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ARMY INSTITUTE OF TECHNOLOGY

VISION DOCUMENT: 2019-2024

1. References:-

- (a) Army Institute of Technology Growth Plan: 2013-2023.
- (b) HQ Southern Comd Sigs letter No 280101/Sigs 5/Gen dt 13 Apr 2019.
- (c) Discussions held on 24 Apr 2019 at HQ Southern Comd, at the office of the Chairman, AIT.

PART I - INTRODUCTION

- 2. AIT had prepared a Ten Year Growth Plan 2013-2023. The same was approved by the Competent Authorities, viz. HQ Southern Comd as well as HQ AWES. Now, based on HQ Southern Comd letter under reference, a presentation and discussion, chaired by Chairman, AIT was held at HQ Southern Comd, on 24 Apr 2019.
- 3. As per the modalities discussed, this Vision and Mission Document has been formulated for the next five Academic Years, i.e. 2019-20 to 2024-25.
- 4. The Objectives have been divided into two parts - Short Term and Mid Term. 'Short Term' consists of the next two years, Academic Years 2019 - 20 and 2020 - 21. 'Mid-Term' indicates the total period of five years, 2019 - 20 to 2024 - 25. As per approved AIT growth plan, 'Long Term' indicates period beyond five years.

PART II – AIT VISION AND MISSION

5. AIT vision and mission were approved during the initial years of its development and are issued to all Departments, branches and displayed at various places in AIT. This is also displayed on website and included in all mandatory brochures. These vision and mission statements should form the basis of all roadmaps and vision documents.
6. Vision for AIT. Strive for Excellence in providing the right environment for development of physical, intellectual, emotional and spiritual quotients, with a view to produce total quality engineers, preparing them to face challenges of the modern information society.
7. Mission of AIT.
- (a) Provide **state of the Art infrastructure** till deemed sufficient through input from staff and students for building up of a Centre of Excellence.
 - (b) Nurture and foster an academic fraternity to cater to the needs of the engineering students' community.
 - (c) Encourage and motivate staff and students to utilize the facilities provided to them, with their **innovative and creative thinking**, in an effective way for their **overall development**.
 - (d) Augment all available avenues to develop staff and students **for emerging needs of society** and develop Army Institute of Technology into a **Global Centre of Excellence** in the field of technical education.
8. The above vision and mission provide the continuum for planning the growth plan, goals and objectives for next five years. The keywords highlighted in the mission statement provide for the objectives for growth for next five years. The vision statement for next five years growth is given in succeeding paras.

PART II - GROWTH PLANS

9. Growth Plan 2013-23 and Progress so Far. Many of the objectives planned for the decade 2013-23 have been completed while some will be required to be taken up in the next five years. These are as given below.

<u>Ser</u>	<u>Plan</u>	<u>Progress</u>	<u>Remarks</u>
(a)	New Civil Engineering Department by 2015-16 (Short Term)	Not progressed. Low demand. Requirement of additional hostel accommodation and department block	Need to study the demand
(b)	ME in Comp / E&TC by 2016-17. (Short Term)	PG course in Mech started in 2015-16. Has been undersubscribed. Max demand for specialisation in Computer Engg.	Planned in this five year plan
(c)	Academic Autonomy by 2017-18. (Short Term)	Application pending with HQ AWES	Likely in AY 2020-21
(d)	Additional hostel floors H flank for 100 – Rs. 2.25 Cr. (Short Term)	Approved in Principle. At TEC stage. 4 floors (104 occupants) Rs 3 Crore	Likely by June 2021.
(e)	Zero failures each year. (Short Term)	Not more than 5%	Aim to keep it below 5%
(f)	70% and 90% first class in third year and Final Year. (Short Term)	Achieved. Better results than that for last two years.	
(g)	Earn consultancies, receive research grants etc. for sustaining academic activities of each Department, without budget support. (Mid Term).	Needs a focused drive	
(h)	Exchange programs with Foreign universities. (Long Term)	Only after autonomy	

Academic Growth Plan 2019-2024

10. Based on the guidance of the approved vision document 2013-23, achievements till date and emerging scenario in the market, the a vision (2019-24), is planned to be issued, which will guide the plans till AY 2024-25 as follows:-

Vision 2019-24.

(a) Reach top 50 in All India NIRF ranking and top 10 in All India in private technical institutes.

(b) Plan for horizontal, vertical and **Quality** growth to aim for becoming a **Global Centre of excellence** in Tech education for Army Wards.

11. The above vision is broken down into short term and medium term goals. Short Term goals will be achieved by 30 June 2021 and Medium Term goals will be achieved by 30 June 2024. These are given in succeeding paras.

Short Term Academic Goals (up to 2021).

12. **Autonomy.** Achieve academic Autonomy by 2020 – 21. (Full implementation by 2023-24)

13. **NBA Re-accreditation.** NBA Reaccreditation of Comp Engg program is due in Jul 19 and the process will be over by end 2019. Comp Engg program may not get reaccredited for six years now but will get reaccredited for three years as other three programs which have been reaccredited in Mar 2019.

14. **Increase in Seats for E&TC Stream by 60.** It is proposed to restore the E&TC UG intake to 120 wef AY 2020-21. Approval of HQ AWES is awaited. Most of the infrastructure is in place.

15. **Innovation and Entrepreneur Cell.** There is a requirement to provide impetus to research innovation and entrepreneurial activities amongst students and faculty of AIT. An independent cell directly under the Principal is planned. The cell will start functioning wef June 2019. It will assist the Departments to achieve their quantified targets.

16. **Artificial Intelligence(AI) and Robotics Center of Excellence**
AI and robotics learning and teaching is part of curricula both Comp/IT and E&TC streams. However, in the current Industry 4.0 scenario, there is a dire need to provide for an infrastructure where students can conduct various higher level experiments, research and build projects which will ensure they are industry ready in future. The center is planned to be fully functional by AY 2020-21.

17. **Internet of Things (IoT) Centre of Excellence.** IoT is another important technology of Industry 4.0. E&TC department has already trained the trainers and are in the process of creating labs and facilities for such a center. It will be fully functional by AY 2020-21.

Medium Term Academic Goals (up to 2024).

18. **PG Program in Comp/E&TC.** AIT proposes to launch a second PG program. Comp Engg or E&TC are preferred stream as many PG in some specialized domains such as "cyber security and block chain technologies", "AI and Machine Learning, IoT, 5G technologies etc. can provide great value to students from defence background. Many private and Govt autonomous institutions have started PG courses in these fields. It is planned to propose the commencement by AY 2021-22.

19. **Research Center in Mech/ E&TC/ Comp.** Any reputed technical institute, can come in global reckoning only if it has a PhD program in one or more streams. There is hence a proposal to set up a research center in either of the three main streams. To set up such research center, there are two mandatory requirements, viz. availability of a PG program and a few approved PhD guides. It is felt that AIT will be able to meet these twin requirements at least in one of these streams by AY 2022-23. Hence a research center can be planned by 2023-24.

20. **Tie-up with Foreign Universities.** To provide a Global footprint and experience to the students, it will be mandatory to have some tie ups with foreign universities and start a student exchange program. Many private autonomous colleges, much below AIT in ranking are already having such tie ups and the students are benefitting from such experience. It is planned to start work by **2022-2**, immediately on attaining autonomy.

21. **New Branch (Electrical / Civil).** As per long term growth plan, there was a proposal to start a new stream of Civil Engg by 2015-16. However, this did not materialize because of various factors such as lack of placement prospects in civil engineering, inadequacy of funds, inadequacy of hostel accommodation etc. It is visualized that with additional Hostel accommodation and adequate fund reserves being built, it will be feasible to commence a new stream by AY **2023-24**. However, considering the market requirement and placements new UG course in Electrical or electrical-electronics is recommended. Necessary infrastructure planning is carried out in subsequent para.

22. **Integrated Courses.** There is new thought process that there is likely to be a bigger demand for integrated courses as compared to pure Engg courses in future. While few institutes have started such courses, the concept is yet to take root. A proposal based on market requirements and future trends will be mooted to have integrated five year courses post 12th standard in either of the combinations of "**Engineering cum Design or Engineering cum Management**". Actual proposal can only be finalized after stabilization of "autonomous" courses, i.e. after AY **2023-24**.

Miscellaneous Targets for Departments for Climbing up the Quality Ladder

23. Along with the horizontal and vertical growth it is extremely important to ensure continuous improvement in quality of teaching, learning, research and innovation processes of AIT. The Depts must study the concept of Outcome Based Education and evolve the teaching learning process and academic procedures based on this. Only then can AIT hope to realise its five year Vision. Some of the targets for ensuring this improvement are listed below:-

(a) Target of 100 Patents

— By end of 2022

- (b) 96% Placements, 70% core companies – By end of 2021
- (c) 3% Students for Higher education – By end of 2021
- (d) 1% Entrepreneurs per batch – By end of 2021
- (e) 50% faculty to be PhD – By end 2023
- (f) One quality paper per faculty per year – By 2021
- (g) 10 student papers per branch per year – By 2021
- (h) Consultancy (10 Lakh/Dept) – By 2020–21

INFRASTRUCTURE DEVELOPMENT PLAN

Academic Infrastructure

24. The short and medium term academic goals lead to Academic Infrastructure development as follows:-

- (a) Exam Cell for Autonomous Functioning (On Ground floor of Academic Block)
- (b) Additional Classrooms for proposed ME (Computer / E&TC)
- (c) Infrastructure for additional department (Electrical or Civil Engineering)

25. The space for Exam Cell and additional two class rooms for fresh ME Programme (Computer/E&TC) is proposed to be created by the following steps:-

(a) Shift the Open Air Café into the area of Gazebos. The Kitchen will be required to be constructed near the biggest gazebo. This project can be completed by Jun 2020. The approx. cost will be about Rs5 Lakhs.

(b) Construct two storied structure for a separate Admin Block, at an approx. cost of Rs 60 lakhs, by Jun 2021 and shift the following from the Main Academic Block to the proposed Admin Block:-

(i) Central Store.

(ii) MI Room.

(iii) Maintenance / Administration Cell.

(iv) Telephone Exchange.

(v) Student Xerox Facility.

26. New UG Department Electrical / Civil Engineering. In order to start a new under graduate Department, a fresh block needs to be created, with about 1,000 square meter area. This is proposed as a double storied building, between the existing Main Academic Block and Workshop. The approx. cost, including equipment / machinery for laboratories, furniture, classrooms, faculty library, faculty cabins and a conference room, will be about Rs 4 Crores.

Hostel Infrastructure

27. To support the horizontal and vertical growth, there will be a requirement of building additional hostels in the existing area of AIT. As of now two hostel projects (porta cabins for 36 students and additional 104 accommodation) are approved and at various stages of execution. Post 2023, one more hostel block for about 240 occupants will need to be built. As the hostel capacity increases, there will be a requirement to increase

the dining hall capacity, additional recreation room and upgrade the kitchens. Details of execution are given in table below: -

<u>Requirement</u>	<u>Plan</u>	<u>Target Date</u>	<u>Remarks</u>
Immediate accommodation for student staying outside (appx 100)	Porta Cabins 36	31 May 2019	60% work completed (Rs.15 lakh)
Additional boys hostel for propose increase of E&TC (Additional 240)	Additional 4 storeys for H Flank (Bhabha Hostel) capacity 104	31 May 2020	TEC in progress (Rs 3 Crores)
Additional Dining Hall along with recreation room	Dining Hall with capacity of 200	31 May 2021	Approx. cost Rs 25 Lakh incl furniture
Upgradation and modernization of Kitchen	Plan for mechanization, automated electric chimney etc.	31 May 2020	Approx. cost Rs 45 Lakh
Additional accommodation for ME Students and one more stream / Dept	Plan for additional hostel for 240+ students.	31 May 2025	AWES directions - only after land issue resolved (Cost Rs. 7.5 Crore)

CONCLUSION

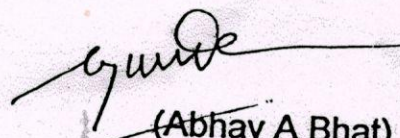
28. AIT has been in existence for the past twenty-five years. In this short period, due to the vision and vigour of the Management, the quality and enthusiasm of the students, the perseverance and cooperation of the staff, AIT has excelled in all fields. Today we are among top 100 in All India Rankings. It is one of the few AWES professional colleges to be financially self-reliant.

29. In order to maintain the momentum and the impetus in quality learning for our Army Wards, we need to plan for horizontal, vertical and qualitative growth/ improvement further. This Vision Document is an attempt to achieve the above and has been prepared in tune with the AIT Growth Plan 2013-23, already approved by HQ Southern Comd and HQ AWES. All the proposed expenditure(s) are planned to be incurred from AIT resources. For this purpose, we have budgeted a separate Development Fund Head, other than the revenue income / expenditure for academic purposes (College Fund) or Hostel Head.

AID/0079/P Plan/Adm

Army Institute of Technology
Dighi Hills
Pune - 411015

13 May 2019


(Abhay A Bhat)
Brig
Director, AIT

NOTING SHEET
AIT

File No : AIT/0069/P Plan/Adm

Sheet No : Two

~~Patron/COS~~
(Through SD)

17/9/8

Should be passed in
the next GBM.

17/8

Chairman 17/08

~~Col Singh~~

19/8

Dir AIT

COS
SECT
Date 17/8
Regn. No. 6
PS

NOTING SHEET

AIT

Case No : AIT/0069/P Plan/Adm

Sheet No : One

PERSPECTIVE PLANNING

1

1. Please ref :-

(a) Para 41(a) of Minutes of Annual Conf of Dean/Directors/ Heads of All Colleges/Institutes held at HQ AWES from 13 to 14 Jun 2019.

PUC


(b) HQ AWES e-mail dt 30 Jul 2019.

Flag 'A'

2. Five year Perspective Plan/ Vision document in r/o AIT Pune is required to be fwd to HQ AWES duly approved by BoA.

3. Vision Document 2019-24 in r/o this Institute is placed opposite for your perusal and approval please.

Flag 'B'


(K. S. Vijayan)
Col
Offg Director

14 Aug 2019

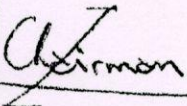
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Chairman AIT
(Through SO to Chairman)

Recommended as per Para 2 & 3 of note 1 ante

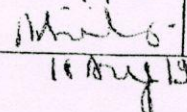

7/8/19

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Chairman

1. Ref notes ante.

2. Vision Document 2019-2024 is r/o AIT, Pune is placed opposite for perusal and approval of Patron pl.


16 Aug 19