

# FOR 4<sup>th</sup> CYCLE OF ACCREDITATION

# ARMY INSTITUTE OF TECHNOLOGY, DIGHI, PUNE

ARMY INSTITUTE OF TECHNOLOGY, DIGHI HILLS,PUNE 411015

www.aitpune.com

SSR SUBMITTED DATE: 07-08-2024

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

August 2024

#### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

- Army Institute of Technology (AIT), was founded in August 1994 under aegis of Army Welfare Education Society (AWES), exclusively for wards of Defence personnel, who are disadvantaged due to frequent movement of soldiers who serve in remote areas. AWES has the senior most appointments of the Army on their Board of Governance.
- AIT is affiliated to Savitribai Phule Pune University (SPPU), approved by AICTE and has UGC recognition under 2(f) and 12(B) since 2014. All UG programs are NBA accredited, with high marks. AIT was accredited with "A" grading in NAAC upto 2021.
- AIT has serene 30 acres Wi-Fi enabled green campus, with National Knowledge Network (NKN) connectivity, high tech laboratories, active industry interface, excellent faculty and bright students.
- Admissions are purely on merit of JEE MAINS, and institute is exempt from the State admission process, reservations and fee regulations.
- With a VISION to be a global technology institute; its MISSION is to produce total quality engineers, technology leaders and entrepreneurs, committed towards sustainable development of society and nation.
- Students are nurtured by the unique Teaching Learning Process, which starts with well-designed innovative Induction training. The entire academic program is focused towards experiential, participative and outcome oriented andragogy.
- 25 vibrant clubs catering for co-curricular and extracurricular development are fully managed by the students. AIT has an effective Institution Innovation Council (IIC) and is promoting entrepreneurship through its Innovation and Entrepreneurship cell.
- Institute was recognised as Best Education Institute for Pune Education Leadership Award by World Education Congress in AY 2021-22. NIRF has ranked AIT in the band of 151-200, nationally, though, being a predominantly UG college. Most other private ranking agencies place AIT in top 50 nationally.
- The performance of AIT students in university exams is of very high standard and placements with over 90 % assurance are best in the region. The average CTC in AY 2022-23 was an astounding Rs 14.2 Lakh PA. Its student teams regularly win many hackathons and technical competitions adding to their reputation.
- AIT is marching ahead to fulfill its vision by implementing NEP and opting from Autonomy from the next academic Year.

#### Vision

To become a "Globally Recognised" technical institute providing world class education and research facilities to the wards of Defence personnel.

#### Mission

(a) Provide the right environment, to the wards of Defence personnel, for development of physical, intellectual, emotional and spiritual quotients, with a view to produce total quality engineers.

Page 2/84 12-08-2024 10:03:26

- (b) Create an ecosystem which can foster the culture of research, innovation, creative thinking and higher studies.
- (c) Develop an education system which creates entrepreneurs and technology leaders who are committed towards sustainable development of society and nation building.

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

#### **Institutional Strength**

- Army Institute of Technology (AIT), was founded in August 1994 under aegis of Army Welfare Education Society (AWES), exclusively for wards of Defence personnel, who are disadvantaged due to frequent movement of soldiers who serve in remote areas. AWES has the seniormost appointments of the Army on their Board of Governance.
- AIT is affiliated to Savitribai Phule Pune University (SPPU), approved by AICTE and has UGC recognition under 2(f) and 12(B) since 2014. All UG programs are NBA accredited, with high marks. AIT was accredited with "A" grading in NAAC upto 2021.
- AIT has serene 30 acres Wi-Fi enabled green campus, with National Knowledge Network (NKN) connectivity, high tech laboratories, active industry interface, excellent faculty and bright students.
- Admissions are purely on merit of JEE MAINS, and institute is exempt from the State admission process, reservations and fee regulations.
- With a VISION to be a global technology institute; its MISSION is to produce total quality engineers, technology leaders and entrepreneurs, committed towards sustainable development of society and nation.
- Students are nurtured by the unique Teaching Learning Process, which starts with well-designed innovative Induction training. The entire academic program is focused towards experiential, participative and outcome oriented andragogy.
- 25 vibrant clubs catering for co-curricular and extracurricular development are fully managed by the students. AIT has an effective Institution Innovation Council (IIC) and is promoting entrepreneurship through its Innovation and Entrepreneurship cell.
- Institute was recognised as Best Education Institute for Pune Education Leadership Award by World Education Congress in AY 2021-22. NIRF has ranked AIT in the band of 151-200, nationally, though, being a predominantly UG college. Most other private ranking agencies place AIT in top 50 nationally.
- The performance of AIT students in university exams is of very high standard and placements with over 90 % assurance are best in the region. The average CTC in AY 2022-23 was an astounding Rs 14.2 Lakh PA. Its student teams regularly win many hackathons and technical competitions adding to their reputation.
- AIT is marching ahead to fulfill its vision by implementing NEP and opting from Autonomy from the next academic Year.

#### **Institutional Weakness**

- 1.Limited footprint, mainly due to absence of PG programs and PhD Centre. AIT working towards this need for vertical growth to create requisite the research ambience.
- 2. Due to above a smaller number of quality research publications and IPRs. Also less amount of sponsored projects and consultancy.

- 3. Relatively smaller institute which has started growing in last 2-3 years. Standalone Technology institute in the campus.
- 4. Less number of Industry sponsored labs.
- 5. Less funded research projects, compared to larger institutes.
- 6. Smaller alumni strength. Also most are currently in middle level leadership, thus financial support below expectations.

#### **Institutional Opportunity**

- 1. Pune being an IT hub of tier one IT companies for better Industry Institute Interaction which gives more exposure to the students in the form of placements and Internships. Pune is also automobile and other industry center which can provide exposure and support to students.
- 2. Tie up with research bodies and centers like NCL, DIAT, CMET, IISER and CDAC in Pune for promoting research activities.
- 3. Institute with NKN facility can take advantage for higher learning like interaction with IIT and NIT via video classrooms.
- 4. Recent successful implementation of a very high value high tech cyber security project, funded by National Security Council Secretariate, in collaboration with a research lab, has brought the institute in national focus. More such projects have are in pipeline.
- 5. AIT has recently signed up with MCCIA and Regional Technology Node of Army, Pune to set up Atma Nirbhar Centre of Excellence in Pune for high value defence tech research.
- 6. Proximity to Defence R&D labs for exploitation
- 7. Many alumni across the globe are at important positions in MNC Tech companies. Being tapped for funding, student internships, high tech projects and entrepreneurship.
- 8. Collaboration with Pre-incubation centers such as BHAU for nurturing ideas and prototypes.
- 9. E Cell, R&D Cell and IIC for fostering startups. Very liberal provisions in Startup and IPR policy and Over Rs. 45 Lakh in AIT Seed fund can promote student ventures
- 10. Academic Autonomy for AIT has bn approved on 10 Jul 24. On implementation, quality of education, student centric activities, agility and flexibility in adopting new programs and industry participation in curriculum design and delivery will further enhance IT reputation. Autonomy will also enable AIT to reach out to reputed colleges and institutions globally for exchange and participative programs.
- 11. Newly launched ME (Data Science) program and proposed PhD research center under Computer Dept will improve AIT R&D footprint.

#### **Institutional Challenge**

- 1. To attract higher JEE rank students, who migrate to IITs and NITs.
- 2. Despite the smaller capture population, maintaining the growth and quality.
- 3. To develop culture and expertise for sponsored project and consultancy
- 4. To network with highly reputed global institutes.
- 5. To get higher rank in NIRF under engineering colleges, without large student population in PG and PhD. Target for top 100.
- 6. To attract high profile industry to provide guidance and invest in AIT growth.

- 7. To attract students (especially from defence background) for the Post Graduate programs.
- 8. To develop a multi-disciplinary hub in line with recommendations of NEP.
- 9. To make most of the Autonomy bring granted.

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

- The Institute is affiliated to SPPU and offers courses prescribed by affiliating university. The faculty members actively participate in syllabus formulation/revision workshops by Board of Studies. Feedback taken from students and the inputs from industry, which are taken through Training and Placement Cell and the alumni are also discussed in these workshops.
- Faculty is deputed to attend not only syllabus implementation workshops, but also various Faculty
  Development Programmes, seminars and workshops. Faculty and students are sponsored to attend /
  present research papers at various national and international conferences. Some such programs are also
  conducted by Institute.
- Due care is taken for effective implementation of curriculum. Academic Calendar contains all central programs and departmental level events. Individual timetables are prepared by faculty and the Lab timetables describe the utilization of laboratories.
- Teaching plans are uploaded on ERP and on moodle for student reference. Weekly Training Program is
  disseminated to students for reference and to management for monitoring. To ensure that stated
  objectives of curriculum are achieved in course of implementation, departments conduct Guest lectures
  workshops, campus connect programs by subject experts from industry and research bodies for covering
  topics beyond syllabus.
- College keeps updating its laboratories as per syllabus and project requirements. Modern teaching
  facilities like ICT enabled smart classrooms, video/audio facilities are utilized for effective delivery of
  the subject material to students. MoUs have been signed with industries like CopperCloud IOTech Pvt.
  Ltd., 3D PLM and Fortytwo Technologies Pvt Ltd amongst others, to enable effective dissemination of
  knowledge.
- The institution interacts with beneficiaries such as industry, research bodies and the university in effective operationalization of curriculum. Institute facilitates student internships in industry.
- Institute encourages in-house projects which help faculty to apply / obtain funds for projects from various bodies such as AICTE and BCUD. This constant interaction with research bodies gives students an exposure to the scope of syllabus in terms of research applications, patents, etc. College has CSI, RSI, IETE and IEEE chapters.
- Value addition courses under professionals are conducted to rectify critical gaps pointed out by industry. Students are encouraged to undergo MOOC courses for self-learning

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

Army Institute of Technology (AIT), Pune is run by the Army Welfare Education Society registered on 29.4.1983 under XXI 1860. Admission through 100% All India Quota is done at Institute Level for wards of Armed Forces personnel based on All India Ranking obtained in the **JEE Main** conducted by **NTA** with special weightage given for the wards of disabled soldiers, War Widows and Gallantry Award winners.

The intake for different programs increased accordingly:

- 1. AY 2021-22: Electronics and Telecommunication increased to 120.
- 2. AY 2022-23: ME Data Science with 24 and BE IT additional 60 were started.
- Around 40 % of the full time teachers are holding the highest Doctorate degree (PhD).
- AIT has 100 % enrollment ratio, with 17:1 student's teacher ratio
- Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences. **Industrial visits, Internships** are regularly organized, **Clubs, Cells and Boards** in AIT prepare students for participation in various competitions hackathons. Students are encouraged for **MOOC** and Value Added Courses.
- Teachers use ICT enabled tools including online resources for Effective Teaching and Learning process.
- College faculty has designed OBE manual with all the rubrics for the evaluation and CO PO mapping.
- As we are fallowing the SPPU curriculum COs are given in SPPU syllabus and POs are from AICTE.
- Internal assessment of term work is done progressively throughout the semester and students are informed about the weightage given to regularity in submission, and timely completion of the work.
- Seminars and Final year project reviews are conducted every semester. Review panel consists of senior faculty for assessment of the project work form department.
- Honor code is also followed for peer imposed controls on student behavior.
- As per examination is concerned Department level mid-semester exam, class test, mock practical exams are conducted for internal evaluation. Examination schedule is displayed well in advance. There is transparency in assessment of internal exams for students.
- University Examination grievances (evaluation) are submitted through the Chief Examination Officer/Student Section of AIT to the University.
- College level Grievances Committee also resolves different complaints raised by the students.

#### Research, Innovations and Extension

- Research activities are centrally managed through the R&DE Cell. The Cell has coordinated the Upgradation of laboratories through MODROB proposals of AICTE and MHRD. It motivates faculty to apply for research grants from various government agencies like DST/AICTE/UGC/MHRD/BCUD.
- Institute provides seed money and sponsors faculty for filing patents and presenting papers in conferences. College collaborates with industries to develop infrastructural facilities for research. AIT has more than 35 published and 5 granted patents (National and International). There is a substantial increase in Quality Research Papers in last three years.
- Through R&DE cell Seminars/Conferences/Workshops are organized. Financial provision for student projects is made in every year's budget for each department.
- Students and faculty members undertake inter-disciplinary research work targeted at national level competitions like Supra SAE, SUPRA-Baja, Asia etc.
- College has established Innovation and incubation hub to foster and nurture creative ideas and guide them to start-up level. The cell organizes idea pitching sessions, workshops and innovative project competitions.
- College has various student chapters like CSI, IEEE, RSI to organize and increase student participation in co- curricular activities.
- Student's innovative ideas are supported and guided through Incubation Center and R & D Cell of college. Smart business ideas are nurtured and progressed under the guidance from private entrepreneurs in Incubation centre.
- Thirty MOU's have been signed with industries, defence and academia for collaborative research and

various activities are conducted under these MoUs which inculcates research environment among faculty and students

- The Mission of AIT is to provide the right environment to foster the culture of research, innovation, creative thinking for development of good leaders and entrepreneurs to support sustainable development of society and nation building. The values of good citizenship are inculcated in our students by the teachers and student peer group.
- College has an AIT tenet and honour code for students that they must abide by. The students at our college actively participate in social service activities which lead to their overall growth. AIT has continually active NSS and NCC Units with substantial number of student's participation.

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

Institute (spread over 30 acre with total built up area of 51317m2) is well equipped with 20 ICT-enable classrooms which includes smart-classrooms (having audio-video recording facilities):05, ICT-enable seminar halls:2, ICT-enable conference hall:2, tutorial rooms:9, laboratories and a workshop:46. All computer labs are well equipped with updated softwares and hardware. Institute has Learning Management System, High-performance-computing facility, and Ubiquitous computing laboratory.

Ratio of number of students to number of computers is 2.51.

We have three sponsored labs viz. Product Innovation, Innovation and Development Centre and EV. The workshop complex consists of facilities like 'Centre of Excellence in AI & Robotics' 3D printers, industrial grade CNC machine, car cut section, BMW engine, machine shop, carpentry, welding and tin-smithy shops.

The institute has campus wide Enterprise class network Cisco Catalyst Switches connected by optical fiber redundant mode connectivity of 10Gbps in academic block and hostels. The Backbone LAN connectivity is provided with WAN connectivity of 2Gbps lease line (1:1) These access points are available for entire campus to cater the need of 2000+users. The Institute also has state of art server center with multiple servers, next generation firewalls like Fortinet and Sonicwall.

The institute has deployed the ERP software for monitoring student admission, faculty profile and interaction with students and parents.

AIT has well stock library consist of print books:36370, print journals:28, E-journals:980, 1888E-books, DELNET database, 129:NPTEL web courses and 324:videos as comprehensive hybrid learning resources. Library has facilities like Turnitin feedback studio+Turnitin originality, anti-plagiarism software, Knimbus E-Library, face recognition attendance system, E-content creation facility and internet connectivity. Library has spacious air-conditioned reading hall (Capacity:156). We have Training and Placement cell with excellent infrastructure for training and placement activities.

To facilitate the students to participate and perform in the spiritual, cultural, sports activities and other extracurricular activities, AIT has various facilities and more than 14.

For specially-abled people, institute provides ramps, special toilet and a passenger-lift having 408 kg/6-passenger capacity. Entire campus is under CCTV surveillance with 775 cameras.

Last five years average percentage of expenditure (excluding salary) for:

Page 7/84 12-08-2024 10:03:26

- Infrastructure development/augmentation **57.32%**
- Maintenance of physical and academic support facilities is 42.68%.

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

- AIT provided scholarships to about 23 % of our students, Institute awards scholarships sponsored by TATA, Indian Express, Badve groups, UdChalo, to deserving students. A few students get financial assistance from J&K government. For economically weak students DLF Raghvendra scholarship, HORIZON scholarship, merit-cum-means scholarships, Leela Poonawala and Persistent scholarships are offered, which are based on family income.
- College has various clubs by which different intra college & intercollegiate activities are conducted. Each club has faculty in charge to guide students. Budgetary support is extended to conduct student events.
- College provides coaching to students interested in appearing for SSB examination under University Entrance Scheme. Evening classes for students identified to be weak in English and programming are conducted in first year. In second year and third year C, C++ programming, JAVA, Oracle, .NET classes are also conducted for additional skill development.
- Students are counseled by faculty addressing their academic as well as personal difficulties. In addition, there is a mentor scheme where 4 to 5 students are placed under a student mentor of next senior batch. The mentors are carefully selected based on recommendation of their counselor. The mentors help the students. A track record is maintained in Counseling file, for each student.
- Training & Placement Cell of the institution has a structured mechanism for career guidance and placement of its students. It works in conjunction with PR Cell consisting of faculty and student members from each department and the college Alumni council.
- AIT has excellent sports facilities and many students can be seen using these facilities. Many of our students participate in inter-collegiate sports competitions. Some of our students also represent Pune university in events like squash and badminton.

#### Governance, Leadership and Management

- The top management of the institute consists of a Board of Governors and its executive committee at Army Headquarters (headed by Chief of Army Staff and assisted by the Adjutant General of the Indian Army with his staff members) and Board of Administration at Headquarters Command (headed by the Chief of Staff as Patron of the college of Lt. General's rank) and Chairman of college (Chief Signals Officer at Headquarters Command of Major General's rank).
- Director of the institute is authority for overall functioning of college. He is also the chairperson of IQAC. Principal of the college is the academic head and supervises, guides and controls work of teaching, nonteaching staff of college. He liaisons with AICTE, UGC, University and other regulatory bodies. The Joint Director is the administrative head and looks all the administrative affairs of AIT.
- Changes in the existing rules and regulations are brought about after a thorough discussion in College Development meetings, Governing body meetings and AWES Directors' conferences based on inputs from ground level and needs of the present generation.
- The college follows a structured approach for ensuring that changes are smoothly and successfully implemented. In order to accomplish this, the stakeholders expectations are aligned, communicated, and

integrated with employee's efforts for growth of the institution. Thus, academic and administrative matters are brought to notice of the management to champion changes required by the organization.

- The College has a clear and well defined system to monitor and evaluate effectiveness and meaningful implementation of policies and plans of the institution.
- Periodical staff meetings at department level and Heads meeting at Institution level along with representatives of various committees are conducted for effective and timely feedback.
- Management develops leadership capacity by broad basing leadership involvement amongst both faculty and students through staff representatives and student secretaries and representatives, in all important activities of the college.
- Faculty in consultation with the head of department decide on their respective lesson plans, class tests, assignments, projects, industrial visits and guest lectures. This enables each individual to build their own informal authority and demonstrate leadership behaviour.

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

- Army Institute of Technology aligns core values, ethical standards and operational practices to foster an environment encouraging holistic student development, academic excellence, and social responsibility.
- There are various implemented measures to promote gender equity to ensure equal opportunities and commitment.
- There is a RO plant on the campus which ensures that pure drinking water is supplied to the entire campus. Automatic flushing system for toilets and automatic electricity cut-off switches to save electricity developed by students is implemented in hostels and academic block. Roof top grid connected solar power plant generating 350 KW power has been installed by institute. Apart from this solar water heating system is provided in all boys and girls hostels for hot water requirement. Phytorid based Sewage Treatment Plant (patented by NEERI) has been implemented in the campus. All street lights are solar and common area lights have been replaced by LED. Automatic power factor controller (APFC) is installed in the power house which gives power factor of unity. Rain water harvesting is done by collecting the rain water in dedicated underground tanks of capacity 23 lakh liters and used during the times of shortage.
- Say No to plastic, E-waste management, environmental preservation and responsible disposal practices are used in AIT campus.
- Sustainable transportation options such as bicycles and electric vehicles are promoted. Environmental awareness campaigns, green audits, environment and energy audits are conducted regularly. These audits evaluate adherence to environmental regulations and efficiency of our energy consumption.
- A friendly barrier-free environment is provided to differently-abled individual. This includes wheelchair, ramps and accessible restrooms and lift. Everyone, regardless of their disabilities can access and navigate campus comfortably and independently.
- Institute promotes tolerance and celebrating cultural, regional, linguistic and communal socioeconomic events through different clubs such as NSS (National Social Service)and cultural club. I & E cell (Innovation and Entrepreneurship Cell), Student Career Counselling and Guidance is done by Training and placement cell. Students actively participates in outreach programs, community service, and partnerships with local organizations. Holistic development of student to make them technology leaders is one of the best practice followed at AIT.

Page 9/84 12-08-2024 10:03:26

# 2. PROFILE

# 2.1 BASIC INFORMATION

Name and Address of the College					
Name	ARMY INSTITUTE OF TECHNOLOGY, DIGHI, PUNE				
Address	Army Institute of Technology, Dighi Hills,Pune				
City	Pune				
State	Maharashtra				
Pin	411015				
Website	www.aitpune.com				

Contacts for Communication									
Designation	Name	Telephone with STD Code	Mobile	Fax	Email				
Director	Brig Abhay A Bhat Retd	020-7249250184	9967032089	020-7249250 183	director@aitpune.e du.in				
IQAC / CIQA coordinator	Seema Tiwari	-	9405012782	-	stiwari@aitpune.ed u.in				

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution					
By Gender	Co-education				
By Shift	Regular				

Page 10/84 12-08-2024 10:03:26

Recognized Minority institution							
If it is a recognized minroity institution	Yes Minority Part A.pdf						
If Yes, Specify minority status							
Religious							
Linguistic							
Any Other	Hundred percent admission for wards of Army Personnel						

#### **Establishment Details**

State	University name	Document
Maharashtra	Savitribai Phule Pune University	<u>View Document</u>
Maharashtra	Savitribai Phule Pune University	<u>View Document</u>

Details of UGC recognition					
<b>Under Section</b>	View Document				
2f of UGC	05-09-2014	View Document			
12B of UGC	05-09-2014	View Document			

Statutory Regulatory Authority	Recognition/Appr oval details Instit ution/Department programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	15-06-2020	12	yearly approval on fifteen June two thousand twenty twenty
AICTE	View Document	15-06-2020	12	yearly approval on fifteen June two thousand twenty twenty

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	Army Institute of Technology, Dighi Hills,Pune	Urban	30	51317				

# 2.2 ACADEMIC INFORMATION

Details of Pro	Details of Programmes Offered by the College (Give Data for Current Academic year)								
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted			
UG	BE,Compute r Engineering,	48	HSC with JEE Rank	English	120	120			
UG	BE,Mechanic al Engineering,	48	HSC with JEE Rank	English	60	60			
UG	BE,Informati ion Technology,	48	HSC with JEE Rank	English	60	60			
UG	BE,Electroni cs And Telec ommunicatio ns,	48	HSC with JEE Rank	English	120	120			
PG	ME,Compute r Engineering ,Data Science	24	UG and GATE	English	24	0			

Position Details of Faculty & Staff in the College

				Te	eaching	Faculty	y					
	Profe	Professor				Associate Professor			Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	9			15			48					
Recruited	5	2	0	7	7	7	0	14	18	18	0	36
Yet to Recruit	2			1			12					
Sanctioned by the Management/Soci ety or Other Authorized Bodies	0			0				0				
Recruited	1	0	0	1	0	0	0	0	13	12	0	25
Yet to Recruit	0			0			0					

Non-Teaching Staff						
	Male	Female	Others	Total		
Sanctioned by the UGC /University State Government				0		
Recruited	0	0	0	0		
Yet to Recruit				0		
Sanctioned by the Management/Society or Other Authorized Bodies				92		
Recruited	71	21	0	92		
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				38		
Recruited	23	15	0	38		
Yet to Recruit				0		

# Qualification Details of the Teaching Staff

	Permanent 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.	5	2	0	4	8	0	5	1	0	25
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	0	0	0	3	0	0	13	16	0	32
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.	1	0	0	0	0	0	3	0	0	4
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	9	0	0	9
UG	0	0	0	0	0	0	0	0	0	0

	Part Time 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

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	84	1164	0	0	1248
	Female	14	132	0	0	146
	Others	0	0	0	0	0
PG	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

Provide the Followin Years	ng Details of Studen	ts admitted to	o the College Du	ıring the last fo	ur Academic
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
ST	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
General	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Others	Male	1215	1167	1125	1122
	Female	156	145	165	161
	Others	0	0	0	0
Total	·	1371	1312	1290	1283

## Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	Currently AIT is following SPPU curriculum (being an affiliated college), which has been upgraded in 2019. The curriculum contains Multidisciplinary /Interdisciplinary subjects, electives and audit courses from first year onwards. First Year Engineering syllabus contains Engineering Graphics (Drawings), System in Mechanical Engineering, Electrical Engineering, Electronics Engineering, Workshop Practices, Programming and Problem Solving etc. The First Year Engineering subject Project Based Learning utilizes multidisciplinary approaches. At AIT, we emphasizes on student undertaking interdisciplinary projects. Second year students have soft skills as mandatory subject. In Third year, there are many Open Electives such as Business Intelligence, Project Management etc. Audit Courses conducted including Green and Nonconventional Energy, Leadership, Foreign Languages, Banking and Insurance, Internet of Things, Design Thinking. Students are encouraged to pursue out of stream honors at minor design course in third and final year. To boost the curricular approach, AIT has vibrant clubs which explore students to multidisciplinary stream and life skill related mean. The Government of Maharashtra has currently implemented NEP 2020 for all affiliated colleges from AY: 2024-25; AIT has also been approved to become autonomy w.e.f 2025-26, which will provide additional impetus to fulfill interdisciplinary approach.
2. Academic bank of credits (ABC):	Each student of AIT is having their unique ABC id. Presently, AIT is affiliated institute to Savitribai Phule Pune University and is transferring credit of individual students of ABC.
3. Skill development:	To ensure students employability and make them industry ready, many skill development initiated and undertaken as follows: a) Value added Courses b) Communication and Soft Skills c) Coding and Programming: OSS club, competitive coding d) EV club and Robotics, SUPRA & BAJA, Equipments-3D printer, addictive manufacturing. e) Entrepreneur Skills f) Personality Development and Interviewing Sessions g) SSB Orientation h) Leadership and Team building
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The core values of AIT are excellence, honesty, integrity, team work, continuous learning and innovation. These core values are the guidelines for

stimulating Indian knowledge System in the institute. For promoting the Indian languages, students are encouraged to participate in various art and cultural activities. Cultural Board, Magazine Board and Fine Art club in the Institute arrange training sessions and competitions on creative arts and culture, literary activity, proficiency modules on regular basis to instigate the importance of Indian Language and culture. Ethics, art and craft, cultural activities, motivational talks and different activities such as celebration of National International Days are organized for the holistic development of the students. Health camps, yoga day celebrations, blood donation camps, river cleanliness drive, blind school visit and many more extension and social activities are organized the institute for sensitization of students towards societal issues and for civilization of students. All the festivals are celebrated by the students through the Spiritual club which is good for communal unity and harmony. Hindi Rashtrabhasha Debate is organized by debate club, to enhance the elocution skills of the students. Annual intra collegiate sports and cultural competition "Aakriti" and inter collegiate sports and cultural competition 'Pace' and 'Amethyst' are conducted annually. Indian culture is reflected through various performances during these events and special efforts are put for the same. That also helps in inculcating linguistic skills and performing arts, which ultimately leads to enhancement in Indian cultural values amongst the students. From AY 24-25, SPPU has introduced Indian Knowledge System as a 2 credit subject for FE students.

5. Focus on Outcome based education (OBE):

The Institution has adopted outcome based education in all respects with clearly stated program educational objectives (PEO), program outcomes (PO), program specific outcomes (PSO) and course outcomes (CO). For every subject course outcome are set by the affiliated university, SPPU which can be modified by the respective course faculty and are mapped with program outcomes and program specific outcomes. Based on mapping of CO and PO, the gaps are identified and to bridge the same various curricular activities are organized. An exhaustive OBE manual has been prepared by AIT in 2021-22, which contains well defined rubrics for continuous evaluation. Departments have well defined policy to calculate

	attainment of COs and POs. In addition to the domain specific skills, the learning outcomes ensure ethics, social responsiveness as well as entrepreneurial skills, so as to make the students capable of contributing to environmental, social and economic wellbeing of the society.
6. Distance education/online education:	Infrastructural facilities at the institution are capable of supporting online teaching. The online platforms are extensively being used for engaging classes as well as for conducting workshops and webinars. Virtual laboratories are being used for conducting online practical sessions. Institution has adopted blended mode of teaching that combines online and offline resources. Lecture Management System is in place. The strength, capability of institutes online/elearning was extensively used during COVID period, despite the fact maximum students of AIT resided in different parts of the country (including some in rural areas), AIT was able to conduct distance online education affectively for a period of 18 months. AIT has a mechanism of advanced deposit of fees for MOOC's, Value Added Courses to be taken up by the students. Registration fees are reimbursed to students on successful completion of such courses. Each department provides a list of such courses to students for understanding. Faculty members attended MOOCs, FDPs, and STTPs to strength the hold on the online teaching platforms and have also created academic material (videos, power point presentations, notes, lab manuals) required for online teaching and learning. Faculty members upload the developed material on online platform, YouTube. Students undergo online courses through schemes like SWAYAM, NPTEL, COURSERA, Spoken Tutorial.

# **Institutional Initiatives for Electoral Literacy**

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Not yet
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Not yet

3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	N/A
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	No
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Based on directives by Army authorities and SPPU notices are circulated to encourage students to register as voters. Many students have utilized online portal to register as voter in their respective native places/transfer voting rights to local constituency.

# **Extended Profile**

#### 1 Students

#### 1.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
1394	1371	1312	1290	1283

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

## 2 Teachers

## 2.1

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

Response: 100

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

#### 2.2

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

2022-23	2021-22	2020-21	2019-20	2018-19
83	80	75	78	80

## 3 Institution

#### 3.1

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

2022-23	2021-22	2020-21	2019-20	2018-19
1270.74	687.28	620.91	551.49	735.15

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

# 4. Quality Indicator Framework(QIF)

## **Criterion 1 - Curricular Aspects**

#### 1.1 Curricular Planning and Implementation

#### 1.1.1

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

#### **Response:**

Army Institute of Technology (AIT) is affiliated to Savitribai Phule Pune University (SPPU) and offers courses prescribed by SPPU. AIT prepares its own academic calendar before the commencement of each semester, in line with the calendar of SPPU which includes student co-curricular and extra-curricular activities, social initiatives, exam schedules and holidays. Based on this, every department prepares its calendar showcasing additional departmental-specific activities. The HOD's allocate equitable teaching load to faculty based on their subject choice and expertise. On introduction of a new course, the faculty undergoes orientation, training and undertakes MOOC courses for upgradation. The department briefs the students on the importance of elective courses thereby guiding them to make their choices. The semester timetable is prepared and displayed well in advance. The faculty prepare their teaching plans keeping in mind the course outcomes, and mapping it with CO, PO/PSO, and uploading the same on ERP /Moodle. The syllabus, teaching plan, PPT's, notes, videos/simulations, laboratory manuals and links to useful websites, are displayed on ERP/Moodle for student reference. Weekly timetables and training programs are prepared and displayed on a regular basis. Continuous formative assessments are carried out by teachers through assignments, unit tests, seminars, tutorials etc. which are further monitored by the HOD's and the Principal. The progress of curriculum delivery, student attendance, and student performance is monitored during the HOD and IQAC meets. Co-curricular and extra-curricular activities, guest lectures, value added courses etc. displayed in the academic calendar help to fill gaps in the curriculum, aid in all round development and employability of the students. Academic audits are conducted regularly as per the SOP issued by IQAC.

Various intra-college and inter-college events are conducted as scheduled in the calendar. Curriculum delivery and conduct of events is uploaded on ERP and monitored by the teachers, the HOD's and the Principal. Student attendance is recorded regularly on ERP through biometric devices. Absence of students is communicated to parents telephonically and through SMS. Cumulative attendance and defaulter student lists are displayed every month. Absent students are given extra assignments / tests to make up for the loss. The departments conduct project progress reviews and seminar presentations as per the standard procedure as given in the academic calendar.

A three-week Induction Program for the first year students is conducted, as per the guidelines of AICTE and SPPU. During the induction training, students are oriented towards the college, its vision-mission, core values, and its culture and polices. The Induction Program also includes sessions, guest lectures and workshops to inform the students on crucial and pressing issues related to Human Values, Gender, Health and Environment. The institute has over 25 clubs which encompass activities in the areas of technical, sports and cultural development which not only enhance the student's CV's but also help them for good placements and higher studies.

Page 23/84 12-08-2024 10:03:26

Above systematic and meticulous efforts have resulted in excellent academic performances, high mean placement salaries and noteworthy outcome of producing total quality engineers and technology leaders as highlighted in the MISSION of the institute.

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

#### 1.2 Academic Flexibility

#### 1.2.1

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

**Response:** 625

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

#### 1.2.2

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

Response: 44.66

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

2022-23	2021-22	2020-21	2019-20	2018-19
605	620	603	548	594

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

#### 1.3 Curriculum Enrichment

#### 1.3.1

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

#### **Response:**

The Institute's policies on Professional Ethics, Gender, Human Values, Environment and Sustainability are provided by Army Welfare Education Society (AWES) and guided by experienced management and staff of the institute. The institute integrates these crosscutting issues in the curriculum prescribed by Savitribai Phule Pune University (SPPU) by conducting sessions, invited talks, senior-junior interactions, arranging group discussions and various co and extracurricular activities. A three-week Induction Program for the first-year students is also conducted as per the guidelines of AICTE and SPPU, during which, the students participate in discussions on these issues.

**Professional Ethics:** Professional Ethics is taught at the institute as per the syllabus of SPPU throughout the BE course. As a part of this, every student's BE project report is scrutinized against plagiarism. Also, Democracy Election and Governance is included in the first year syllabus. The primary objective of this course is to ensure that the students have knowledge of the constitution, fundamental duties and rights of citizens, professional ethics and the responsibilities of engineers. Training and placement cell regularly organizes specific trainings on corporate practices and etiquettes to industry specific needs.

**Human Values:** Up to 10 sessions are conducted by teachers of the institute and guest lecturers on the importance of human values during the Induction Program. Group discussions and presentations by students is a part of the training session. Apart from this, sessions on mental health, environmental awareness, meditation and yoga, soft skills, and creative practices are included in the Induction Program. The institute strives to build in the students the values of empathy, compassion and service by organizing visits to orphanages, old age homes, and blind schools and by undertaking social activities in collaboration with the NSS Club.

**Gender:** Our institute organizes sessions on Gender Sensitization during the Induction Program. These sessions aim to instruct the students about the existing challenges, gender roles, responsibilities and biases prevalent in society. Women's Day Celebration in college also includes a session on Gender Sensitization. As per the directions of Maharashtra State Commission for Women, an Internal Complaint

Cell (ICC) has been formed. The constituted committee that has been functional for years taking care of issues pertaining to gender. ICC has displayed guidelines and immediate contact numbers in academic block and hostels. To promote gender equity among students, the institute promotes equal representation of both genders in leadership positions in both- clubs and committees.

Environment and Sustainability: The issues of Environment and Sustainability are addressed through the course "Environmental Studies" offered to all engineering students. Outdoor sessions are often organized to sensitize students to ecological and environmental issues. The NSS club of AIT also undertakes several environment friendly activities like the NSS camp, cleanliness drives etc. In addition, our institute boasts of 30-acre green campus where several green initiatives are carried out by the college and the students which include restricted entry of automobiles, use of battery powered vehicles/ bicycles, pedestrian friendly pathways, ban on use of plastic, landscaping with trees and plants and use of solar energy.

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

#### 1.3.2

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

Response: 82.14

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

Response: 1145

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

#### 1.4 Feedback System

#### 1.4.1

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

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

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document

## **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

#### 2.1.1

#### **Enrolment percentage**

Response: 97.92

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

2022-23	2021-22	2020-21	2019-20	2018-19
366	370	373	316	314

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

2022-23	2021-22	2020-21	2019-20	2018-19
384	378	378	318	318

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Final admission list as published by the HEI and endorsed by the competent authority	View Document
Document related to sanction of intake from affiliating University/ Government/statutory body for first year's students only.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

#### 2.1.2

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

Response: 97.92

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

Page 28/84 12-08-2024 10:03:26

2022-23	2021-22	2020-21	2019-20	2018-19
366	370	373	316	314

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

2022-23	2021-22	2020-21	2019-20	2018-19
384	378	378	318	318

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

#### 2.2 Student Teacher Ratio

#### 2.2.1

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

**Response:** 16.8

#### 2.3 Teaching- Learning Process

#### 2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

#### **Response:**

Effective Teaching Learning Process is major strength of AIT. AIT organizes student centric innovative Induction training for new batch. The program is modern, dynamic and aligned to the advanced andragogical methods. The program is optimized based on feedbacks from all the stakeholders and experienced mentors of AIT

#### A. Experiential learning

Only through experiential learning the industry ready Total Quality engineers are produced.

Some initiatives by AIT under experiential learning are as follows:

- 1. **Industrial visits**: Organised regularly for practical knowledge and industry orientation.
- 2. **Internships**: Students are empowered to reinforce their theoretical knowledge, solve live industry problems and be prepared for high value placement.
- 3. Clubs, Cells and Boards: 21 vibrant clubs at AIT prepare students for participation in various competitions Hackathons
- 4. **Innovation and Entrepreneurial Cell:** Students interested in entrepreneurship are groomed for entrepreneurial careers. Some of the students have started their own Start-Ups
- 5. **Project work and sponsored Projects:** Project Base Learning is part of curriculum right form the first year. The system provides students access to technical publications, online databases, and other resources that support their professional growth.

Students visit to blind school, old age homes, Orphanages, participation in blood donation camps, tree plantation, Swach Baharat Abhiyan which makes them aware about social responsibility.

#### **B.** Participative learning

Participative learning is enabled through Conferences, Seminars, Group discussion, Quizzes, Assignments, Case studies, Club activities, and Industrial visits.

- 1. **Technical Club:** Technical activities round the year, **Technical Aakriti:** Intra college technical feast, **Solutions:** Inter collegiate technical fest of AIT provide a sound platform to enhance allround technical skills.
- 2. Students successfully learn and execute; technical and leadership skills while organizing one of the largest driven **Hackathon 'INNERVE'**.
- 3. Students are encouraged for **MOOC** courses, NPTEL, spoken tutorial, Coursera, webinars, and certification courses under (Value Added Courses).
- 4. National Service Scheme helps students learn the importance of social and environmental aspects.
- 5. Departmental Wall Magazines, **Srijna** annual college magazine make students learn drafting writing publishing and editing skills

#### C. Problem-Solving Methodologies

Problem solving skills prepare the students to handle real-life problems, which industry demands. In almost all courses, problem solving skills are embedded.

- 1. Inter department technical competition, 'Tech-Aakriti', is conducted every year. This helps students to nurture and showcase their technical talent and on spot problem solving ability.
- 2. Students undertake projects to solve industrial, societal, and environmental problems. 'Smart India Hackathon', 'Robocon,' 'BAJA' are different platforms that provide opportunities for students to find solutions to real-life problems.

#### D. Teachers use a diverse ICT tools for teaching learning

Modernized classrooms, upgraded laboratories and student-friendly ambience make learning exciting and innovative at AIT.

- 1. Wi-Fi and LAN: 2000 Mbps dedicated lease line
- 2. Microsoft Teams: For Online/Hybrid mode conduct of class, tests.
- 3. Moodle: Learning Management System: e-learning dissemination of study material
- 4. **ERP: Process Automation,** student attendance, Student & Teachers database, counseling, parent interaction.
- 5. Video Conferencing Platforms: Used effectively during COVID pandemic
- 6. **Central Library**: Range of e-resources extended remote access facilities to all stakeholders and includes, OPAC facility to find the availability of books

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

#### 2.4 Teacher Profile and Quality

#### 2.4.1

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

**Response:** 118.92

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

2022-23	2021-22	2020-21	2019-20	2018-19
72	69	66	63	63

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

#### 2.4.2

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

Response: 31.06

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

2022-23	2021-22	2020-21	2019-20	2018-19
34	27	22	21	19

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

#### 2.5 Evaluation Process and Reforms

#### 2.5.1

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

**Response:** 

Army Institute of Technology is affiliated to the Savitribai Phule Pune University and closely follows all regulations laid out by the University regarding examination and evaluation. Our college strives to ensure a mechanism of continuous internal assessment which is innovative, transparent and fair. Greater transparency breeds more accountability.

- Internal assessment of term work is done progressively throughout the semester and students are informed about the weightage given to regularity in submission, completing the practical with due diligence, behavioural aspects, attendance, independent learning and class activities at the very beginning of the course.
- Internal examinations and assignments are integral parts of Continuous Internal Evaluation (CIE) of students and is carried out through Class Test, MCQs, Assignments etc. These tests are not only for assessment of the students but also transformation of traditional education system to technologically updated assessment processes.
- Assignments are given to the students by the teachers following department specific teaching plans.
- For final year projects two reviews per semester are conducted. Review panel is formed consisting of senior faculty members assesses project work and gives suggestions for further improvement.
- Student's seminar are conducted and assessed by Review Panel.
- College has to follow the examination time tables of the affiliating university which includes Insem Exam, Practical/Oral Exam and End-sem Exam.

#### The grievance redressal system is time-bound and efficient

- University evaluation grievances are submitted through the Chief Examination Officer/Student Section to the University in required format. Students are counselled by their counsellors and guided by student section for filling these forms.
- University redresses these grievances.
- Grievances regarding internal evaluation are communicated by student to the HOD who enquires into the matter with concerned teacher. Suggestion boxes are mounted outside office of each HOD for students to communicate grievances. College level Grievances
- Committee also resolves different complaints raised by the students, if they are of a grave nature. The names of committee members are prominently displayed in the central foyer.

# The institute has adopted the following mechanisms for redressing the grievances of the students with reference to evaluation at the University level

- 1. The institute's Chief examination officer (CEO) and examination section redresses University evaluation grievances.
- 2. They forward these grievances to the University for redressing them. Under the University evaluation redressal system students can apply for photocopy, verification and revaluation.
- 3. After revaluation at the University level, results are communicated to the Institute.
- 4. Institute communicates the same to the concerned students.

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

#### 2.6 Student Performance and Learning Outcomes

#### 2.6.1

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

#### **Response:**

Program outcomes (POs) are the graduate attributes, a student should possess after completion of the programme.

All departments in the institute have Program Outcomes (POs) and Program Specific Outcomes (PSOs). These are published on institute website, brochures and displayed at various locations in the departments. All stake holders including faculty and students are made aware about POs and PSOs.

#### **Guidelines for CO statements:**

- The affiliated university has provided CO statements for every course.
- Each course has 4 to 6 Course Outcomes (COs) defined in the syllabus.
- The subject teacher uses these COs while teaching his course.
- Students are made aware about them at the beginning of the course by the subject teacher.
- The COs are mapped with POs by the subject teacher.
- The teacher carries out assessment of students based on these COs.
- The test, assignment, case study, mini project and major projects are mapped to these COs to calculate CO attainment.

#### Communication of POs and COs to the **Teachers:**

- · Institute encourages all faculty members to attend the Outcome Based Education (OBE) Workshops and Faculty Development Programs.
- · CO statements if required are revised by the subject incharge.
- · Program outcomes are displayed on notice boards in faculty cabins and in the department. Program Outcomes and Course Outcomes are included in the course file and laboratory manuals for the reference.

Page 34/84 12-08-2024 10:03:26

#### Communication of POs and COs to the Students:

- · Program outcomes are communicated to students in the Induction and Orientation programs at the commencement of every academic year.
- · Program outcomes are also displayed in laboratories and all notice boards.
- At the commencement of the course, course in-charge communicates the Course outcomes during the theory and practical sessions.
- · Curriculum Booklet, lab manual and project log book contains course outcomes.
- · Internal assessment question papers and assignments include the respective course outcome along with Bloom's taxonomy level.

Communication of vision, mission, PEOs, PSOs to the Alumni:

PEOs, PSOs, vision, missions are communicated to the Alumni in Alumni Meet through Director's Presentation.

Communication of vision, mission, PEOs, PSOs to the Parents:

• PEOs, PSOs, vision, missions are communicated to the parents through email as well as in parents-teacher meetings.

Communication of vision, mission, PEOs, PSOs to the Employers:

· PEOs, PSOs, vision, missions are communicated to the employers through email.

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

#### 2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

**Response:** 

#### **Response:**

All the departments of the institute are accredited by NBA and they follow Outcome Based Education

Page 35/84 12-08-2024 10:03:26

(OBE). The institute has provided guidelines to all concerned through OBE manual.

#### **Process for CO Attainment:**

- · Course Outcome Attainment is computed for all the theory, practical, seminar and project courses. CO attainment is divided into internal and external assessment and carried out using various tools.
- External Assessment has **70%** weightage (Department may change this weightage if required) which includes University in-semester, end-semester examination, oral/practical examination and term work assessment. Since our Institute is affiliated with Savitribai Phule Pune University, and the weightage of End Semester Examination, In Semester Examination, and Oral/Practical/Term Work marks is higher in students' final results, we gave more weight to External Assessment than Internal Assessment.
- · Internal Assessment has 30% weightage (Department may change this weightage if required) which includes continuous assessment for practical courses, theory courses, seminar and project work.
- 1. For theory courses, the assessment tools considered are unit test, MCQ test, assignments, tutorial, programming Skill Test, Case Study presentation.
- 2. For practical/ oral/ termwork courses, internal assessment tools considered are laboratory performance, mock practical / oral, mock seminar and project work presentation. The attainment levels are considered taking average performance levels in the university examination. Attainment level is measured based on internal assessment and external assessment (university examination).
- · Attainment levels are considered as below:
- o For Example: Attainment Level 1: 60% students scoring more than University average percentage marks or set attainment level in the final examination.
- o Attainment Level 2: **70%** students scoring more than University average percentage marks or set attainment level in the final examination.
- o Attainment Level 3: **80%** students scoring more than University average percentage marks or set attainment level in the final examination. Attainment is measured in terms of actual percentage of students getting a set percentage of marks.
- o If targets are achieved then all the course outcomes are attained for that year. Higher targets are set for the following years as a part of continuous improvement. If targets are not achieved then an action is planned to attain the target in subsequent years.

#### **Process for PO and PSO Attainment:**

- o PO and PSO Attainment is divided into two parts direct and indirect attainment.
- o Direct attainment has 80% weightage which is determined by taking average of all courses addressing that PO and PSO. As direct attainment comprises the average CO-PO attainment of all engineering courses and is solely based on students' performance during four years of engineering, we assigned a

higher weightage (80%) to direct attainment than indirect attainment (20%).

- o In-direct attainment has **20%** weightage which includes analysis of program exit survey, co-curricular and extra-curricular activities, employers' feedback and alumni feedback and average is taken to get the Indirect PO and PSO Attainment.
- o The final program outcome and program specific outcome attainment is computed by adding direct and indirect attainment in the proportion of 80:20 (Department may change this ratio if required) respectively.

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

### 2.6.3

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

Response: 96.97

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

2022-23	2021-22	2020-21	2019-20	2018-19
295	320	304	356	291

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

2022-23	2021-22	2020-21	2019-20	2018-19
302	334	310	363	306

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise.	View Document
Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students	View Document

# 2.7 Student Satisfaction Survey

-	_	
′ 7	7	- 1

Online student satisfaction survey regarding teaching learning process

# **Response:**

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

# Criterion 3 - Research, Innovations and Extension

# 3.1 Resource Mobilization for Research

### 3.1.1

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

**Response:** 1622.18

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

2022-23	2021-22	2020-21	2019-20	2018-19
748.78	752.28	34.14078	32.62745	54.35

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

# 3.2 Innovation Ecosystem

### 3.2.1

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

# **Response:**

AIT has created an ecosystem for research and innovation. It includes projects and innovation labs, an Innovation & Entrepreneurship cell, an IIC, an IPR cell, an R&D Cell, Professional society memberships, collaborations, research experts and faculty mentors for projects, and PhD guides.

**IIC-** The institution has an MHRD-recognized IIC through which various activities on IPR, entrepreneurship, and innovation are conducted throughout the year. Star rated IIC by MIC AICTE since 2018-19.

**Innovation & Entrepreneurship cell**: Established to foster the spirit of innovation and Entrepreneurship in our students.

**R&D** and **IPR** Cell- AIT have comprehensive R &D policies and IPR policy to encourage and foster to

Page 39/84 12-08-2024 10:03:27

# AIT students and faculty.

- Incentive grant to AIT students for innovative projects
- Incentives to faculty to publish paper in quality journal
- Seed funds for projects and startups
- Financial support to present paper in conference
- Technical and financial assistance to faculty and students to file patent. Total fund received by faculty and students from AIT for filing patents is Rs. 2,04,080/-
- Thirty MOU's have been signed with industries, defence and academia for collaborative research and various activities are conducted under these MoUs which inculcates research environment among faculty and students
- Appreciation letters to the students and faculties for their achievements.
- R&D Cell conducts seminars, webinars, and workshops to transfer knowledge among faculty and students
- AIT is a part of group of ACOEP to take initiatives in defence research
- AIT provides financial, academic, infrastructural facilities, human resources required and timely
  administrative decisions to enable students and staffs for participating in the various technical
  activities.

**Various Clubs:** Technical, SAE Collegiate club, Robotics, EV, Innovation & Enterpreneurship, Open Source SW club conducts annual intra and inter college competitions which stimulate critical thinking, creativity and scientific temper among the students.

**Labs**: AIT has well equipped and dedicated labs for development of innovative projects. e.g. Robotics Lab, 3DPLM lab and EV Lab to provide state of art facilities to students for realizing their ideas and innovations.

**Students chapters:** Through student chapters of professional bodies (CSI, IEEE, IETE) various opportunities of competitions are made available to students.

SOP is framed for Seed Money for research project which encourage to faculty to extend their research work without waiting for a grant from external agency.

AIT & Regional Technology Node, HQ Southern Command, Pune organized an event "Southern Star Academia Industry Interface" on 12th May 2023. Active participation from Defence, R&D institutions, industries, Start-ups, academia are the major highlights of program.

# **Major Achievements:**

- National Cyber Security research project of 7.46 Cr
- Students are recipient of national and international level awards like KPIT SPARKALE, Smart India Hackathons (SIH) etc.
- Faculty awards for the Best Thesis.
- The Institution has more than 30 published patent, five granted patents and more than 10 copyrights. Quality research papers have been increased.
- Star rated IIC by MIC AICTE
- NIRF Ranking
- Startups by students

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

# 3.2.2

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

Response: 51

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

2022-23	2021-22	2020-21	2019-20	2018-19
17	11	16	05	02

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

# 3.3 Research Publications and Awards

# 3.3.1

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

**Response:** 1.74

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

2022-23	2021-22	2020-21	2019-20	2018-19
50	20	44	44	16

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

# 3.3.2

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

**Response:** 1.41

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

2022-23	2021-22	2020-21	2019-20	2018-19
28	42	24	25	22

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

# 3.4 Extension Activities

3.4.1

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

### **Response:**

The Mission of AIT is to provide the right environment to foster the culture of research, innovation, creative thinking for development of good leaders and entrepreneurs to support sustainable development of society and nation building. The values of good citizenship are inculcated in our students by the teachers and student peer group. College has an AIT tenet and honour code for students that they must abide by. The students at our college actively participate in social service activities which lead to their overall growth. AIT has continually active NSS and NCC Units with substantial number of student's participation with following major activities.

**Food Distribution:** Every year Sant.Dnyaneshwar Palakhi is a great festival celebrated in Maharashtra. NSS club organised Food and water distribution to around 500 pilgrims every year who participate in Palkhi Event.

Cleanliness Drive:NSS Club of AIT went to clean the Indrayani River at Alandi, Pune. The volunteers got sub-divided into small teams, picked up the plastic waste around both the ghats, and cleaned the surroundings using brooms and dustbins. Students also encouraged the locals to make efforts on their level to keep the river clean and forbid practices such as washing clothes, bathing, and disposing of waste in the river. In the end, the students cleaned a Mandir situated at the ghat and distributed food among the locals.

Visit to blind School: NSS volunteers visited "Mai Bal Bhavan", Students interacted with the children, played Antakshari and football with students. students also performed fun activities, volunteers distributed sweets to the children.

**Blood donation camps**: College collaborates with AFMC for conducting blood donation camps. AIT regularly conduct a blood donation camp every year. Many AIT students & faculty enthusiastically donate blood.

**Tree plantation**: Every year during monsoons we conduct a tree plantation drive. Over the years it has made our campus lush and green. Approximately 3000 trees are planted in AIT campus.

**Independence Day & Republic Day:** AIT celebrates the national festival with great enthusiasm. AIT organizes various cultural events on this day such as patriotic songs by students and faculty, speech by students and faculty. Sweets are also distributed to celebrate the national festival.

**Visit to Orphanages:**NSS Club has visited and stayed for a week in orphanage named "snehvan". Group of NSS girls and boys have served many services such as cleaning of campus, teaching to students, wall painting etc. during this visit.

The National Cadet Corps: Maharashtra Bn. NCC unit has been functional in Army Institute of Technology since Nov 22 with a capacity of 100 cadets. Dr.Bidwai has been commissioned as Associate NCC Officer (Rank Lieutenant) on 14 Nov. 2023. Every year NCC Unit at AIT organizes various events like cleaning activity, blood donation campaign, tree plantation, cycling rides, fort visits etc. along with the regular parades for the overall development of the cadets. The Cadets have been given an opportunity

to attend national and international camps, firing competitions, sports competitions, mountaineering events across India. Cadets have been trained on disaster management by National Water Academy, khadakwasla.

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

### 3.4.2

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

# **Response:**

- AIT has received 3rd Rank in west region Dataquest T school employability index survey in AY 2022-23. Similarly AIT has received 4th Rank in west region Dataquest T school employability index survey of AY 2021-22.
- AIT has established Institution Innovation Council (IIC) in Year AY 2018-2019 on 21st November 2018 with four star rating. Subsequently AIT has worked on various activities and earned recognitions. AIT has earned four star rating in AY 2019-20, 20-21, 21-22. In 22-23 AIT has received three and half star rating.
- AIT is recognised as Best Education Institute by Pune Education Leadership Award by World Education Congress in AY 2021-22
- AIT is considered amongst the Best Engineering Colleges of India. Ministry of HRD, Government of India has ranked AIT in the band of 151-200, among all engineering colleges in India, through National Institute Ranking Framework (NIRF). AIT has been nationally ranked at 55, 39 and 15 among private and government colleges by India Today.
- AIT has received Certificate of Appreciation by ZS associates for coordinating best placement activities.
- AIT has received Best Placement Award in AY 2019-20 by Dataquest T School Conference & Awards.
- The Placement Cell at AIT has been consistently placing more than 90% of its registered students through Campus Placement. 96% students of 2022-23 batch have been placed. AIT's Campus-Placements are amongst the best in the entire State of Maharashtra with all leading IT Services & Product and manufacturing companies recruiting students through Campus Placement
- AIT has received first prize at chhatra Vishwakama Award 2018 by AICTE in AY 2018-19 for innovation project titled "Mosquito detector, counter and alerter".
- AIT has participated in various social activities such as Blood donation and cleanliness drives. AIT is appreciated with many momentos and certificates by AFMC in AY 2019-20 and 2018-19.
- AIT Encourage many students to participate in project competitions, hackathons at national and international level. Students have won multinational UNESCO India Africa Hackathon on 25th November 2022 and awarded by honourable vice president and union education minister of India. Also Students won Smart India hackathon on 26th August 2022 with prize money of 1 lakh.

Students have also won top prize at KPIT Sparkle competition straight for two years.

• AIT has received 6th Rank by THE WEEK Magazine amongst Top Engineering Colleges across country: Hansa Research Survey 2018.

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

### 3.4.3

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

**Response:** 73

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

2022-23	2021-22	2020-21	2019-20	2018-19
10	5	22	32	4

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

# 3.5 Collaboration

### 3.5.1

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship,

# on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 30

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

# **Criterion 4 - Infrastructure and Learning Resources**

# 4.1 Physical Facilities

### 4.1.1

The Institution has adequate infrastructure and other facilities for,

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

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

## **Response:**

Campus is spread over 30 acre with total built up area of 51317m2. College is well equipped with 20 ICT-enable classrooms which includes 05 smart-classrooms having audio video recording facilities, 2 ICT-enable seminar halls, 2 ICT-enable conference hall, 09 tutorial rooms, 46 laboratories and a workshop. Each Department has well maintained and continuously updated laboratories. All computer labs are well equipped with latest softwares and updated hardware. Institute has Learning Management System (LMS-Moodle) to manage effective teaching learning processes. High-performance computing facility is installed to enable R&D in areas like Deep learning and Machine learning. Ubiquitous computing laboratory focuses on energy sensing, low power sensing and projects based on IoT.

The institute has three sponsored labs viz. Product Innovation Lab, Innovation and Development Centre and EV lab sponsored by Dassault systems, Robu.in and Ex-army person respectively. We have well equipped 'Centre of Excellence in AI and Robotics' to enhance immersive learning in AI and robotics. The workshop complex consists of different facilities like 3D printers, industrial grade CNC machine, cut section of car, BMW engine and shops like machine shop, carpentry, welding and tin smithy shops.

The institute has campus wide Enterprise class network Cisco Catalyst Switches connected by optical fiber redundant mode connectivity of 10Gbps in academic block and hostels. The Backbone LAN connectivity is provided with WAN connectivity of 2048Mbps(2Gbps) lease line (1:1) Class-A ISP internet which includes 1000Mbps(1Gbps) NKN, 500Mbps(0.5Gbps) (Tata Teleservices) and 500Mbps(0.5Gbps) (Power grid) connectivity. This Network comprises of 100+campus wide Cisco 9115 series Wi-Fi Access Points monitored by Cisco Wi-Fi controller 9800L. These access points (120) are available for entire campus to cater the need of 2000+users. The Institute also has state of art server center with multiple servers, next generation firewalls such as Fortinet 200F and Sonicwall 4600. The Netgear make NAS storage facility of 3 TB is available.

The institute has deployed the educational ERP software for monitoring student admission, faculty profile and interaction with students and parents.

AIT has well stock library with 36370 print-books, 28 print-journals, 980 E-journals, 1888E-books, DELNET database, 129 NPTEL web courses and 324 videos as comprehensive hybrid learning resources. Library also includes Turnitin-feedback-studio+Turnitin-originality (with AI-detection) antiplagiarism software, Knimbus E-Library (remote access platform), face recognition attendance system, E-content creation facility and internet connectivity. Library has also compact storage system to store 10000 print books. It has spacious air-conditioned reading hall (Capacity:156) with Bring Your Own Device (BYOD) and Wi-Fi facility for students. We have Training and Placement cell with excellent infrastructure for training and placement activities.

Page 47/84 12-08-2024 10:03:27

AIT aspires to offer the best facilities to participate and perform in the spiritual, cultural, sports activities and other extra-curricular activities. To facilitate this, AIT has 08 different facilities to conduct cultural activates, 17 different sport facilities and more than 14 different clubs to provide platform for cultural, sports, co-curricular and extra-curricular activates for overall development of students.

For specially-abled people, institute provides ramps, special toilet and a passenger-lift having 408 kg/6-passenger capacity. Entire campus is under CCTV surveillance (775cameras).

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

# 4.1.2

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

Response: 53.1

# $4.1.2.1 \ \textbf{Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakks)}$

2022-23	2021-22	2020-21	2019-20	2018-19
750.43	337.04	324.03	256.62	384.55

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

# 4.2 Library as a Learning Resource

4.2.1

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

# **Response:**

1.IT library is an excellent knowledge resource centre. It is located on the ground floor of Aryabhata Centre and spread over a carpet area of 723m2 in different sections (like Book Processing, Circulation, Stack Room, Compact storage unit, Digital Library, BMS/UPS Room, Reading Hall and Conference Room).

Library was automated in the year 1998 with "SLIM21 system for library information and management" software that manages and integrates multiple core library functions and services. Modules presently implemented which are required for day-to-day library management are Cataloguing, Circulation, Acquisitions, Serial Control and Web OPAC. Different types of services such as reference service, email alert service and OPAC facility are provided by the library through the library management system. A variety of reports and statistics are generated through SLIM21 software to support the library system. The latest upgraded versions of ILMS are implemented from time to time to meet the technological advances. Details of Upgraded versions of SLIM 21 are as follows.

AY	ILMS	Version
2022-2023	SLIM 21	3.9.0
2021-2022	SLIM 21	3.8.0
2020-2021	SLIM 21	3.7.0
2019-2020	SLIM 21	3.7.0
2018-2019	SLIM 21	3.6.0

AIT library has a comprehensive and rich hybrid resource collection consisting of 36370-print books, 28-Print journals, 980-e-journals, 1888-e-books, DELNET Database and 129-NPTEL web-courses and 324-videos. Subscriptions of e-resources are renewed annually. The e-resources available with the library are IEEE (ASPP)+POP All, Springer Nature 3 Subject Collection, ASME Digital Collection, ELSEVIER-Science Direct (Engineering and Computer Science) and McGraw Hills Access Engineering e-books, Springer Nature e-books, Videeya e-books, McGraw Hills India Express Library e-books etc.

In addition to these learning resources, well-furnished 12 seating capacity digital library section having 12 high end PC with Internet connectivity, the printer and scanner are provided. Other facilities like **Turnitin feedback studio+Turnitin originality (with AI detection tool) anti plagiarism software having 1348 end user license, Knimbus e-Library (Remote Access Platform)**, Face recognition attendance system (to maintain record of user footfall) is provided to the users. In the year 2023-2024 the library has received financial assistance from Savitribai Phule Pune University under the QIP of Rs. 73,237/- for e-content creation.

The state-of-art air-conditioned reading hall provided with wi-fi facility, electric plug socket for bring your own device (BYOD) has a total seating capacity of 156. Apart from these facilities the library has provided a book bank facility for the top ten students from each class. The library also awards annually Best Library User to the student in the form of Trophy and Certificate to motivate students to use library facilities.

Library books are arranged systematically in 50 book racks, compact storage unit and 3 journal display racks having storage capacity of 35,000+10,000 books and 75 print journals respectively. Usage reports and statistics of e-resources and other print resources is generated and maintained by the library. Face recognition attendance system is used to maintain a record of user footfall in the library.

Average budget utilization in last five years is 39.08 lakhs and average procurement of resources viz. books: 619, E-books: 1256, E-journals: 993 and print journals: 57.

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

## 4.3 IT Infrastructure

#### 4.3.1

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

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

### **Response:**

Institute has campus wide Enterprise class network Cisco Catalyst Switches connected by optical fiber redundant mode connectivity of 10Gbps in academic block and hostels. The Backbone LAN connectivity is provided with WAN connectivity of 2000Mbps (2Gbps) lease line (1:1) Class-A ISP internet which includes 1000Mbps(1Gbps) NKN, 500Mbps (0.5Gbps) (Tata Teleservices) and 500Mbps (0.5Gbps) (Power grid) connectivity. This Network also comprises of campus wide Cisco 9115 series routers/Access Points monitored by Cisco Wi-Fi controller 9800L. These access points(120) have been presence over the entire campus to cater the need of 2000+ users.

**Internet Bandwidth and Staff/Students Users Details (01 Jul 2024)** 

Sr	Academic Year	Leased Line	Total	No of Users
No			Bandwidth	
	2022-23		2000Mbps (2 Gbps)	2000+ Users
		Power Grid-		
		500Mbps		
		NKN-1000Mbps		

2	2021-22	TATA-150Mbps	1650 (1.65Gbps)	Mbps 1500 Users
		Power Grie 500Mbps	` • ′	
		NKN-1000Mbps		
3	2020-21	TATA-150Mbps	1150 Mbps	1200 Users
		NKN-1000Mbps	(1.15Gbps)	
4	2019-20	TATA-150Mbps	1150 Mbps	1200 Users
		NKN-1000Mbps	(1.15Gbps)	
5	2018-19	TATA-150Mbps	1150 Mbps	1000 USers
		NKN-1000Mbps	(1.15Gbps)	

The Institute also has state of art mini data center with farm of servers, next generation firewalls and network NAS storage facility.

The Institute has adequate IT facilities with 42 softwares which are used at various

departments by the students and faculty. Application Software such as MATLAB, Auto CAD, computer vision system, Signal processing tools box, SLIM, Turnitin feedback studio+Turnitin+AI-detection antiplagiarism software, Knimbus-remote access E-Library etc. are available at the institute. Institute also has school-campus agreement for Microsoft license. Institute also having Learning Management System (LMS)- Moodle which helps the institute to manage effective teaching learning processes. The institute has deployed the educational Enterprise Resource Planning (ERP) software for monitoring student admission and faculty profile as well interaction with students and their parents.

All computers are networked with UPS power backup and three DG-sets of 125 KVA generators are installed to ensure uninterrupted power supply.

**IT infrastructure in AIT:** High performance computing facility is developed to focus on many areas such as Deep learning, Machine learning and advanced AI research. Students and staff can use high performance workstations, IoT and embedded kits and sensors for various Ubiquitous applications.

- 1.**HPC Server** possesses a combined processing power of multiple Central Processing Units, Graphical Processing Units, and the most advanced Tensor Processing Units. As a result, HPCs are extremely efficient in supporting advanced AI research.
- 2. **Workstation:** Two workstations having Intel Xeon 16 Core and Intel Xeon 6 Core CPU specifications.
- 3. **Deep Learning Inference Embedded Platform:** Consisting of 6-core NVIDIA Carmel ARMv8 CPU and 384-core Volta GPU.
- 4. **Deep Learning Inference Embedded Platform:** Consisting of Octal-core NVIDIA Carmel ARMv8.2 CPU @ 2.26GHz and 512-core Volta GPU.
- 5. **Thermal camera:** 3D- Stereo camera, Night vision camera, IP Camera and Wireless USB cam
- 6. Artificial Intelligent IOT Lab: This lab includes, IOT Node-Cortex-M4 (Micro-Python Enabled), AI Node, All in One General Purpose Board, IOT Gateway, Portable Sensor Kit/wio

Page 51/84 12-08-2024 10:03:27

node module, IOT sensor kit, RFID module, Fingerprint Sensor module, Stepper Motor, DC Motor, Solid State Relay Module and Amazon Echo device.

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

### 4.3.2

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

Response: 2.52

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

Response: 554

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

# 4.4 Maintenance of Campus Infrastructure

#### 4.4.1

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

Response: 39.54

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

2022-23	2021-22	2020-21	2019-20	2018-19
477.26	275.51	234.33	247.8	293.53

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

# **Criterion 5 - Student Support and Progression**

# **5.1 Student Support**

### 5.1.1

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

Response: 22.98

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

2022-23	2021-22	2020-21	2019-20	2018-19
453	365	238	232	240

File Description	Document
Year-wise list of beneficiary students in each scheme duly signed by the competent authority.	View Document
Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).	View Document
Upload policy document of the HEI for award of scholarship and freeships.	View Document
Institutional data in the prescribed format	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

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

**Response:** A. All of the above

Page 54/84 12-08-2024 10:03:27

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

### 5.1.3

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

Response: 21.53

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

2022-23	2021-22	2020-21	2019-20	2018-19
273	311	267	326	255

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

# 5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

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

**Response:** A. All of the above

Page 55/84 12-08-2024 10:03:27

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

# **5.2 Student Progression**

# 5.2.1

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

Response: 92.02

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

2022-23	2021-22	2020-21	2019-20	2018-19
291	323	278	324	249

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

2022-23	2021-22	2020-21	2019-20	2018-19
300	330	304	359	299

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

# 5.2.2

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

**Response:** 57.48

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

2022-23	2021-22	2020-21	2019-20	2018-19
22	18	18	11	04

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

# 5.3 Student Participation and Activities

### 5.3.1

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

**Response:** 58

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

2022-23	2021-22	2020-21	2019-20	2018-19
06	14	0	26	12

File Description	Document
Upload supporting document	View Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

# 5.3.2

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

Response: 23.4

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

2022-23	2021-22	2020-21	2019-20	2018-19
37	25	12	22	21

File Description	Document
Upload supporting document	<u>View Document</u>
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 Association of the Army Institute of Technology:

The Army Institute of Technology (AIT) saw its first batch of graduates in 1998, and by 1999, the AIT Alumni Association was established. On June 17, 2000, the association was officially registered under the Charity Commissioner of Pune. The association adheres to a comprehensive set of documented rules, regulations, and norms, with a total membership strength of 4,890 alumni. The primary governing body, the Alumni Governing Council, includes the President, Secretary, and Treasurer, with elections held every three years. Each graduating student contributes an alumni membership fee of Rs. 1100/- to support alumni activities.

### Contributions of the Alumni Association

The contributions of the AIT Alumni Association are diverse and impactful, including:

- **Student Guidance:** Providing guest lectures and technical sessions.
- Entrepreneurship Support: Offering guidance through the startup/E-cell for aspiring entrepreneurs.
- Event Sponsorship: Sponsoring technical and co-curricular events.
- Scholarships: Awarding scholarships to deserving students based on merit and financial need.
- Laboratory Support: Enhancing departmental laboratories.
- **Project Competitions:** Organizing competitions to showcase student projects.
- Campus Placements: Facilitating campus placements and internships by connecting with industries.
- **Job Opportunities:** Offering job opportunities within alumni-owned companies.

### **Networking and Connectivity:**

The Alumni Association hosts an annual national meet and regional meets in major metro cities. For more information, alumni can visit the website at alumni.aitpune.edu.in. Additionally, AIT alumni stay connected through LinkedIn, Instagram, and Facebook. The association is notable for its diverse presence in various non-conventional sectors, such as social services, public services, politics, and education, serving as role models for current students. Their significant contributions have been instrumental in

developing the E-cell on campus and fostering the Institution's Innovation Council (IIC) activities.

### **Global Reach and Achievements:**

AIT alumni are spread across the globe, including the US, UK, and Australia, and hold prominent positions within various organizations. Among the over 6,000 alumni, more than 75 are successful entrepreneurs, some of whom have received accolades from the Prime Minister of India. The Alumni Association actively supports numerous activities at AIT, such as the Foundation Day, technical events, and project competitions.

## **Strengthening Bonds and Loyalty:**

The association has successfully strengthened fellowship and cooperation among alumni, fostering a sense of loyalty to the institute. The number of scholarships continues to grow each year, and alumni entrepreneurs provide significant employment opportunities to AIT graduates. In top multinational companies, AIT alumni proudly represent the institute.

**Impact Areas:** The AIT Alumni Association has created a substantial impact in four key areas:

- Support System
- Offering Expertise
- Assistance in Employability
- Mentorship and Scholarships

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

# Criterion 6 - Governance, Leadership and Management

# 6.1 Institutional Vision and Leadership

### 6.1.1

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

# **Response:**

At our institution, governance and leadership are aligned with our vision and mission. Our leadership team prioritizes transparency and collaboration. By actively engaging stakeholders and incorporating their feedback, we foster a culture of inclusivity and innovation. Regular assessments of our policies help us adapt to changing needs while staying true to our mission.

Our vision and mission are in tune with the objectives of the Higher Education policies of the nation since pursuit of excellence in chosen field of study and inculcating core values in students is the ultimate goal of Higher Education. Measures taken to translate the vision into activities are,

- · Participative management and transparent policies.
- · Providing high class infrastructure for academics, sports and cultural activities to produce total quality engineers.
- · Synergy with industries for experiential learning and for developing technology leaders.
- · Involvement of all stakeholders in decision making bodies.
- A highly secure and fully residential campus with all amenities for providing right conducive environment and to ensure all round development of students.
- Special emphasis on R&D and innovation and entrepreneurship Encouraging peer and self-learning.
- Continuous efforts to interact with R & D institutions within country and abroad. Con Constant engagement with alumni with higher institutions in MNCs abroad.

### 6.1.1 b.

Effective leadership is visible in institutional practices such as decentralization and participative management. The institution's governance and leadership directly support our short-term and long-term Institutional Perspective Plans. This alignment ensures that every initiative drives us toward achieving our strategic goals effectively and efficiently

AIT functions under the aegis of the Army Welfare Education Society (AWES).

Page 61/84 12-08-2024 10:03:27

- · Director provides the link between top management and functionaries of the institute. Along with values and ethos of army culture, there is adequate freedom and decentralization.
- · IQAC audits including reviews are held regularly. HoDs further hold their departmental consultations. The General Body consisting of external doyens of industry and academia meets once/twice yearly to discuss institute progress and policies.
- The CDC meets regularly and discusses all functional issues. Teachers and students have adequate representation in CDC.
- · Financial powers are decentralized to HOD. Routine leave is approved at the department level.
- · All important projects are designed by project management committees headed by senior faculty. Employees also nominated for local purchase committee, formulation of SOP and other committees including anti ragging committee, disciplinary committees etc.
- · Branch heads, class representatives and the club in charge are part of the extended student council and manage all student affairs.
- All club activities and competitions, including national-level Hackathons are planned, organized and conducted by students under the guidance of the club in charge.

# NEP Implementation:

- · Two-week FDP is conducted on NEP at institute level
- Faculty have attended FDPs on NEP at other institutions
- Faculty requirement at first year level is finalized as per NEP instructions given by SPPU Pune

Academic Bank of Credits IDs are created for all AIT students

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

# **6.2 Strategy Development and Deployment**

### 6.2.1

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

Page 62/84 12-08-2024 10:03:27

# **Response:**

The College has a clear and well defined system to monitor and evaluate the effectiveness and meaningful implementation of the policies and plans of the institution.

- Monitoring and review of the strategic/perspective plan is carried out every six months at the institutional level during the IQAC and HOD's meetings.
- The Army Institute of Technology's (AIT) IQAC also reviews the program and presents to the College Development Committee (CDC appointed as per University norms) every six months. The program is also submitted to the society i.e. Army Welfare Education Society (AWES) on yearly basis. AWES organization was registered under the Societies Registration Act XXI of 1860 on 29 Apr 1983 as Army Welfare Education Society (AWES) being a statutory requirement for affiliation to CBSE. The Apex Body of AWES is the Board of Governors (BOG) with the Chief of Army Staff as the Patron-in-Chief and Army Commanders as Patrons. The day to day work, in pursuance of BOG directions, was to be carried out by an Executive Committee headed by the Adjutant General (AG) and a retired Officer appointed as full time secretary of AWES. This secretariat which started functioning under AG's Branch as CW-9 later metamorphosed into the present day HQ AWES under a retired officer of Major General rank.
- The plan and program is submitted to Governing Body during the Governing Body Meeting (GBM).
- The plan is shown to the department, who work on implementing the future projects in a timely manner.
- All relevant documents related to Strategic/perspective plans are available on website.

AIT Growth Plan 2015-20.pdf (aitpune.com)

aitgrowthplan.pdf (aitpune.com)

# AITPP-2011-20.pdf (aitpune.com)

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

- Details of Institutional Bodies are placed on the AIT website. Army Institute of Technology (aitpune.com)
- The institutional bodies include the CDC, IIC, Grievance Committee, Student Council, Committee for conduct of admissions, E cell, R & D cell and many others.
- Every year this list is published in form of a notice. These bodies meet as per statutory requirement as well as when the need arises. They interact with the Principal and Director regularly.
- The Society governing (AWES) AIT has its own service rules published as "Rules and Regulations for Professional Institutes" 2009.
- These rules are updated and modified as per changes in higher education policies and other requirements from time to time.

- AIT has placed copy of these rules on its website.
- Placement SOPs and policy letters are maintained in the office and copies are placed on the website of the college. All employees and students are made aware of the same and are expected to follow the same.

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

# 6.2.2

# Institution implements e-governance in its operations

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

**Response:** A. All of the above

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

# **6.3 Faculty Empowerment Strategies**

# 6.3.1

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

# **Response:**

# 1. Performance Appraisal System and Process

Institution has established comprehensive performance appraisal system for faculty members, incorporating multiple evaluation levels. This system follows UGC-provided formats and society-specified parameters such as ACR for both Teaching and Non-Teaching. The goal is to thoroughly evaluate each faculty member's performance across various domains. Appraisal process starts with an initial rating from Head of Department, and then reviewed by the Principal and Director. Followed by individual discussions with each faculty member to review their performance. Faculty interviews are conducted to identify areas for improvement, provide appropriate skill upgrades, and identify potential candidates for future leadership roles. There is a strong emphasis on participating in programs like FDPs and Certification Courses.

# 3. Recognition of Outstanding Performance

Outstanding performance is recognized during AIT Day Award Function with accolades such as Best Teacher, Best Non-Teaching, Best Result, and Best Research. Exceptional achievers are interviewed by Director and awarded citations, which may include prestigious awards like Army Commendation GoC-In-C. Chairman of institute also makes special efforts to recognize individual achievements with complimentary letters. Following appraisal cycle, top-performing teachers receive appreciation letters, and motivation letters to encourage additional efforts for improvement. These evaluations are meticulously documented in individual service records.

# **5.**Comprehensive Welfare Measures for Staff

To enhance well-being of both teaching and non-teaching staff it offers competitive salaries aligned with industry standards, and upon completion of a PhD, faculty members receive three additional increments and eligible for promotions under the CAS Policy. Faculty members pursuing PhD are granted six additional leaves annually.

# 6.Professional Development and Financial Support

Institution has established various programs to support faculty members in pursuing higher education and research. Faculty empowerment strategies include skill development, upgrades through FDP and R&D initiation policies. Financial support is provided for workshop registration, conference expenses, and travel costs, and also receives financial assistance for IPR filing. Special awards are given for best renovation and best paper. Institution encourages faculty to engage in consultancy and sponsored projects, and special funds are available for faculty launching start-ups to implement creative ideas for the institute.

## 7.Insurance and Other Welfare Initiatives

One of the notable welfare initiatives offered by the institute is Accident Insurance coverage amounting to ? 5 lakh, funded by the institute. There is Contributory Group Medical Insurance scheme providing coverage of ? 5 lakh per family and a Contributory Group Term Insurance plan offering ? 10 lakh coverage. Other benefits include gratuity, Diwali bonuses for non-teaching staff, and retirement benefits such as leave encashment. The institution also provides special support in the case of a staff member's

demise, including ex gratia payments and assistance to the family, including priority employment consideration for the next of kin. Institute offers various welfare measures, such as staff quarters, ambulance service and transportation available for payment. Interested staff members can avail of lunch and refreshments at subsidized rates, and insurance premiums for lower-salary staff are partially paid by institute. To promote physical and mental well-being, institute organizes Yoga and Meditation sessions, staff sports competitions.

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

## 6.3.2

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

Response: 15.91

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

2022-23	2021-22	2020-21	2019-20	2018-19
09	14	07	17	16

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

# 6.3.3

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

Response: 41.22

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

2022-23	2021-22	2020-21	2019-20	2018-19
78	56	90	83	24

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

2022-23	2021-22	2020-21	2019-20	2018-19
112	86	61	69	79

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

# 6.4 Financial Management and Resource Mobilization

## 6.4.1

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

Page 67/84 12-08-2024 10:03:27

# regularly (internal and external)

### **Response:**

#### a. Mobilization of resource and funds

The Institute is predominantly funded by student fees. These fees are determined based on society policies and projected needs and are approved by the board of administration of HQ Southern Command (SC) before finalization. Fees collection of the students based on the anonymous committee of Justice B.N. ShriKrishna submitted to AICTE 2015. Limiting yearly fee increases to 5% helps to alleviate the financial burden on students. To augment the budget, additional funds are sourced from philanthropists, alumni, research grants and requests to HQ SC and AWES for Grants In Aids (GIA). Investment strategies are optimized to maximize returns, and sponsorships for specific events are actively pursued.

## b. The optimal utilization of resources

The financial management system at the Institute is structured for budget sanctioning and expenditure oversight. An internal approval framework ensures all expenses are scrutinized by multiple authorities, including the accounts department, the Joint Director, the Director, and the Local Purchase Committee. Purchases are authorized according to approved financial powers, with high-value acquisitions requiring open tendering, technical evaluations, and commercial assessments. These procedures comply with Government financial regulations, rules and regulations of society and are detailed in the Standard Operating Procedures (SOP) of AIT.CFA for approving the expenditure is based on policy directive issued by the society.

The budgeting process begins with Collection of the data from departments and Various clubs submitting anticipated expenses. These are reviewed and approved by the College Development Committee (CDC) and the management. Additional funds are allocated as necessary to cover unforeseen expenses. All expenditures adhere to the SOP and government rules, ensuring transparent financial operations.

Financial assistance provided to staff for participation in technical events, skill programs, conferences and workshops. Students also receive support for national, international, and state-level competitions, contributing to their excellent performance in these events. This financial support underscores the Institute's commitment to fostering academic and professional growth among its community.

The Institute has a dedicated Purchase Committee responsible for calling quotations, technical evaluations, Comparative Statement, and Price negotiations. Their objective is to procure quality equipment cost-effectively. A project officer oversees the procurement process and ensures timely project completion. This structured approach to procurement guarantees probity, efficiency and transparency.

# c. Internal and External financial audits

Internal audits are conducted quarterly by Gazetted Army Officers as mandated by Station HQ Kirkee, with surprise checks periodically ordered by higher authorities. Administrative Inspections by the Institute's Patron involve comprehensive reviews of all expenditures. Additionally, certified public accountants perform annual external financial audits, with the audit reports formally submitted to HQ Army Welfare Education Society (AWES) and signed by the Head of the Institute. Audit objections or

observations are addressed promptly, ensuring financial accountability.

Annual financial audits conducted by a chartered accountant ensure adherence to established financial procedures. These audits are crucial for maintaining financial integrity, confirming that all funds are utilized appropriately and in alignment with the Institute's objectives. Financial transactions are maintained on tally Prime software version 3.0

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

# 6.5 Internal Quality Assurance System

### 6.5.1

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

# **Response:**

The IQAC plays a crucial role in ensuring and enhancing the institution's quality of education, research, and overall functioning. Here are the necessary steps for fulfilling this criterion in an engineering college:

# **Establishment of IQAC:**

The Institute established its Internal Quality Assurance Cell (IQAC) on February 25, 2005. The IQAC periodically revises policies to align with NAAC guidelines. On September 14, 2022, the composition of the IQAC was reformed as outlined below:

- Chairperson- Head of Institute
- Heads of All the Departments.
- Dean R&D, One Associate Professor and One Assistant Professor.
- Members from the Management Joint Director.
- NAAC Co-coordinator.
- Senior Administrative Officers.
- Local Society Nominee, Students, and Alumni.
- Nominee of Employer/ Industrialists/ Stakeholders.

# The IQAC has several key initiatives which include the following:

The IQAC strategies goals and targets on the basis of the institute's Vision and Mission and set relevant benchmarks. Goals and targets are the prospective plans and are further propagated to the

department.Defining Objectives and Functions: The objectives and functions of the IQAC are in alignment with the vision and mission of the engineering college. These objectives include monitoring academic activities, improving teaching-learning processes, promoting research and innovation, and enhancing the overall quality of education.

Developing Policies and Procedures: It has developed policies and procedures for the functioning of the IQAC, including mechanisms for assessment and accreditation processes, documentation and record-keeping, data analysis, and feedback mechanisms.

Implementing Quality Initiatives: Implement quality initiatives based on the findings of the self-assessment. These initiatives may include faculty development programs, student support services, infrastructure development, industry collaborations, and community engagement activities.

Monitoring and Evaluation: The Institute establish mechanisms for monitoring and evaluating the effectiveness of quality initiatives implemented by the IQAC. Regularly review and analyze data related to student performance, faculty development, research output, and stakeholder feedback.

Continuous Improvement: The Institute Promote a culture of continuous improvement within the students by encouraging feedback from peers students, faculty, staff, and other stakeholders. to identify areas for improvement and implement corrective measures.

Documentation and Reporting: Maintain detailed records of IQAC activities, including meeting minutes, assessment reports, action plans, and outcomes. Prepare annual quality assurance reports for submission to the NAAC and other relevant bodies.

External Peer Review: The Institute engages in external peer review processes to validate the effectiveness of the IQAC and its contribution to the quality enhancement of the students. Seek feedback from external experts and stakeholders for further improvement.

Dissemination of Best Practices: The Institute shares best practices and success stories of the IQAC with the new paradigm in education, placement, and M-tech analysis report with other departments within the college and with external institutions. Encourage knowledge sharing and collaboration to promote quality assurance in higher education.

By following these steps, our institution effectively fulfils Criterion 6.5.1 related to the Internal Quality Assurance Cell and demonstrates a commitment to continuous quality enhancement in all aspects of its operations.

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

6.5.2

# Quality assurance initiatives of the institution include:

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

**Response:** A. Any 4 or more of the above

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

# **Criterion 7 - Institutional Values and Best Practices**

# 7.1 Institutional Values and Social Responsibilities

### 7.1.1

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

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

## **Response:**

To promote gender equity, Institute ensures equal participation of girls and boys in all co-curricular and extra curricular activities.

Gender equity is supported through co-curricular activities by organizing events, workshops & initiatives that raise awareness about gender issues, promote inclusivity and provide opportunities for individuals of all genders to participate.

- 1. **Workshops and Seminars**: Hosting workshops, seminars focused on gender sensitivity, diversity, inclusion has helped educate students, staff about the importance of gender equity and how to foster it within the university community. Frequently such workshops are organized to promote the gender equity.
- 2. Awareness Campaigns: To make the awareness about gender equity different promotional activities such as posters, presentations and social media campaigning.
- 3. Skill-building Programs: AIT ensures adequate participation in skill-building programs, this leads to women entrepreneurship among the alumni, Start up by women entrepreneur such as Pallavi Tyagi-26 Technology services, Swati Kulkarni-elda Health, Manjiri Sharma-Freight Fox etc
- 4. **Counseling:** In AIT establishing regular Counseling and mentorship is done to provide a safe space for sharing experiences, seeking advice, and building networks. There are faculty counselors for every group of 15-20 students. Counseling for some students is also done by professional Counselor.
- 5. **Inclusive Competitions and Events:** There is equal representation for both the genders. Organizing competitions, hackathon that encourage participation from individuals. The awards are won by girls and boys students.
- 6. **Scholarships:** Scholarships awarded to both boys and girls to motivate and encourage. There are some scholarships which are only for girls like Pragati, Scholarship and Badve scholarship to support the gender equity.
- AIT Clubs: AIT has vibrant clubs, headed by students of 3rd year. The Leadership Teams has equal representation from girls and boys. Every Club has one boy and one girl as secretaries. Aakriti competitions are held in the areas of Technical/Sports and Cultural. These keenly contested competitions have both girls and boys team fielded for each sport. The team results have equal weightage for girls and boys in the overall championship.
- Placement: Girl students are also placed in high package company as well as many girls has

Page 72/84 12-08-2024 10:03:27

joined armed forces.

- Various Committees are established to address concerns, complaints or disputes arises among student, employees or stakeholders. Female Faculty or girls are representator for various committees' like
  - 1. Anti-Ragging Committee
  - 2. Internal Complaints Committee (ICC)
  - 3. Grievance Redressal Committee

In AIT, there is almost equal percentage of teaching female and male faculty as well as non teaching staff. The actual count is reflected in below Table 1 and 2.

Female faculties are nominated, based on their ability, as head departments and conveners of various committees, etc.

**Table1: Teaching Faculty Summary** 

Sr. No.	AY	Male Faculty	Female Faculty	Total
1	2022-23	43	40	83
2	2021-22	43	37	80
3	2020-21	40	35	75
4	2019-20	40	38	78
5	2018-19	41	39	80

# **Table2:Non-Teaching Faculty Summary**

Sr. No.	AY	Male Faculty	Female Faculty	Total
1	2022-23	93	37	130
2	2021-22	75	28	103
3	2020-21	61	17	78
4	2019-20	67	19	86
5	2018-19	72	24	96

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

## 7.1.2

#### The Institution has facilities and initiatives for

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

**Response:** A. 4 or All of the above

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

#### 7.1.3

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

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

**Response:** A. All of the above

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

#### 7.1.4

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

#### **Response:**

- Army Institute Technology (AIT) is committed to promoting diversity and harmony, with students being the wards of army personnel. The institute works towards eradicating stereotypes and enhancing self-esteem through courses like Humanities and Social Sciences, Business Communication, Soft Skills, and the three-week Orientation Program. Teachers deliver lectures with an acceptance and appreciation for different ideas, opinions, and learning styles, making an effort to understand racial and cultural characteristics. Additional communication and soft skills classes are conducted for fresher's to help them communicate effectively.
- AITians follow an Honor Code based on personal integrity, with Grievance Redressal cell, Internal Complaint Committee, Equal Opportunity Cell for specially abled Student and Staff, and Anti Ragging Committee aiming at social protection, tolerance, and harmony. Industrial visits expose students to practical challenges and make them from different backgrounds. The institution has a disabled-friendly, barrier-free environment, including ramps/lifts for easy access to classrooms, Divyangjan friendly washrooms, signage, assistive technology, and provision for enquiry and information. The Director of the institute and eminent personalities are invited to emphasize the importance of tolerance and harmony during national festivals and other events.
- The NSS and Spiritual club activities mitigate socioeconomic diversities and progress them
  towards a tolerant and harmonious living. Cultural, debate and dramatic, and NSS club organize
  competitions in street plays, skits, and choreography to educate students about their social
  responsibilities and understanding their actions. Students are encouraged to participate in various
  co-curricular and extracurricular activities to mingle and share opinions. The institute provides

merit cum means scholarships as financial support with the help of various organizations and conducts aptitude and general knowledge classes for eligible students.

- Army Institute Technology (AIT) sensitizes students to constitutional obligations about values, rights, duties, and responsibilities of citizens. The institute follows an honor code and encourages staff to act as role models for impressionable students. Students celebrates various festivals and days, focusing on developing physical, intellectual, emotional, and spiritual qualities.
- The mission of AIT is to provide a conducive environment for the development of defense personnel, aiming to produce quality engineers with research and innovation for sustainable development of the society. The institute hoists the flag during national festivals and emphasizes the duties and responsibilities to become leaders and good citizens. Staff and Students of AIT celebrates various festivals in right spirit and conducts intra and inter-college events training them to become good citizens. Our institute policies reflecting core values and prepares a code of conduct for students and staff. The college curriculum includes mandatory courses like Professional ethics and human values, Constitution of India, and Essence of Indian Traditional Knowledge. A three-week orientation program is organized to includes constitutional obligations among students. The institute also organizes awareness programs on traffic rules and regulations, focusing on ethical values, rights, duties, and responsibilities of citizens. The institute spreads awareness about pandemic situations like Covid and ensures appropriate measures have been taken. NSS activities involve philanthropic initiatives, such as donations and help to government, charities, and organizations to help victims during natural disasters.

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

#### 7.2 Best Practices

#### 7.2.1

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

#### **Response:**

# **BEST PRACTICE-I**

- 1. **Title of the Practice:** Comprehensive Efforts for Higher Package Placement of Students
- 2. Objectives of the Practice:
  - To enhance the relevant skills through Skill Development activities
  - To gain practical knowledge through Internships and Work Experience
  - To train the students to enhance quantitative and qualitative aptitude

• To build and maintain professional network and develop a strong personal branding

# 3. The Context:

- Enhance relevant skills such as problem-solving, critical thinking, communication, teamwork, and technical skills through coursework, projects, internships, and extracurricular activities.
- Gain practical experience through internships or part-time jobs in relevant industries or organizations. This also provides valuable networking opportunities.
- Preparation of interview questions, prepare for quantitative and qualitative aptitude that demonstrate the skills and accomplishments
- Build and maintain professional networks through industry events, career fairs, informational interviews, and online platforms. Networking can lead to job opportunities and referrals.

#### 4. The Practice:

- Competition: The job market is often competitive, with many qualified candidates vying for limited positions. Employers may have high standards and specific criteria for candidates.
- **Experience Requirements:** Many high-paying jobs require several years of experience in the field, which can be difficult for recent graduates or those transitioning to a new industry.
- **Industry Changes:** Industries are constantly evolving due to technological advancements, market trends, and other factors. Keeping up with these changes and adapting skill sets accordingly can be challenging.

#### **5. Evidence of Success:**

- o Skill Development through Placement Activities
- o Internship
- AMCAT 2022
- o Campus placements of last 5 years with CTC

## 6. Problems Encountered and Resource Required:

- **Limited Networking:** Access to professional networks and connections is crucial for job opportunities, but not everyone has an extensive network to leverage.
- Competitive Market: The job market can be fiercely competitive, with numerous qualified candidates vying for limited positions.
- **Industry Instability:** Certain industries may experience fluctuations or downturns, impacting job availability and salary offerings.

# **BEST PRACTICE-II**

1. **Title of the Practice:** Industry Integration to foster co-curricular activities including Innovation and Entrepreneurship

## 2. Objectives of the Practice:

- To share the knowledge among different sectors of Industry.
- To promote the ecosystem development where start ups can be benefited
- To keep pace with the trends and disruptive changes taking place in industry.
- To support collaborative opportunities

#### 3. The Context:

• Integrating industries allows for the exchange of ideas, technologies, and best practices among different sectors, fostering a culture of innovation.

- Combining resources such as capital, infrastructure, and expertise from various industries can provide startups and entrepreneurs with the necessary support to turn their ideas into viable businesses. Basic research with an inclination towards industry has been happening in AIT during the past years. Integration encourages collaboration between established companies and startups, leading to joint ventures, partnerships, and co-development efforts that drive innovation. Periodic industry visits help students to update their understanding of the subject and industry practices in each domain. Guest Lecture by Industry Person- in all the courses has led to strong interactions between the institute and industry.
- Project-based internships are a good learning process which brings new perspectives and is up-to date with the industry trends.
- Collaborative and cooperative research projects with industry could lead to direct Intellectual Property (IP) generation and/or translation into industrial realization.

#### 4. The Practice:

- o To nurture research and innovations, and to encourage entrepreneurial initiatives of students, the institute established Innovation and Entrepreneurship cell under Institutes Innovation Council, an MHRD initiative. Startup eco system was built through collaborative efforts between senior alumni entrepreneurs and the aspiring startup founders. The eco system includes mentors, domain experts and resources. Since then, the institute has nurtured 8 startups. Industry mentors help our students through various entrepreneurship camps innovative project collaboration between industry and AIT is done through cooperative knowledge creation and exchange.
- Industry mentors help our students through various entrepreneurship camps Innovative project collaboration between industry and AIT is done through cooperative knowledge creation and exchange.
- Hackathon and coding competitions by various technical clubs in AIT are regularly conducted in AIT to address real world problems faced by industry many of their competitions are sponsored by relevant Industries. Industry practitioners and standards organizations conduct codes and standards concept to our students.
- To make students refined skillset and employable at KPIT, KPIT has started a training program to optimize the skills of the students by training them through the nominated faculties from the respective departments.

#### 5. Evidence of Success:

- Industry participation makes students learn from new perspectives and helps create rapport with industry persons. It provides greater clarity and has an impact on their placement interviews.
- o The most meaningful aspect is that such tie-ups acknowledge and capitalize on the

relative strengths of the academia and the industry.

- A total of 18 Industrial expert guest lectures have been conducted so far. Industry linkages have paved the way for 456 project-based internships and 90 plus companies visiting regularly with attractive job opportunities to our students through the "dream" and "super-dream" offers. Through these practices, AIT supported 08 start-ups, conducted over 40 plus workshops on Industry-Academia Innovative during the last 5 years.
- FE students scholarship(AY: 2022-23):
  - **NSE Talent Sprint:** Ms Debasmita Adak, FE IT has been selected to participate in the highly acclaimed Women Engineers (WE) Program offered by Talentsprint and supported by Google to empower talented first year woman engineering students to become world class software engineers.
  - Reliance Foundation Scholarship: Students have been "shortlisted" for Reliance Foundation Scholarship of Rs 2 Lakh. Kaushal Vyas (FE Comp), Sheikh Hasina (FE E&TC), Ashish A Kumar (FE Mech), Roshnee Gouda (FE IT).
  - **Deutsche Bank Scholarship:** Students (Tanu Kohli FE IT, Roshnee Gouda FE IT, Ritika Singh FE E&TC) have received Rs 1 lakh scholarship for 4 years and Laptop.

## 6. Problems Encountered and Resources Required:

- Availability of right person and resources for corresponding topic is sometimes a challenge. Industry partners may require specialized skills or expertise that are not readily available within academia, necessitating additional training or recruitment efforts to bridge the gap.
- In spite of some temporary barriers, AIT has been offering its best with consistent efforts to optimize industry-institute integration through a number of strategies enabling various initiatives to thrive in the country's quest for technological leadership

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

#### 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:**

# Holistic Development of Defense wards to make them Technology Leaders

AIT is Unique HEI with objective of providing high quality technical education to wards of defense personnel .Army Institute of Technology (AIT) was established in 1994 exclusively for children of serving and retired Indian Armed Forces Personnel. Wards of War Widows in receipt of liberalized pension are also eligible for admission into AIT. AIT functions under the aegis of Army Welfare Education Society (AWES).

Industry needs skilled graduates who are better prepared to solve complex problems in an interdisciplinary and global context. To address this need, the institute undertakes concrete steps towards holistic development of students which would eventually equip them as Futurist Technology Leaders. To achieve this, a comprehensive approach is followed to address various aspects such as intellectual, Social, Spiritual, Physical and Emotional development of students.

- 1. For **Intellectual Development**, the institute exposes students to industry experts, professionals and mentors. The institute also proactively identifies curriculum gaps and makes provisions to impart content beyond the syllabus.
  - Memorandum of Understandings with leading companies like Microsoft, Deloitte, Credit Suisse, TCS, Dassault Systems and Copper Cloud IO Tech are signed and executed. Majority of the students undergo industry- sponsored projects and internships. 3DPLM Lab sponspored by Dassault Systems, where projects, industrial training and Competitions takes place.
  - AIT is considered amongst the Best Engineering Colleges of India. Ministry of HRD, Government of India has ranked AIT in the band of 151-200, among all engineering colleges in India, through National Institute Ranking Frame work (NIRF). AIT has been nationally ranked at 55, 39 and 15 among private and govt colleges by India Today, The Week and Dataquest surveys respectively, during the Academic Year 2022-23. AIT has been awarded the Best Professional College (Urban) by Pune University in the Year 2017. AIT has been awarded the Best Sports Trophy, in its category for the Academic Year (2018-19).
  - Placement Activities: The Placement Cell at AIT has been consistently placing more than 90% of
    its registered students through Campus Placement. 96% students of 2022-23 batch have been
    placed. AIT's Campus-Placements are amongst the best in the entire State of Maharashtra with
    all leading IT Services & Product and manufacturing companies recruiting students through
    Campus Placement.
  - Various clubs run by students are actively contributing for the intellectual development of students:
    - OSS Club: This club create technically aware developers and a space where they can
      actively participate and contribute towards the Open source community while developing
      their individual skills. This club conducts Activities like:
      - Pre-Innerve Games and Innerve Hackathon (Inter College): Innerve is India's largest student driven hackathon, which imparts a platform for students to present

their adept ideas and technical skills at a renowned forum.

- SPARK, GRAPHICA and Devlok as Intra college events.
- Technical Club: This club is formed to deliver information regarding every happening in the gallery of engineering world that is competitions, seminars and conferences taking place out there: This club conducts various intellectual events.
  - QUANTIVISUALS: It is question based event on Computer Science Fundamentals and aptitude questions ranging from easy to complex ones.
  - IDEATHON: Students present their ideas and explain how they look forward to implement their idea and gave the pros of their project.
  - VULCAN: The great event of Vulcan arrives with the best paper writing event in the institute
  - SOLUTIONS: It is a premier annual Technical Fest, it had more than 20 events in various respects such as coding, gaming, robotics, etc.
- 2. For **Social Development**, the institute exposes students to the diverse social structure and their issues through NSS, Robotics and NCC activities. AIT has various scholarships schemes which also provide networking opportunities, mentorship, and access to academic and professional resources that contribute to students' personal and professional development.
  - NCC at AIT: The first Batch of 2 Maharashtra Battalion NCC enrolled on 19th Nov 2022. Total 34 Students from all branches are enrolled. The combined annual training camp was attended by cadets from 23rd May to 1st June 2023 at group Headquarters NCC Pune.
  - NSS Club: This club organizes the cleanliness drive within AIT campus, Blood donation camp, Food donation, cleaning drive, Raksha Bandhan celebration with visually impaired and orphan students etc.
  - Blood Donation Camp: Blood Donation camp with the AFMC blood on the occasion of "Vijay Diwas".
- 3. For **Physical Development**, the institute promotes Sports and physical activities among students to cultivate important skills such as physical fitness, team spirit, confidence, decision making and mental strength.
  - Medical Facility: Nursing Assistant (NA) is available 24 X 7 hours on Campus. An ambulance is present on campus to take students requiring further medical treatment to Military Hospital (MH) Kirkee. One lady doctor has been employed by AIT for providing medical assistance to students thrice a week.
  - Sports Club: Institute provides excellent indoor/outdoor facilities for sports. The Sports Club of instituter is dedicated to promoting sports, physical fitness, developing students' athletic abilities, and creating a positive impact on the community. Well-equipped gymnasiums are separately available for boys and girls. AIT students have won various medals at National/ University level. AIT hosts various Sports events at College/ University level.
- 4. For **Emotional Development**, the institute has a hierarchical counselor system in place that ensures students have contact with faculty at least once every week. During these meetings, students can discuss their academics as well as personal problems with faculty. Training programs on counselling are planned for AIT faculties for Mental health of students.
- 5. For Spiritual development, the institute Has a "Sarv Dharm Sthal", where festival, of religions are

celebrated and students can pray as per their individual faith. AIT has an MOU with heartfulness foundation, where students are expressed to Meditation and Yoga practices to provide spiritual foundation to their personality. The spiritual club celebrates Krishna Janmasthmi, Ganesh Festival, Diwali, Gurunanak Jayanti, Christmas, Lohri, Shivratri, Ramnavmi etc.

In short, the institute provides a holistic environment for students to develop their cognitive, social, physical, and emotional skills.

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

# 5. CONCLUSION

## **Additional Information:**

Peer and participative learning play a large part in overall personality development of students. Students are given leadership and organizational roles from very early stage. While the Student Council President, Secretary and Ladies representatives are selected from within the Final Year students, the clubs are run under the Student secretaries of third year, with joint secretaries of second year contributing in overall implementation. Student council members, club secretaries, student representatives in committees along with branch heads and class representatives are consulted on all major decisions. The practice of Core Values and honor code develops a sense of self-discipline and ethical behavior which helps in character formation. Club functionaries organize various inter-branch competition and college events in a professional manner. They also carry out liaison with industry for sponsorships and providing problem statements. The student club functionaries, also organize beyond curriculum skill development of the juniors, preparing them for national level tech competitions, hackathons and for developing skill sets for high value placements. The activities of these clubs are promoted on their own various social media handles, e.g "@oss\_club\_ait" (Open Source Software Club on INSTAGRAM). Each club is allotted a budget based on their previous years' expenditure and new year projections. A presentation to Director and Principal on budget utilization and activities planned is conducted in the beginning of the year, and students are made to ensure probity and accounting procedures in the budget utilization. This develops a sense of responsibility and organizational skills which are very essential qualities required in the corporate world.

There is a mentor scheme where 4 to 5 students are placed under a student mentor of next senior batch. The mentors are selected based on recommendation of their counselor. The mentors help the students. A record is maintained in Counseling file, for each student by the faculty batch counselor.

Since AIT is run by AWES, students are encouraged to prepare for their SSB interviews. Besides the SSB interview coaching, there is an Obstacle training course for our students and the families of staff members, supervised by the physical training director.

# **Concluding Remarks:**

AIT has completed 30 years as a premier technical institute, catering for quality education of wards of defense personnel. It is affiliated to SPPU and approved by AICTE. All its UG programs are accredited NBA. Institute takes pride in its very high ranking amongst all engineering colleges, in country which includes NIRF ranking of 150-200 in, Data Quest ranking of 28) and The Week ranking of 38 nationally. Though it is predominantly UG college, of late it has developed excellent research and innovation culture. Students enjoy excellent placement which are amongst best in Pune. Average CTC and highest salaries have been increased every year and is Rs 14.2 Lakh and 51 Lakhs respectively for AY 2022-23. Many students are also opting for higher studies as well as joining the defense forces as technical entry officers.

Institutional strengths include excellent students, dedicated and enthusiastic faculty, residential premises, emphasis in providing facilities in experiential learning and very active peer leaning culture driven by vibrant clubs.

Institution has excellent laboratories, sports facilities, library and infrastructure for all round development.

Page 83/84 12-08-2024 10:03:28

The institute is planning to grow vertically and horizontally as well as make efforts to grow globally. It has been approved to become an autonomous institute very "recently.

AIT is marching ahead, befitting its motto "ONWARDS TO GLORY".