



Army Institute Of Technology (AIT), Dighi Camp, Pune - 15.

Director : 7249250115, Joint Director : 7249250117, Principal : 7249250186

Exch : 7249250183, 7249250184, 7249250185

Website : www.aitpune.com Email : ait@aitpune.edu.in

Recognised by AICTE and DTE Maharashtra and affiliated to Savitrabai Phule Pune University

Criterion VII – Institutional Value and Best Practices

7.2 – Best Practices

7.2.1 - Describe two best practices successfully implemented by the Institution

Best practices as hosted on the Institutional website

Sr. No.	Academic Year	Page Number
1	2022-23	<u>2</u>
2	2021-22	<u>11</u>
3	2020-21	<u>19</u>
4	2019-20	<u>27</u>
5	2018-19	<u>32</u>

1. AY: 2022-23

Sr.No.	Document	Page No.
1.1	Best Practice-I	<u>3</u>
1.2	Best Practice-II	<u>8</u>

1.1 **Best Practice- I**

1. **Title of the Practice:** Comprehensive Efforts for Higher Package Placement of Students

2. **Objectives of the Practice:**

- (a) To enhance the relevant skills through Skill Development activities
- (b) To gain practical knowledge through Internships and Work Experience
- (c) To train the students to enhance quantitative and qualitative aptitude
- (d) To build and maintain professional network and develop a strong personal branding

3. **The Context:**

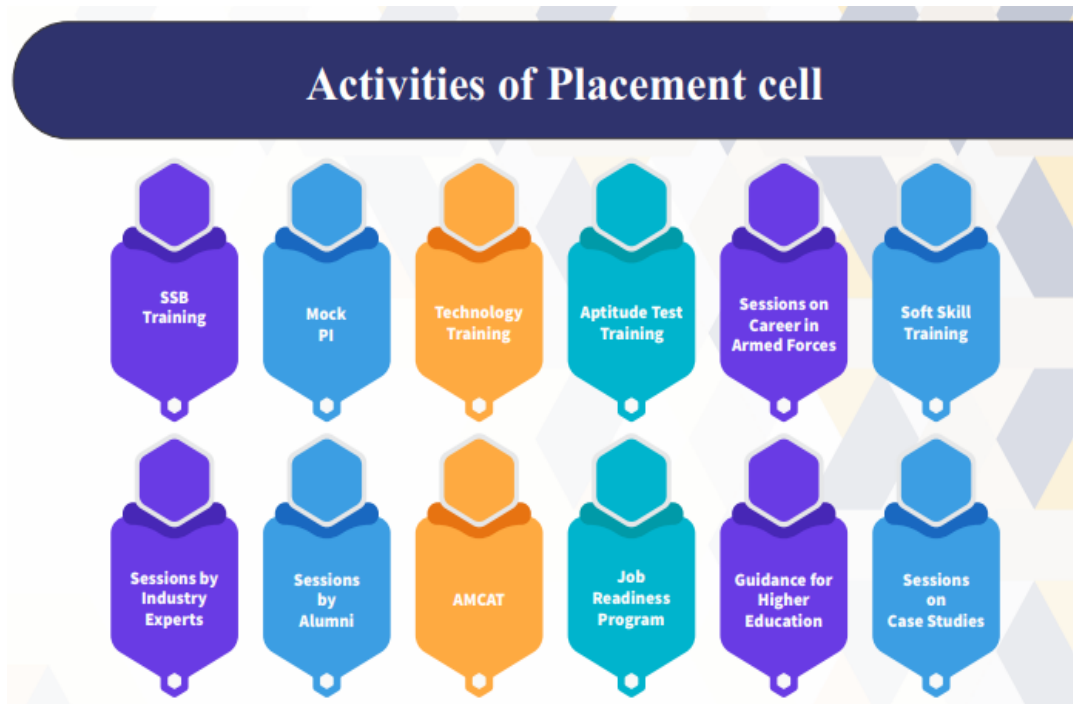
- a) Enhance relevant skills such as problem-solving, critical thinking, communication, teamwork, and technical skills through coursework, projects, internships, and extracurricular activities.
- b) Gain practical experience through internships or part-time jobs in relevant industries or organizations. This also provides valuable networking opportunities.
- c) Preparation of interview questions, prepare for quantitative and qualitative aptitude that demonstrate the skills and accomplishments
- d) 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:**

- a) **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.
- b) **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.
- c) **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:**

(a) Skill Development through Placement Activities



(b) Internship

DEPARTMENT OF INFORMATION TECHNOLOGY
INTERNSHIPS
(AY : 2022-23)

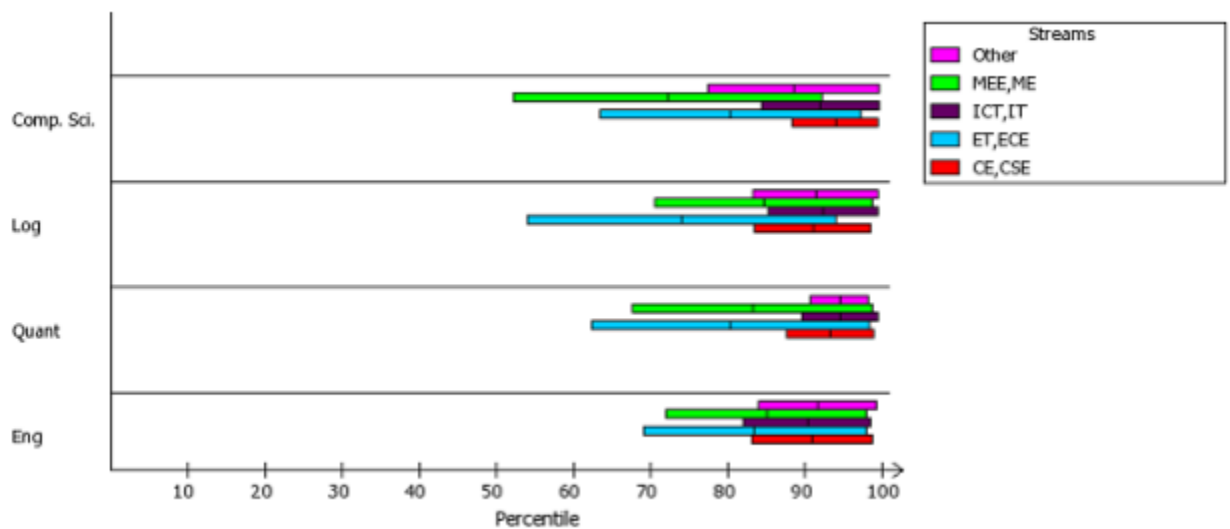
SR.NO	CLASS	NAME OF THE STUDENT	DETAILS	PERIOD	DAYS
1	BE	Aarti Kumari	Geeks for Geeks	4/5/2022 TO 15/11/2022	220 DAYS
2	BE	Abhishek Satyawar Shedge	Solytics Partners	3/7/2022 TO 31/8/2022	58 DAYS
3	BE	Ajay Singh	Credit Suisse	6/6/2022 TO 8/12/2022	86 DAYS
4	BE	Ajay Kumar Mourya	Solytics Partners	1/4/2022 TO 30/9/2022	80 DAYS
5	BE	Aniket Saha	Tech curators	11/8/2022 TO 12/10/2022	63 DAYS
6	BE	Ankit Kumar	Cuvette Tech	3/7/2022 TO TO 28/8/2022	57 DAYS
7	BE	Chandresh Singh	Groww, India	13/6/2022 TO 6/12/2022	146 DAYS
8	BE	Deepak Barnwal	Goldman Sachs	1/7/2022 TO 12/8/2022	43 DAYS

(c) AMCAT 2022

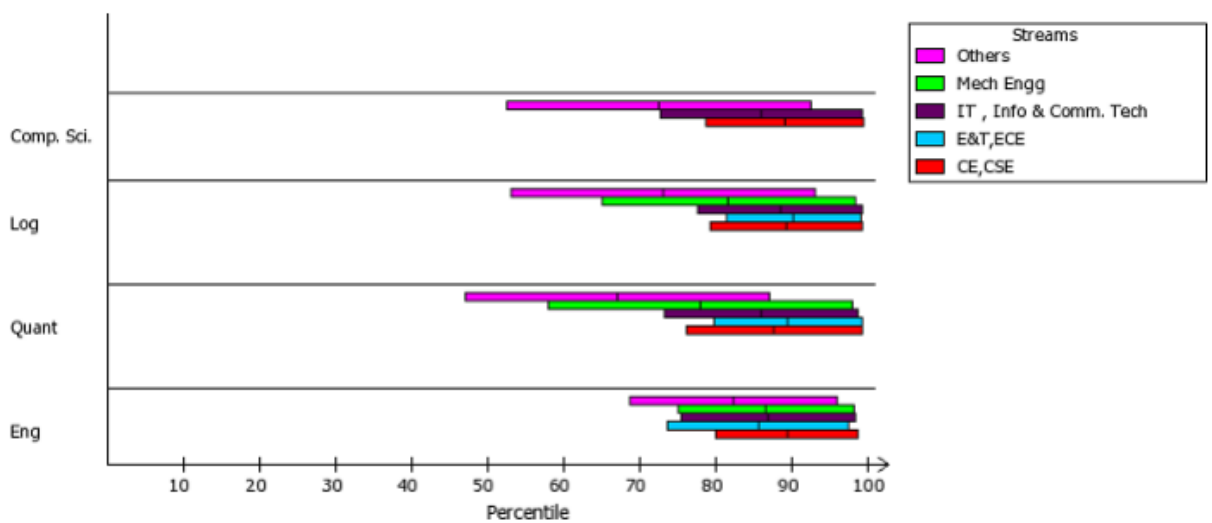
Employability Assessment Test (AMCAT)
AIT has been ranked among TOP 10% colleges of India

Year	AIT Campus Average	National Average
2023	635	478
2022	610	478
2021	648	478
2020	601	478
2019	585	478

SHL
National Employability Award 2023
presented to
Army Institute of Technology, Maharashtra
for being amongst the top 10% colleges in India that excelled in
amcat
for the 8th consecutive year. The award is based on the performance of final year students in AMCAT.
Himanshu Aggarwal
Chief Distraction Officer, SHL



Phase-I



Phase-II

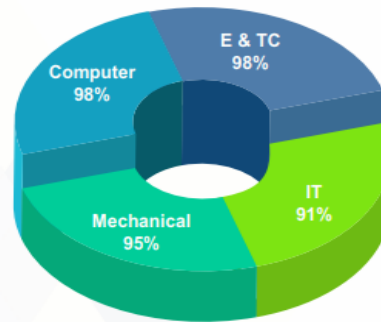
(d) Campus placements of last 5 years with CTC

Overall Placements						
Year of Course Completion	Number Registered	Number Placed		Highest Salary incl RSUs	Average Salary	Median Salary
		No	%			
2018-19	272	245	90	Rs 39.00 lakh	Rs 7.15 lakh	Rs 6.40 lakh
2019-20	342	313	92	Rs 39.00 lakh	Rs 7.30 lakh	Rs 6.50 lakh
2020-21	287	260	91	Rs 39.00 lakh	Rs 9.45 lakh	Rs 7.60 lakh
2021-22	314	305	97	Rs 112.14 lakh	Rs 14.70 lakh	Rs 12.00 lakh
2022-23	282	271	96	Rs 52.00 lakh	Rs 14.20 lakh	Rs 12.50 lakh

Placement Details 2023

Placement Ranking in Pune University – **3**
 Average Salary in Lakh – **14.20**
 Median Salary in Lakh – **12.50**
 Highest Salary in Lakh – **52.00**
 No of industries visited – **89**
 Placement Percentage – **96**

Branch-wise Placements



6. Problems Encountered and Resource Required:

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

1.2 **Best Practice- II**

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

2. **Objectives of the Practice:**

- a) To share the knowledge among different sectors of Industry.
- b) To promote the ecosystem development where start ups can be benefited
- c) To keep pace with the trends and disruptive changes taking place in industry.
- d) 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 the industry practices in each domain. Guest Lecture by Industry Person- in all the courses has led to strong interactions between the institute and industry.

The 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:**

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. The 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.

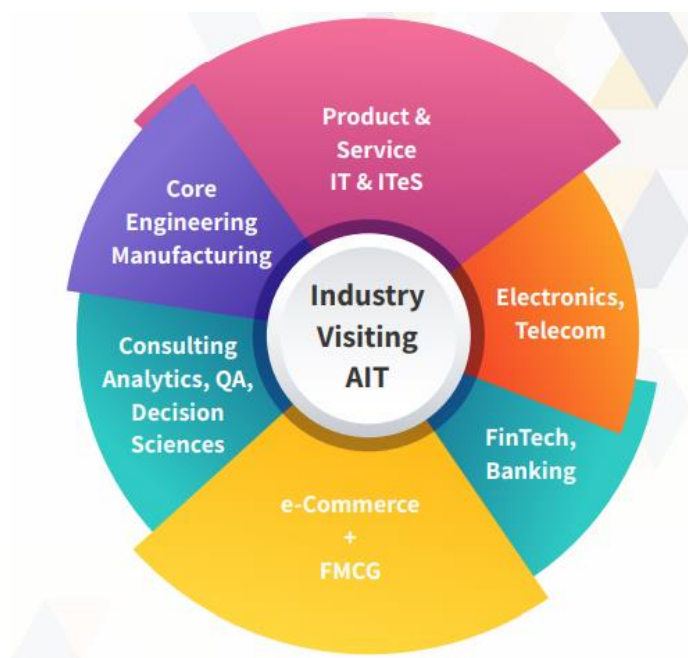
Industry mentors help our students through various entrepreneurship camps Innovative project collaboration between industry and AIT is done through cooperative knowledge creation and exchange.

Hackathon and coding competitions by various technical clubs in AIT are regularly conducted in AIT to address real world problems faced by the 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.



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.

Scholarship details - Prime Minister's Scholarship Scheme, Swachhta Saarthi Fellowships, Merit Cum Means scholarship, Rolls-Royce Unnati scholarship, Award of Scholarships Under ESSA,

National Scholarship Portal, Badve Scholarship, Horizon Scholarship, Hashmap Scholarship, Udchalo Scholarship, AICTE Pragati Scholarship Scheme, Central Sector Scheme Of Scholarships, J&K Scholarship, Award of Scholarships, Open Merit Scholarship.

FE students scholarship (AY: 2022-23):

1. **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.
2. **Reliance Foundation Scholarship:** Following students have been "shortlisted" for Reliance Foundation Scholarship of Rs 2 Lakh. Out of 40000+ applications and about 5000 students are selected :- Kaushal Vyas (FE Comp), Sheikh Hasina (FE E&TC), Ashish A Kumar (FE Mech), Roshnee Gouda (FE IT).
3. **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:

The availability of right person and resources for the 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 the industry-institute integration through a number of strategies enabling various initiatives to thrive in the country's quest for technological leadership

2. AY: 2021-22

Sr.No.	Document	Page No.
2.1	Best Practice-I	<u>12</u>
2.2	Best Practice-II	<u>16</u>

2.1 **Best Practice- I**

1. **Title of the Practice:** Comprehensive Efforts for Higher Package Placement of Students

2. **Objectives**

- (e) To enhance the relevant skills through Skill Development activities
- (f) To gain practical knowledge through Internships and Work Experience
- (g) To train the students to enhance quantitative and qualitative aptitude
- (h) To build and maintain professional network and develop a strong personal branding

3. **Context**

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

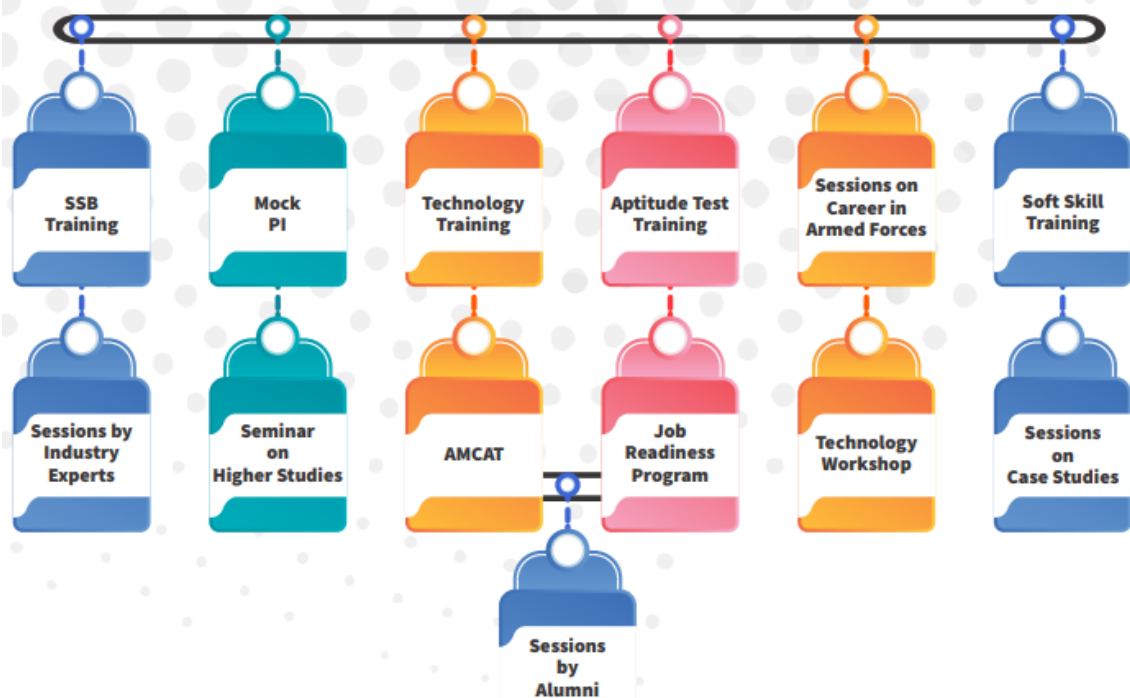
4. **The Practice**

- d) 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.
- e) 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.
- f) 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**

(e) Skill Development through Placement Activities

Activities of Placement cell



Orientation program-Indian Navy

(f) Internship

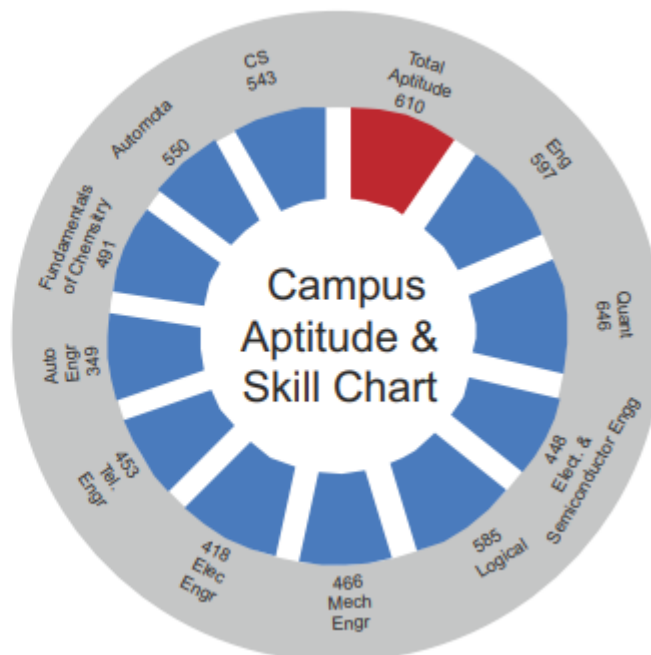
Army Institute of Technology
Department of Computer Engineering
Record of Student Internships (2021-2022)

Sr. No.	Name of Student	Class	Name of Industry/Organization	Date	Duration
Sem I					
1.	Roshan Pious	SE Comp	RS Deep Info Lab Pvt. Ltd, Delhi	25/08/21-31/10/21	2 months
2.	K. Pradeep	TE Comp	Solytics Partners Pvt. Ltd., Chennai	05/06/21-04/11/21	6 months
3.	Anupam Kumar	TE Comp	Microsoft India (R&D) Pvt. Ltd, Bengaluru	02//05/21-24/06/21	2 months
4.	Subham Rana	TE Comp	Microsoft India (R&D) Pvt. Ltd, Bengaluru	02//05/21-24/06/21	2 months
5.	Anuranjan Kumar Pandey	TE Comp	AI-Cogito Corporation	17/11/21-17/04/22	6 months
6.	Aman Thakur	TE Comp	RS Deep Info Lab Pvt. Ltd, Delhi	25/08/21-31/10/21	3 months
7.	Anurag Chaudhary	TE Comp	Bizotics Tech Consultancy & Services Pvt. Ltd., Mumbai	13/07/21-13/12/21	6 months
8.	Kapil	TE Comp	Bizotics Tech Consultancy & Services Pvt. Ltd., Mumbai	14/07/21-14/12/21	6 months
9.	Rahul Ramesh Mahant	TE Comp	Microsoft India (R&D) Pvt. Ltd, Hyderabad	02/04/22-24/06/22	2 months
10.	Pranvi Gupta	BE Comp	BNY Mellon Technology Pvt. Ltd., Chennai	18/05/21-23/07/21	2 months

(g) AMCAT

**Employability Assessment Test
(Aspiring Minds
Computer Adaptability Test)**
 AIT has been ranked
 among **TOP 10%** colleges of India

Year	AIT Campus Average	National Average
2022	610	478
2021	648	478
2020	601	478
2019	585	478
2018	570	478

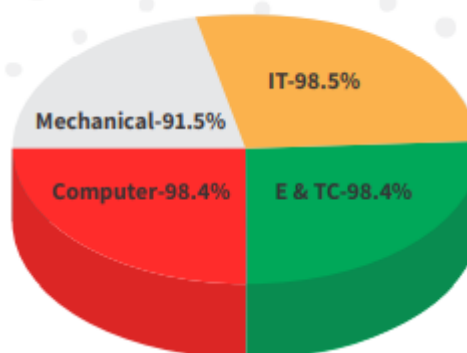


(h) Campus placements with CTC

Overall Placements						
Year of Course Completion	Number Registered	Number Placed		Highest Salary incl RSUs	Average Salary	Median Salary
		No	%			
2018-19	272	245	90	Rs 39.00 lakh	Rs 7.15 lakh	Rs 6.40 lakh
2019-20	342	313	92	Rs 39.00 lakh	Rs 7.30 lakh	Rs 6.50 lakh
2020-21	287	260	91	Rs 39.00 lakh	Rs 9.45 lakh	Rs 7.60 lakh
2021-22	314	305	97	Rs 112.14 lakh	Rs 14.70 lakh	Rs 12.00 lakh

- **Placement Ranking in Pune University – 3**
- **Average Salary in LPA – 14.7**
- **Median Salary in LPA – 12.00**
- **Highest Salary in LPA – 112.14**
- **No of industries visited – 93**
- **No of students placed above average salary – 103 out of 305**
- **Placement Percentage – 97**

Branch-wise Placements :



6. Problems Encountered and Recourses Required

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

2.2 **Best Practice- II**

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

2. **Objectives of the Practice:**

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

3. **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 the industry practices in each domain. Guest Lecture by Industry Person in all the courses has led to strong interactions between the institute and industry.

The 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:**

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. The startup eco system was built through collaborative efforts between senior alumni entrepreneurs and the aspiring startup founders. The eco system

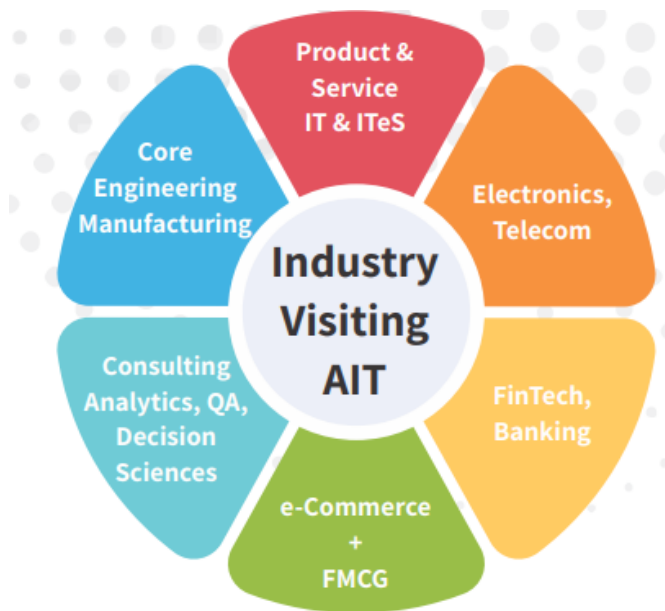
includes mentors, domain experts and resources. Since then, the institute has nurtured 8 startups. Industry mentors help our students through various entrepreneurship camps innovative project collaboration between industry and AIT is done through cooperative knowledge creation and exchange.

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 the industry many of their competitions are sponsored by relevant Industries. Industry practitioners and standards organizations conduct codes and standards concept to our students.

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.



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 26 Industrial expert guest lectures have been conducted so far. Industry linkages have paved the way for 407 project-based internships and 100 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 30 plus workshops on Industry-Academia Innovative during the last 5 years.

6. Problems Encountered and Resources Required:

The availability of right person and resources for the 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 the industry-institute integration through a number of strategies enabling various initiatives to thrive in the country's quest for technological leadership

3. AY: 2020-21

Sr.No.	Document	Page No.
3.1	Best Practice-I	<u>20</u>
3.2	Best Practice-II	<u>25</u>

3.1 **Best Practice-I**

1. **Title of the Practice:** Vibrant Clubs at Army Institute of Technology

2. **Objectives of the Practice:**

- (a) Building leadership skills and team spirit
- (b) Improve their networking
- (c) Help in community outreach
- (d) All round development
- (e) Peer learning
- (f) Increase employability

3. **The Context:**

Students at AIT are wards of army personnel, who join AIT after clearing the JEE exam. Though all the students come from army background, the opportunities that they get are different. Also, some of the students come from rural environment and some do not have the required soft skills and lack confidence.

AIT gives considerable importance to the overall personality development of its students as exemplified in our vision statement. To help develop management and organizational skills in students while at the same inculcating the responsibilities of a good citizen in them, the Institute offers a large number of vibrant clubs to the students. Students are encouraged to be members of these clubs.

4. **The Practice:**

The Institution motivates the students to get actively involved in the extracurricular and co- curricular activities and extension activities. College has various clubs by which different intra college & intercollegiate activities are conducted. Each club has a faculty in charge to guide the students. Student secretaries a girl and a boy, from Third Year, are selected via interview for all the clubs. These secretaries in consultation with the staff in charges propose budget and activities for each year.

These activities are also marked in the academic calendar. The students are also helped by a team of joint secretaries who are selected from amongst Second Year students. They in turn are backed by a team of volunteers from all years.

Activities supported: Various clubs and their major activities conducted.

- **Technical Board**
 1. Tech-Aakriti (Intra college)
 2. Tech solutions(Inter college)
 3. Participation by students in technical events of other colleges.

- **Cultural and Music Board**
 1. Aakriti (Intra college)
 2. Amethyst (Inter college)
 3. Battle of Bands (Inter college)
 4. Healing by music
 5. Participation by students in events of other colleges.

- **Sports Club**
 1. PACE (Intercollege sports event)
 2. Aakriti Sports(Intra college)
 3. Participation by students in events of other colleges and university.

- **NSS Club**
 1. Blood donation camp
 2. Orphanage visit
 3. Old age home visit
 4. Collection of funds for donation to NGOs
 5. Independence Day celebration
 6. Republic day celebration
 7. Cleanliness drives
 8. Tree plantation
 9. A week long NSS camp

- **Spiritual Club**
 1. Yoga day
 2. Mahashivratri festival
 3. Krishna Janmashtami celebration
 4. Spiritual Guest lectures
 5. Ganesh Utsava
 6. Christmas celebrations

- **Magazine Club**
 1. Photography competition
 2. Magazine board notice board
 3. E Magazine
 4. News letters

- **Open Source Software Club**
 1. OSS Club WordPress Blog
 2. Web Portal for AIT incubation centre
 3. Collaborative projects based upon Open source technologies

4. Guest lectures
- **Robotics Club**
 1. Participation in ROBOCON
 2. Various robotics competitions
 3. Robotics workshops
 - **Maths Club**
 1. Ramanujan Quiz
 2. Visit to Mathematical Institutes
 3. Discussion sessions
 4. Guest Lectures
 - **Debating Club and Quiz**
 1. Hindi debate in Pre Aakriti and Aakriti
 2. English debate in Pre Aakriti and Aakriti
 3. Intra college events for first year students
 4. Participation by students in events of other colleges
 - **Fine Arts Club**
 1. Sessions during FE orientation program
 2. Yearly art exhibition
 3. Guest lectures and guidance
 - **Nature Club**
 1. Nature Walk
 2. Herbal plantation
 3. Trek
 4. Bird Watching
 - **Info Security & Digi Forensic Club**
 1. Three days' workshop on Information Security and Digital Forensic
 2. AICTE Sponsored online STTP on Information Security and Digital Forensics
 3. Logo Making Competition
 4. Seminar
 - **Cycling Club**
 1. Cycle expeditions to nearby places like forts and picnic spots
 2. Long expeditions like cycling to Goa and Shirdi
 - **Competitive Coding Club**
 1. Imparting coding skills
 2. Coding competitions
 3. Designing website

5. Evidence of Success:

1. Students are able to successfully conduct the inter branch events like Aakriti (cultural, sports and technical). Their management and leadership skills improve as they overcome adversities to conduct various events.
2. Organizing Inter collegiate events like Pace, Solution and Amethyst increases the confidence of students and their network.
3. Being a part of NSS and Spiritual club helps the students realise their social responsibilities and help them become citizens.
4. Clubs like Baha, Robotics and OSS helps the students become technically sound and gives them an opportunity to work on inter Disciplinary projects.
5. Sports club, Nature and cycling club improve the endurance of the students.
6. Clubs like Debating and quiz club, the Magazine Board improve the soft skills of the students and help is all round development.
7. Mentoring of juniors by seniors has resulted in close bonding between the students. This develops team spirit and leadership qualities. Also the alumni persuade their employers to visit AIT for placement drives.
8. Biggest evidence of the success is not only the increasing placements of our students but also their increasing CTC from 5.4 Lakh in 2016-17 to 9.4 Lakh in 2020-21. Globally established MNC like Amazon and Microsoft are recruiting AIT students to a large extent.
9. The club activities have also helped in nurturing Entrepreneurs.

6. Problems Encountered and Resource Required:

Resources required:

1. Budgetary provision made for each club.
2. Besides the budgetary provision, the resource are students, who enthusiastically conduct various activities.

Problems encountered:

1. The students are passionate about ensuring that their branch wins. So sometimes a difference of opinion arises. To get over this problem the judging panel for each event has a staff member from every department. This has also increased the teacher student interaction and bonding.
2. AIT is remotely located. Getting outside students to participate in inter collegiate events, Solution (technical), Amethyst (cultural) and Pace (Sports) used to be a challenge. A PR team

was formed, which publicizes events in other colleges. Similarly, transport is provided to AIT students to participate in inter collegiate events held in other colleges.

3. Since the College has to follow the examination time tables of the affiliating university, there is no scope for flexibility from examination schedule. Consideration cannot be provided even for the internal assessment examinations.
4. Due consideration in respect of attendance is given for the students participating in important events outside the college.
5. Transport is arranged for the students to represent team of our college in various competitions. They are given additional support and facilitated by the teachers even in odd hours. Extra classes are conducted to cover up the syllabus.

3.2 Best Practice-II

1. **Title of Practice:** Ecell and Startups.

2. **Objective:** The purpose of entrepreneurship cell is four-fold, namely,

- a) To bring out entrepreneurial flair in students
- b) To make students understand entrepreneurial attitude and entrepreneurial skills.
- c) To provide them with a platform which gives them number of innovative opportunities to develop the entrepreneur in them.
- d) To generate successful commercial enterprise contributing towards significant job creations.

3. **The Context:**

India is a land of youngsters. With more than 50% of the country's population below 25, in the era of an exponential technological growth, it becomes a perfect time for the youngsters to innovate, improvise and bring new advance products and services to public and help the economic growth of the country, being their own boss.

4. **The Practice:**

A budding entrepreneur needs answers to the thousands of questions he/she would have. They need to know procedures and legalities of setting up an organization. The Entrepreneurship cell (E-Cell) of AIT aims to ignite this spirit of entrepreneurship and encourage students to think creatively and help them identify and solve problems of the society by organising various events, lectures, seminars, workshops, webinars, entrepreneurship summits, etc. It provides multiple platforms to budding entrepreneurs where they can improve upon their business models and groom their entrepreneurship skills. E-Cell can nurture and guide the start-ups and act like a bridge between budding entrepreneurs and the investors and mentors.

5. **Evidence of Success:**

The Activities Supported:

1. Inspirational talk shows of eminent speakers who have done something big in their lives starting from scratch, who deliver vibrant speeches to young minds of the college.
2. Team competitions like logo design, ad making, EPL manager and many more.
3. A series of webinars all along the year featuring successful entrepreneurs.
4. Various workshops are held along the year which encourage students to adopt an innovative and problem solving mindset.
5. StartUp Saga: The annual program comprising of orientation sessions/workshops, idea pitching and discussion, Business models, Problem statement and solution, talk shows and of course prizes.

6. Visits to various incubation centers in and around Pune like Vigyan ashram, Venture Center, Bhau Patil Institute amongst others.

6. Problems Encountered/ Resources Required:

Resources required:

- We have free incubation center, which include 3D PLM lab, EV lab, Robotics lab etc which are made available to interested students.
- Alumni as a contact point to industry for sponsorship, projects and mentoring.

Problems encountered:

- Lack of government funding. To make more funds available, our E cell actively solicits sponsorship and funding from industry. Alumni have also come forward to support the budding entrepreneurs.
- College is funding basic research and IPR filing.
- PG is not well established. Plans are underway to begin a PG in Data Science and AI in computer engineering department.
- We do not have R&DE center. A plan is underway to start research centers in fields of AI, ML, Robotics, IOT and Cyber Security in the coming 5 years.

4. AY: 2019-20

Sr.No.	Document	Page No.
4.1	Best Practice-I	<u>28</u>
4.2	Best Practice-II	<u>30</u>

4.1 Best Practice-I

1. **Title of Practice:** Curriculum Enrichment Measures

2. **Objective:** This practice was implemented in order to enrich the existing curriculum and give hands on experience to our students as per industry expectations.

4. **The Context:** Curriculum revision takes place every four to five years by affiliating university. However, in order to keep the students in pace with the current and latest developments in the industry, additional curriculum enrichment measures have been introduced in the college.

5. **The Practice:**

Curriculum enrichment is done by following measures:

1. Value added evening courses – From the first year onwards Computer programming and Soft Skills classes are conducted for students identified to be weak in these skills. In the second and third year Core JAVA, python, machine learning, programming in C, CATIA, CAE(hyperworks), IOT, Raspbery pi for Beginers are some of the value added courses conducted by the institute. Besides this workshop are conducted on python, PCB design etc.
2. Mock Group Discussion/Personal interview (GD/PI) sessions with professional expert for the third year students.
3. Organization of large number expert lectures on latest developments in the respective branch by every department.
4. Student internships – A large number of students do internships in third year. College helps in procuring internships offers from Army, DRDO and other government organizations for our students.
5. Project based learning-For better learning experience, along with traditional classroom teaching and laboratory work based learning, project based learning has been introduced with an objective to motivate students to learn by working in group.
6. Sponsored projects – Around 60 - 70% of final year projects are sponsored
7. Technical club activities – Students get a handson experience through various club activities like Supra-Baja, Robotics, Open Source software, Innovation and Incubation cell etc.
8. Project Competitions – AMALGAM-Final year project competition with cash prizes is held every year.
9. Startups- All projects are rigorously monitored by faculty and higher authority of college and full technical and financial support is provided to some projects based on their evaluation report by which they are converted into startups. Few students of BE launched their startups with the help of college.
10. Co-curricular based credit system (CCCBAS) - This has been introduced to motivate student participation in technical activities, value added certification courses, internships, MOOCs like COURSERA and UDACITY.

6. Evidence of Success

Excellent results of our students in the examinations, student achievements in co-curricular activities and consistent placement percentages 92% are proof of the success of this practice.

7. Problems Encountered and Resources Required:

Some of the students are reluctant to pay additional fees for the value added courses hence, Institute provides part subsidy for the value added courses to ensure full participation. Identifying suitable resource persons for conduct of the various training activities and their monitoring requires continuous perseverance by the management and heads of departments.

4.2 Best Practice-II

1. **Title of Practice:** Green Environment Initiatives

2. **Objective:**

This practice was implemented to reduce the institute's carbon footprint make the campus green. Also, student participation in these initiatives makes them responsible citizens.

3. **The Context:**

The growing concern for environmental protection and conservation led the institute to implement a large number of green environment initiatives.

4. **The Practice:**

The main initiatives are as follows:

a) Energy conservation

- Automatic power factor controller (APFC) is installed in the power house which gives power factor of unity.
- Almost all street lights, toilets and corridors are provided with the LED fittings.
- Auto flush and auto cut off system is installed in the hostel toilets to save electricity and water.

b) Use of renewable energy

- Interactive solar power generating system of 325 KW is provided on the roof top of the academic building. With the installation of this system 50 to 60 % of the total electricity requirement is met. It also has additional advantages like: no escalation in power cost for 25 years, up to 20% rebate in property tax under Green Building Norms, uninterrupted energy use during day time round the year.
- Apart from this solar water heating system is provided in all boys and girls hostels for hot water requirement.

c) Water harvesting

- Water recycling or waste water treatment plant of 200 m³ or 2,00,000 liters capacity has been constructed. The principle of the treatment is based on Phytoid technology. The Phytoid Technology treatment is a subsurface flow type in which wastewater is applied to cell/system filled with porous media such as crushed bricks, gravel and stones. It consists of three zones (i) Inlet zone composed of crushed bricks and different sizes of stones (ii) Treatment zone consist of same media as in inlet zone with plant species and (iii) Outlet zone. Daily 150 m³ or 1,50,000 liters recycled water is available. This is being used for landscaping of the institute. Institute also proposes to further use this recycled water for flush systems. This would save 30% of fresh water.
- Rainwater harvesting is being done near Hostel Flank "H". This is being further developed.

d) Tree Plantation

- Every year students along with the garden staff plant trees. Due to this program over the years the campus has become lush and green. Last year 2500 saplings were planted by students. Also, a herbal garden consisting of plants with medicinal values is cultivated in the college campus.

e) E-waste management

- E waste generated is first reused in the campus itself. Then discarded waste is disposed off by board of officers to authorized vendors.

5. Evidence of Success

- Monthly electricity bill for institute has reduced due to rooftop solar power generating system as well as extensive use of LED lights in the institute.
- Due to use of the recycled water from the waste water treatment plant for gardening purposes the daily water requirement from outside agency has reduced.
- The green cover of institute has increased considerably in last 5 years.

6. Problems Encountered and Resources Required

Regular maintenance of the solar rooftop power generating system and the waste water treatment plant is required.

5. AY: 2018-19

Sr.No.	Document	Page No.
5.1	Best Practice-I	<u>33</u>
5.2	Best Practice-II	<u>35</u>

5.1 Best Practice-I

1. **Title of Practice:** Curriculum Enrichment Measures

2. **Objective:** This practice was implemented in order to enrich the existing curriculum and give hands on experience to our students as per industry expectations.

3. **The Context:** Curriculum revision takes place every four to five years by affiliating university. However, in order to keep the students in pace with the current and latest developments in the industry, additional curriculum enrichment measures have been introduced in the college.

4. **The Practice:**

Curriculum enrichment is done by following measures:

11. Value added evening courses – From the first year onwards Computer programming and Soft Skills classes are conducted for students identified to be weak in these skills. In the second and third year Core JAVA, python, machine learning, programming in C, CATIA, CAE(hyperworks), IOT, Raspbery pi for Beginers are some of the value added courses conducted by the institute. Besides this workshop are conducted on python, PCB design etc.
12. Mock Group Discussion/Personal interview (GD/PI) sessions with professional expert for the third year students.
13. Organization of large number expert lectures on latest developments in the respective branch by every department.
14. Student internships – A large number of students do internships in third year. College helps in procuring internships offers from Army, DRDO and other government organizations for our students.
15. Project based learning-For better learning experience, along with traditional classroom teaching and laboratory work based learning, project based learning has been introduced with an objective to motivate students to learn by working in group .
16. Sponsored projects – Around 60 - 70% of final year projects are sponsored
17. Technical club activities – Students get a handson experience through various club activities like Supra-Baja, Robotics, Open Source software, Innovation and Incubation cell etc.
18. Project Competitions – AMALGAM-Final year project competition with cash prizes is held every year.
19. Startups- All projects are rigorously monitored by faculty and higher authority of college and full technical and financial support is provided to some projects based on their evaluation report by which they are converted into startups. Few students of BE launched their startups with the help of college.
20. Co-curricular based credit system (CCCBAS) - This has been introduced to motivate student participation in technical activities, value added certification courses, internships, MOOCs like COURSERA and UDACITY.

5. Evidence of Success

Excellent results of our students in the examinations, student achievements in co-curricular activities and consistent placement percentages 92% are proof of the success of this practice.

6. Problems Encountered and Resources Required:

Some of the students are reluctant to pay additional fees for the value added courses hence, Institute provides part subsidy for the value added courses to ensure full participation. Identifying suitable resource persons for conduct of the various training activities and their monitoring requires continuous perseverance by the management and heads of departments.

5.2 **Best Practice-II**

1. **Title of Practice:** Green Environment Initiatives

2. **Objective:**

This practice was implemented to reduce the institute's carbon footprint make the campus green. Also, student participation in these initiatives makes them responsible citizens.

3. **The Context:**

The growing concern for environmental protection and conservation led the institute to implement a large number of green environment initiatives.

4. **The Practice:**

The main initiatives are as follows:

f) Energy conservation

- Automatic power factor controller (APFC) is installed in the power house which gives power factor of unity.
- Almost all street lights, toilets and corridors are provided with the LED fittings.
- Auto flush and auto cut off system is installed in the hostel toilets to save electricity and water.

g) Use of renewable energy

- Interactive solar power generating system of 325 KW is provided on the roof top of the academic building. With the installation of this system 50 to 60 % of the total electricity requirement is met. It also has additional advantages like: no escalation in power cost for 25 years, up to 20% rebate in property tax under Green Building Norms, uninterrupted energy use during day time round the year.
- Apart from this solar water heating system is provided in all boys and girls hostels for hot water requirement.

h) Water harvesting

- Water recycling or waste water treatment plant of 200 m³ or 2,00,000 liters capacity has been constructed. The principle of the treatment is based on Phytoid technology. The Phytoid Technology treatment is a subsurface flow type in which wastewater is applied to cell/system filled with porous media such as crushed bricks, gravel and stones. It consists of three zones (i) Inlet zone composed of crushed bricks and different sizes of stones (ii) Treatment zone consist of same media as in inlet zone with plant species and (iii) Outlet zone. Daily 150 m³ or 1,50,000 liters recycled water is available. This is being used for landscaping of the institute. Institute also proposes to further use this recycled water for flush systems. This would save 30% of fresh water.
- Rainwater harvesting is being done near Hostel Flank "H". This is being further developed.

i) Tree Plantation

- Every year students along with the garden staff plant trees. Due to this program over the years the campus has become lush and green. Last year 2500 saplings were planted by students. Also, a herbal garden consisting of plants with medicinal values is cultivated in the college campus.

j) E-waste management

- E waste generated is first reused in the campus itself. Then discarded waste is disposed off by board of officers to authorized vendors.

5. Evidence of Success

- Monthly electricity bill for institute has reduced due to rooftop solar power generating system as well as extensive use of LED lights in the institute.
- Due to use of the recycled water from the waste water treatment plant for gardening purposes the daily water requirement from outside agency has reduced.
- The green cover of institute has increased considerably in last 5 years.

6. Problems Encountered and Resources Required

Regular maintenance of the solar rooftop power generating system and the waste water treatment plant is required.