Health Insurance
- 8. Subsidized Bus Transportation Facility for staff
- 9. The staff has access to sports and fitness facilities so they can live healthy, balanced lives.

Academic privilege to Teaching & Non- Teaching Staff:

- 1. The Institute encourages Staff members to engage in various Workshops, FDPs, conferences, and certifications in India and abroad and offers financial support by reimbursing the registration expenses as well as TA/DA.
- 2. The institute assists with the filing and publishing of patents.
- 3. The Institute encourages faculty members to join a variety of professional organizations and reimburses subscription fees.

Research and development incentive programs:

The institute offers substantial rewards for publishing papers in journals and conferences. Giving teacher's access to personal computing resources: The Institute offers desktop computers and internet to all faculty and staff members and encourages them to use contemporary teaching aids.

Performance appraisal mechanism:

Institute has a well-defined performance appraisal mechanism in which faculty share a self-appraisal report and on the basis of the report, yearly appraisals are done.

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

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

Response: 0

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

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

File Description	Document
Institutional data in the prescribed format	View Document

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

Response: 18.01

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

2021-22	2020-21	2019-20	2018-19	2017-18
20	13	11	2	10

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

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

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

6.4 Financial Management and Resource Mobilization

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

Response:

The AIT uses a structured and coordinated technique to raise funds. For efficient use of funds and resources, the institute maintains a responsible and transparent financial system. The institute needs money for salaries, infrastructural developments, routine academic and extracurricular activities, competitions, participation in intra- and inter-university sports and games.

Sources for Institute funds are as follows:

- The student tuition fee is the major source of income for the institute
- Scholarships: Scholarships and Grants for students from different departments of both state and central governments.
- Funds from conducting examinations in college and Allen Informatics center.
- Various government and non-government agencies sponsor events like seminars and workshops.
- Funds provided by the management

Utilization of Funds

- Fund for Salary of Faculty members & staff
- Funds for Student welfare
- Various maintenance and civil work
- Faculty development
- Institutional day to day expenditure

Optimal utilization of funds

The director of Allenhouse Institute of Technology prepares the institute budget before the financial year starts. The institutional budget covers ongoing costs including salaries, internet and electricity, stationary, and other maintenance. It comprises budgeted costs including furniture purchases, lab equipment purchases, and other development costs. The members of the Board of Governors review and approve the budget. The purchase and accounts departments keep an eye, if spending is going over budget. Additionally, accounting professionals who certify the financial statements for each fiscal year are hired and an audit report is prepared on an annual basis, the same has been shared on the website of the institute.

File Description	Document
Provide Link for Additional information	View Document

6.5 Internal Quality Assurance System

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

Response:

The IQAC Cell of the institute works towards improving and maintaining the quality of teaching learning process, identifying and suggesting new ways of using modern aids and ICT tools, developing suitable infrastructure, and offering suggestions for making AIT a better learning place. IQAC is an effective and efficient internal coordinating and monitoring mechanism. The IQAC is important in preserving and enhancing the institution's quality and provides recommendations for quality-improving actions to be taken. The Institution's teaching, research, and publication activities are planned, directed, carried out, and evaluated by the IQAC. The sub-committees dealing with various activities and departments implement the IQAC guidelines and report the feedback.

Through quality improvement programs and best practices, the IQAC works to establish a culture of quality throughout the institution. It plays a crucial role in preserving and enhancing the institution's quality. The following IQAC activities have seen significant quality improvements as a result of institutionalization: Strategic planning of important areas and responsibility allocation –

- 1. Prepare reports of all the quality assurance decisions
- 2. Student technical training
- 3. Academic results
- 4. Student soft skills development
- 5. Placement support
- 6. Faculty development programs
- 7. Research and development
- 8. Interaction with industry
- 9. Self-Study Reports of various accreditation bodies (NAAC, NIRF, NBA).
- 10. Performance Based Appraisal System (PBAS)

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

6.5.2 Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
- 2. Collaborative quality initiatives with other institution(s)/ membership of international networks
- 3. Participation in NIRF
- 4.any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA, ISO Certification etc

Response: C. Any 2 of the above

File Description	Document
Institutional data in the prescribed format	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity and Institutional initiatives to celebrate / organize national and international commemorative days, events and festivals during the last five years

Response:

AIT organizes National festivals as well as Anniversaries for the great Indian personalities like Teacher's Day on 5th Sep. Engineer's day on 15th Sept, International Women's Day on 8th March, International Yoga Day on 21st June, Independence Day on 15th August, Republic Day on 26th Jan, World Environment Day on 5th June and birth anniversary of Mahatma Gandhi on 2nd Oct, Dr. B. R. Ambedkar on 14th April and Maharshi Valmiki Jayanti on 24th Oct.

The Institution promotes Gender Equality & Sensitization in curricular and co-curricular activities, and provides facilities for women on campus. At AIT various co-curricular and extra-curricular activities are conducted regularly for all students and faculties to promote Gender Equality & Sensitization.

The Institute organizes activities regularly throughout the year for the all-around development of students and faculties.

- 1. **International Women's Day:** Recently on the occasion of International Women's Day, AIT organized a Felicitation Ceremony for 'Exemplary Women who carved their way through the Challenges of Gender Equality.' The Chief Guest of the event was Ms Garima Chaudhary, IRS, Additional Commissioner of Income Tax (GOI). She shared her life experiences on how women can fight for their rights and motivate them on March 8, 2021.
- 2. **Session on Gender Equality:** AIT invited FICCI Flo Kanpur this year to organize an event on "BE WHO YOU ARE". The Guest of the Event was Zainab Javid Patel. The event focused on the struggles that marginalized communities have to face in Indian Society. The inspiring story of Zainab Javid was very inspiring.
- 3. **World Population Day:** AIT organized an awareness program in a village on the occasion of World Population Day for highlighting the role of women in raising fewer but healthier children subsequently nurturing a progressive population. The program was attended by around 70 women who actively participated and interacted with the team.
- 4. **International Yoga Day:** AIT organizes yoga day on 21st June every year for Senior Management, faculty members and students. The guest for the session for this year was Yog Guru AtulyaJi.
- 5. **Environment friendly practices:** Energy conservation, rain water harvesting, waste recycling, carbon neutral, green practices etc. are practiced by the institute.
- 6. **Internal Green audit:** Campus has started to sensitize the students about the environmental issues and challenges. The students are trained on Energy audit and students have contributed to energy audit of parent industry successfully.

File Description	Document
Provide Link for Additional information	View Document

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7.1.2 The Institution has facilities and initiatives for

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

Response: A. 4 or All of the above

File Description	Document
Upload supporting document	View Document

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

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

Response: A. All of the above

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

7.1.4 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic diversity and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

Allenhouse Institute of Technology is undertaking various initiatives in the form of celebration of days of national heroes and famous personalities, national Festivals, and other such activities to promote a cultural environment by bringing students and faculty with diverse backgrounds on a single stage. These functions help in developing tolerance harmony towards culture, region and linguistics and also communal social economics and other diversities. Institute offers one compulsory course named as Universal Human Values (KVE 301/401) and professional ethics in 2nd year and three open elective courses named as Human values in Madhyasthdarshan (KOE 089), Human Values in Buddha and Jain Darshan (KOE 098) and Human Values in Vedic Darshan(KOE 099) in final year . For the understanding of constitutional aspects, one compulsory course named as Constitution of India, law and engineering (KMC 501/601)is taught in the third year of the degree program. Regular cultural activities are organized in the institute such as REETH, nukkad natak, poster making competition etc to make an inclusive environment. The institute celebrates Hindi Diwas to promote Hindi and sessions are organized to make students aware about the

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Hindi translation of the technical vocabulary. Jan Jaitya Gaurav Diwas is celebrated to create awareness of the diversity of cultures of India.

File Description	Document
Provide Link for Additional information	View Document

7.2 Best Practices

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

Response:

Title of the Practice:

Experiential learning to students with live problems from industry through Institute Industry Interaction

Objectives of the Practice:

The objectives of the practice are as follows:

- To provide the faculty and students an opportunity to gain real life problems solving experience in shoe and leather industry related to repair, refurbishing and troubleshooting.
- To bridge the gap between academia and industry
- To make students familiar with the working environments of real industry
- To get the students trained in various processes and mechanisms of shoe and leather industry
- To prepare and place the students in shoe and leather industry
- To get consultancy projects from the Shoe and leather industry

The Context:

Kanpur is famous for the production of leather shoe and leather goods globally. Kanpur leather cluster has about 1600 units and turnover of around Rs 40,000 Cr. (as of TOI July 2022). Kanpur leather industry has always faced three major problems. The first one is scarcity of skilled manpower at all levels because skilled people prefer top metro cities to work, the second problem is availability of equipment and machines use in tannery and footwear manufacturing and the third one is related to logistics. Institute has focused on the first two problems and providing solutions to the industry.

The Practice

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AIT has established two labs "Shoe Design Lab (SDL) and Machine Design and Refurbishing Lab (MDRL)" in collaboration with Promoter of Allen Cooper. The prime focus of these labs are designing and providing the machine related solutions and refurbishing. The labs are equipped with latest software, tools and techniques. Such labs are unique in the city of Kanpur and in the context of the higher education. The mode of working of the lab is as follows:

- In the first instance, experts from the leather industry come to institution to train the students. The students are trained to design.
- The students get training to dismantle the machine and exposed to every parts, functions and techniques separately.
- The students are given the opportunity to develop the capacity to analysis, synthesis and create.
- The students simultaneously learn to develop new machines from scratch.
- The students are also trained on shoe design software "Shoemaster".
- Constraints and Limitations: All students may not be interested in leather industry and all the students may not have the required technical acumen.

Evidence of success: So far this practice is successful more than 50 students have been trained and about 10 to 12 machines are refurbished and are functional in their respective premises.

Problems Encountered and Resource Required: Integration of this practice academic time table of the institution and respective departments becomes the problem. Since currently the practice is provided to students free of charge, monetary difficulties come in the way. The refurbishing equipments and machines are limited so students cannot work in large numbers.

Note: Since the practice is limited to Kanpur and the leather industry, use of the same by the other institutions may not be feasible.

Title of the Practice:

Employability Enhancement and Skill Development

Objectives of the Practice:

The objectives of the practice are as follows:

- To understand the need of the industry
- To design, develop and deliver the content as per the industrial requirements. To get the students trained on the skill set needed by the industry.
- To develop a positive environment where students can hone their skills to meet the industrial challenges.

- To bridge the gap between academia and industry
- To enhance the employability of students

The Context:

The Institute offers different graduate programs in engineering. Fundamental requirement for excellence of any professional institute is to produce a skilled workforce which can cater the needs of the industry, and therefore the Institute opts to design various skill based courses apart from the regular AKTU curriculum so that the employability of the students can be enhanced.

The Practice

- Skill based training courses are floated just after the completion of first year.
- These courses are mandatory for all the students
- Students of various programs are given trainings on different skillsets as per the need and requirements of the industry of that particular program
- Extra classes on recent trends and technologies are organized
- Project Based Learning (PBL) is the basic philosophy of each skill development program
- Course material is prepared for each skill set internally by faculty and the trainings are conducted by practicing experts from different industries or academia

Constraints and Limitations:

- AIT being an affiliated institute has to follow the curriculum prescribed by the University. Due to time and training constraints, sometimes, adequate attention to the trainee is lesser than expected.
- In certain skill domains inviting experienced trainer becomes a problem

Evidence of success:

A total of 23 such programs have been organized in the last five years benefitting more than 1300 students. Many of the students have reported that due to attending such skill development programs, their employability has gone high and they are working o a higher profile than expected, More details are given in criteria subsection 1.2.1. Some prominent training programs to be mentioned are Advance Python programming with Machine Learning, PRIMAVERA, ANSYS, AUTOCAD, CAM etc. The results can be verified from the enhancement of quality placements and our students are now qualifying national qualifiers like INFYTQ and TCSNQT in very good numbers (32 out of 60 qualified the written round of INFITQ).

Problems Encountered and Resource Required:

- Integration of this practice with the academic time table of the institution and respective departments becomes the problem in certain cases..
- Finding qualified trainers and their retention is also a problem area in some cases.

File Description	Document
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

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

Response:

AIT was founded with the aim to provide students with exposure to the real industrial environment and skills, as founders are reputed industrialists from Kanpur leather industry (Promoters of Allen Cooper brand). The area in which institute has worked intensively is to train the students in the skills required by the industry and then by using that skill set, students can get the learning by working on real projects received by the industry.

The institution has set up a lab in collaboration with the leather industry, and gives training on shoe master software. Another lab has been set up for design and refurbishment of leather product manufacturing machines. Through these labs institute provides the facility of "experiential learning to students with live problems from industry through Institute Industry Interaction" in which faculty and students get an opportunity to gain real life problem solving experience in shoe and leather industry related to advanced level shoe designing ,repair, refurbishing, troubleshooting and designing new innovative machines. So far this practice is successful and more than 50 students have been trained and about 10 to 12 machines are refurbished and are functional in their respective premises. Students are designing innovative machines as their project work to ease out human effort.

The Institute offers different graduate programs in engineering. Fundamental requirement for excellence of any professional institute is to produce a skilled workforce which can cater the needs of the industry, and therefore the Institute opts to design various skill based courses apart from the regular AKTU curriculum so that the employability of the students can be enhanced.

Institute has started a practice for Employability Enhancement and Skill Development courses" where design, development and delivery of the content as per the industrial requirements is done. The aim of this practice is to get the students trained on the skill set needed by the industry. These skill based training courses are floated just after the completion of first year and attending these courses are mandatory for every student.

A total of 23 such programs have been organized in the last five years benefitting more than 1300 students. Many of the students have reported that due to attending such skill development programs, their employability has gone high and they are working to a higher profile than expected, More details are given in criteria subsection 1.2.1. Some prominent training programs to be mentioned are Advance Python programming with Machine Learning, PRIMAVERA, ANSYS, AUTOCAD, CAM etc. The results can be verified from the enhancement of quality placements and our students are now qualifying national qualifiers like INFYTQ and TCSNQT in very good numbers (32 out of 60 qualified the written round of INFITQ this year).

File Description	Document
Appropriate web in the Institutional website	View Document

5. CONCLUSION

Additional Information:

In addition to running a full fledged institution namely AIT, The Superhouse Education Foundation (SHEF) started number of educational ventures in terms of Two management institutions, namely Allenhouse Business School and Allenhouse Institute of Management along with schools up to the senior secondary level and a chain of 09 Delhi Public Schools as franchise, 06 Allenouse Public School and 04 Allen Kids located in different parts of Uttar Pradesh. Continuing the part of the chain SHEF started Allenhouse Business School

The institute is now focusing on adopting and implementing various quality processes that enable us to meet the requirements for accreditation by various agencies. The AIT is also prepared and ready to face the challenges of NEP2020 and strategically the institution has also started working through a well structured strategic plan (2022-27).

Concluding Remarks:

The Superhouse Education Foundation (SHEF) is very seriously committed to providing education from Kindergarten to higher Education in Uttar Pradesh and gradually proceeding to other states of the country as well. This is the best example of industry involvement in education thereby contributing to the growth of the state and the nation.

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6.ANNEXURE

1.Metrics Level Deviations

1.Metrics	s Level D	eviation	S						
Metric ID	Sub Questions and Answers before and after DVV Verification								
1.4.1	Institution obtains feedback on the academic performance and ambience of the institution from								
	various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken								
	report on the feedback is made available on institutional website (Yes or No)								
	Ar	nswer Aft ark : DVV	ter DVV Ve	Verification erification: It the changes	No	s not provide	ed filled-in feedback form in support		
3.3.2	Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years 3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years Answer before DVV Verification:								
	20	021-22	2020-21	2019-20	2018-19	2017-18			
	2		0	1	1	1			
	Answer After DVV Verification :								
	20	021-22	2020-21	2019-20	2018-19	2017-18			
							 		

2.Extended Profile Deviations

Z.LAU	chica i forme Deviations
ID	Extended Questions
1.1	Number of teaching staff / full time teachers during the last five years (Without repeat count):
	Answer before DVV Verification: 112
	Answer after DVV Verification: 58