Stay Ahead

BANNARI AMMAN INSTITUTE OF TECHNOLOGY, SATHYAMANGALAM

STRATEGIC PLAN

2020-2025

Contents

Strategic Plan 2020 – 2025

1.0 Background

Bannari Amman Institute of Technology (BIT) was started in 1996 with four branches in UG programmes viz, Computer Science and Engineering, Electrical and Electronics Engineering, Mechanical Engineering and Textile Technology, with an intake of 160 students. Facilities were gradually planned to introduce additional UG and PG Programmes in Applied Science, Engineering and Technology and Management. PhD Programmes were introduced in all eligible disciplines from 2005 onwards.

Stay Ahead is the motto of the institute and is publicised across the stakeholders by embedding it in the institute logo. Accordingly, BIT strives to stay ahead of its peers and competitors by gaining a competitive edge, and building capacities and capabilities in terms of faculty, infrastructure and services that can sustain any external demands. BIT provides a highly competitive environment for both faculty and students, whose effective engagements are measured objectively using suitable indicators. BIT, an autonomous institution since 2007, affiliated to Anna University, stands one among the top-20 institutions in the state. It is accredited by the National Assessment and Accreditation Council (NAAC) with an 'A' Grade in the first two cycles and an 'A+' Grade in the third cycle. The National Board of Accreditation (NBA) has accredited 9 UG programmes. As an indication of the world-class education standards of our academic programmes, 8 UG Programmes are accredited by the Institution of Engineering and Technology (IET)-UK. BIT has won many prizes and awards that include the Clean & Smart Campus Award 2019 by AICTE, IMC Ramkrishna Bajaj National Quality Award, 5S Excellence Award 2019 and Honour Roll Award 2016 - National Entrepreneurship Network. BIT has defined its Vision and Mission, published them and disseminated them among all the stakeholders.

2.0 VISION

- To be a centre of excellence, providing a world-class education that transforms individuals into intellectual, empathetic and responsible citizens.

3.0 MISSION

- To provide top of the line infrastructure that is most conducive for learning.
- To engage committed members of faculty who will infuse subject knowledge with the latest teaching pedagogies.
- To provide state-of-the-art facilities to the members of faculty and student fraternity to access and engage in diligent research.
- To collaborate the best minds in the industries with the academia of the college, thereby empowering the students to meet the global standards.
- To create an enterprising environment for continual progress and change that respects heterogeneity.

4.0 CORE VALUES

- Promoting the use of technology
- Fostering global competency
- Social responsibility and national development
- Accountability and transparency
- Excellence

5.0 QUALITY EDUCATION

- All the departments are headed by experienced professors who are scholars in their respective fields. A dedicated team of professors, associate professors and assistant professors assist the department heads in effectively carrying out the academic programmes.
- This distinguished and enthusiastic faculty forms the backbone of the institute.
- The institute has an open culture wherein students interact freely with the faculty.
- The faculty, the excellent infrastructure and the right guidance & counselling result in qualified, skilled, confident students in engineering and technology, ready to take on the world with great vigour.

Core competencies of the institute include (i) teaching-learning (Engineering Education), (ii) research, (iii) entrepreneurship development, (iv) placement, (v) industry interaction, (vi) composition and contribution from the Governing Council (vii) special labs (viii) virtual labs, (ix) centres of excellence and (x) in-house e-governance system. These core competencies are mapped with the mission of the institution.

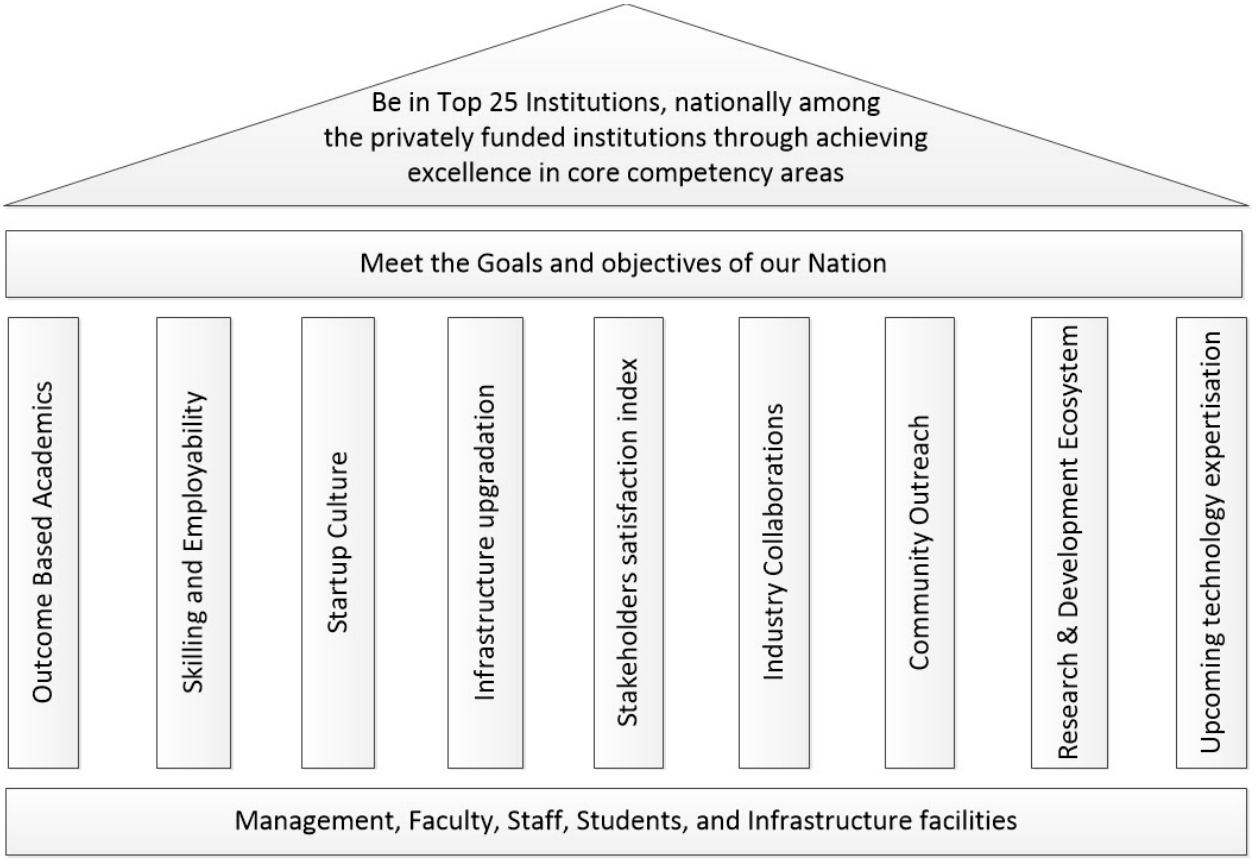
BIT has sought collaborations with other institutions, including IIT Madras, IIT Bombay, NITTT & R Chennai, Foreign Universities (Asia Pacific University, Sunway University, Universiti Malaysia Pahang) for faculty development activities.

6.0 STRATEGIC PLAN

The Strategic Plan (SP) of Bannari Amman Institute of Technology aims to leverage the strengths of the Institute that have been developed over a period of time, and the capabilities of those that are confident enough to develop in coming years. Strategic planning is often a key tool for a more rational and systematic approach to bring about the necessary changes for greater internationalisation in institutional direction and daily operations.

BIT believes in integrating teaching with research, the freedom and responsibilities of staff members, acting with integrity, and the value of an inclusive and diverse community. The key focus areas are identified through the gap analysis with respect to the global developments, industry requirements, competitors' performance, and the institution's perceived status. The current position of the institute is ascertained through the key results obtained in educational objectives and the attainment, teaching-learning, quality of faculty members, research and consultancy services, student progress, development of necessary infrastructure, interaction with the industries and results published by various surveys and rating agencies.

Measures to improve the performance along with the methodology are detailed in the strategic planning process. The action plans are reviewed and modified by the members of the Apex Committee. The key decisions are discussed in the Governing Council for further improvement in the plan and communicated for implementation. BIT's strategic plan includes nine major factors, given below, linked logically with enablers and final objectives:



The objective of the strategic plan is to elevate the status of BIT as a leading institution with national and international recognition, with a global ranking in selected disciplines. Efforts are taken continuously by all the enablers (Management, Faculty, Staff and Students with enhancement in infrastructure facilities) to become a well-known institution among the customers and other stakeholders. Goals for all the nine parameters are set, in consideration with various developments that are taking place nationally and globally in all the fronts of engineering and technology and the competing institutions in this field, while maintaining educational policies and guidelines of MHRD as the periphery of the paradigm within which the institute operates.

6.1 Outcome-based Academics

Action Points:

- Since the institute has a lot of academic flexibility, it is planned to set up more flexible regulations in the curriculum, which allows lateral and vertical mobility within and across departments, students exchange programmes, and collaborative learning.

- ❖ Updating curriculum as per industry requirements and also introducing electives suggested by industry.
- ❖ The assessment of course outcomes through external surveys (like alumni, employer, graduate, and industry experts) and internal surveys (students feedback, faculty feedback, student exit survey) will be mapped to graduate attributes and programme outcomes.
- ❖ Upgrading faculty and staff competency through self-learning, peer learning and certificate courses, industrial training, in-house training by industry experts/experts inside BIT. Non-teaching and other BIT staff competency development through in-house training / industrial training with certification.
- ❖ Providing students with the ability to choose their learning trajectories and programmes, and thereby choose their own paths in life according to their interests and talents.
- ❖ Each course should end with application projects that emerge with a more 'active learning' experience. It will include activities such as planning, creating, thinking critically, building, testing, and reporting
- ❖ Make the students select final year project topics based on societal and industrial needs like rain water harvesting, drone-modelling etc., which includes health & safety, environment and commercial risk.
- ❖ Upgrading examination facilities through an automation system in the controller of examinations.

6.2 Skilling and Employability

Action Points:

- ❖ To set minimum skill competence required before passing to subsequent semesters, for students of all departments and years.
- ❖ To design a foundation training programme consisting of all basic engineering skills to be delivered to students of all streams.
- ❖ To establish infrastructure and human resources for all world skill verticals and provide worldskill training to all students.
- ❖ To sign agreements with industries and startups for training all students on real product development cycles.
- ❖ Setting up special labs or infrastructure for upcoming technologies and emerging technologies to provide exposure to all students.

- ❖ Implementing a monitoring system to measure the effectiveness of the work carried out by students through skill training.
- ❖ Organising more awareness / training programmes for improving the participation of students in competitive examinations / higher studies.

6.3 Startup Culture

Action Points:

- ❖ Encouraging innovative ideas of students, faculty, and alumni to be translated into commercial products/processes as per BIT-ISP policy for the benefit of society.
- ❖ Promoting technology-driven start-ups based on the local resources available for creating employment opportunities and percolating the same for a large number of rural communities.
- ❖ Providing sufficient infrastructure facilities in the institute for accommodating new start-ups with technical support, mentoring, seed fund for early-stage start-ups, development fund for commercialisation, IP protection, technology transfer and commercialisation.
- ❖ Promoting Industry-Institute collaborative student ventures within the institute which in turn will promote industry-driven marketable products and services.
- ❖ Developing self-sustainable campus start-up models in various disciplines of engineering and technology.
- ❖ Conducting awareness programmes and encouraging students to participate in idea contests and other such programmes for promoting startups.

6.4 Infrastructure upgradation

Action Points:

- ❖ As the institute expands in number of students, faculty and staff, the infrastructure needs to be improved. So, measures will be taken to introduce more infrastructure to accommodate the increased intake.
- ❖ Creating a centralised e-data management system for the institution.
- ❖ Upgrading laboratory facilities through purchase of latest machines / equipment, and collaborating with industry.

- ❖ Upgradation of sports infrastructure facilities and implementing automation systems in various non-academic areas like hostels, quarters and transport.
- ❖ Upgrading the existing laboratories / establishing state-of-the-art laboratories in various departments as Centres of Excellence in core programmes
- ❖ Implementing log book for individual machines, equipment, computers etc., for tracking utilisation.
- ❖ Implementing effective waste management through waste segregation and recycling which helps to maintain an environment friendly campus.

6.5 Stakeholders satisfaction index

Action Points:

- ❖ To restructure the faculty appraisal system by including all activities and special competencies of faculty members in addition to regular academic and research requirements.
- ❖ To support faculty members develop their own infrastructure and allow students enroll and support the development of faculty and students.
- ❖ To facilitate faculty members to form into interdepartmental teams and consider team achievements for their performance appraisal.
- ❖ To sponsor faculty members to visit various places across the world for their professional upgradation.
- ❖ To form a student care centre for collecting data and updating all parents on the progress of their children from first year to final year.
- ❖ To establish a helpdesk with online and offline platforms, to assist all students and faculty members in reducing their administrative requirements and to address their grievances with a robust followup system.
- ❖ To get in touch with various companies and all recruiters to know about their competency requirements, and provide company and domain specific training to students from first year to enable them start being productive to the companies from their first day of joining.
- ❖ To include students areas of interest and special talents in various academic requirements to help them practise their passion.

- ❖ The feedback shall be collected iteratively from all the stakeholders at regular intervals which will help measure the stakeholder satisfaction, and also for the institute to self assess their progress against objectives.

6.6 Industry collaborations

Action Points:

- ❖ The college is situated in a rural area with very few major industries nearby. However this limitation will be overcome by the various strategies like internships in core industries, regular industry visits of students and faculty, industry sponsored research projects by the faculty and students, etc.
- ❖ The yearly target of Industry Institute Partnership development plan is fixed for engineering departments, special labs, and technical societies and chapters, and the target will be revised periodically based on the requirements.
- ❖ Enhancing the industry and institute relationship through Industry Institute Partnership Cell (IIPC) for equipping faculty and students to latest practices, and make the students industry-ready by providing exposure to current industry practices and hone their skills to adapt changing technologies.
- ❖ Constant follow-up and review for MoU with industry which benefit faculty and students, and to expose them to enriched knowledge and real time experiences.
- ❖ Follow-up of student industry internship to ensure that students are acquiring well rounded experiences and getting a first-hand idea of how industries work.

6.7 Community Outreach

Action Points:

- ❖ Promoting Clean India Mission and smart village development to the nearby villages which helps to spread awareness on the importance of a clean environment.
- ❖ Disseminating digital literacy for rural people which will provide guided online experiences that help users to find, evaluate, and compose clear information through writing and other media on various digital platforms. Digital literacy is evaluated by an individual's grammar,

composition, typing skills and ability to produce text, images, audio and designs using technology.

- ❖ Promotion of life skills and entrepreneurship to promote startup ecosystem by converting laboratory research projects into market driven innovative products using local resources.
- ❖ More women empowerment programmes will be organised to improve their well-being, realise their economic goals, grow a business and to improve their home, or investing in training or education.
- ❖ Promotion of personal hygiene and sanitation in villages will be done by the team of NSS, YRC and NCC as water and sanitation related diseases such as diarrhea, eye and skin infection, malaria are common in the rural areas. This promotion will improve the quality of life of citizens through minimum inputs.
- ❖ Conducting water and energy conservation awareness programmes to reduce the quantity of water used by the end user.
- ❖ Providing conceptual learning training for school students in and around BIT, and spreading awareness of ICT tools to school teachers.

6.8 Research & Development (R & D) Ecosystem

Action Points:

To develop focussed Central Research Facility & Centres of Excellence in the institute on emerging areas with potentially large societal impact.

- ❖ Introducing R&D park which helps to create a better ambience for research by providing greater flexibility to encourage the faculty members and scholars while continually improving research infrastructure inside the campus.
- ❖ Encouraging the faculty members for collaborative research with the premier institutions, research laboratories and industries of repute.
- ❖ Focusing the research more on multidisciplinary areas so that each research laboratory can gain the required level of expertise in another field.
- ❖ Motivating the faculty members to publish their research work in Science Citation Index (SCI) / Web of Science / Scopus indexed journals.
- ❖ Providing financial and administrative support to all faculty members / students for filing of patents or other IPR related activities.

- ❖ Strengthening the research advisory board to provide guidance and direction for faculty members by offering more opportunities for iterative processes.
- ❖ Encouraging summer research / post-doctoral fellowships, which offers students as well as faculty members the opportunity to participate more in research activities.

6.9 Upcoming technology expertisation

Action Points:

- ❖ To cope with the modern world and the knowledge-driven era of technology, it is planned to identify and implement new methods in administration and academic activities.
- ❖ Implementing technological advancements in classroom learning and everyday settings of community and workplace.
- ❖ Providing more technological support by identifying learning needs and opportunities for teachers to become more collaborative and extend learning beyond the classroom.

Bannari Amman Institute of Technology

Alathukombai, Sathyamangalam - 638 401,Erode District, Tamil Nadu, India

Dr T Ramesh Kumar

IQAC-Coordinator

- iqac@bitsathy.ac.in

Dr C Palanisamy

Principal

- Principal@bitsathy.ac.in