### ANNA UNIVERSITY CHENNAI - 25

#### ANNA UNIVERSITY - STRATEGIC GOALS AND OBJECTIVES

# (i) To be among the top five technological universities by focusing on learners and providing them with an exceptional learning experience

We focus on developing learners with passion and commitment to work in a global environment, capable of creativity, innovation, and entrepreneurship for nation building through state-of-the-art teaching, learning and mentoring experience.

#### **Curriculum Aspects**

- i. Design of an innovative curriculum that is flexible, responsive and caters to the needs of the learners with global relevance.
- ii. Design of a curriculum with in-depth focus on fundamentals which seamlessly integrates theory, practical, self-study and experimental learning.
- iii. Addition of courses that reflect the innovative, analytical and technical aspects of engineering providing both broad and in depth perspectives of the field for global competitiveness.
- iv. A teaching and learning environment that nurtures leadership qualities, teamwork and professional ethics.
- v. Emphasizing on research-based, application-oriented and product-development projects in the curriculum.
- vi. Constitution of advisory committee that continuously monitors and provides inputs for curriculum improvement.

#### **Teaching-Learning Process**

- i. Review of the teaching and learning activities with a view to updating on current trends and future requirements.
- ii. Integrated e-learning, blended learning and flipped classrooms as part of the teaching learning process.
- iii. Developing evidence-based approaches for assessing best practices in learning methodologies and course delivery.
- iv. Employing teaching assistants with financial support to help faculty in student interaction.
- v. Establishment of a dedicated Teaching Learning Centre to provide training to faculty and explore innovations in pedagogical and technological aspects of teaching learning and evaluation processes.
- vi. Providing ample opportunities for the exposure to and interactions with international experts and global leaders in a variety of curricular, co- and extra- curricular activities for enrichment of learning experience.

#### **Co-Curricular Aspects**

- i. Identification of students who need special help and provide appropriate mentoring.
- ii. English language course as bridge course to strengthen English Language Skills.
- iii. Foreign Language courses for students with good English language skills as part of curriculum.
- iv. Interaction with corporate, key professional bodies and associations for internships, projects and placements.
- v. Support to technical, social, innovative and theme area project competitions
- vi. Continued support to socially relevant and commercial projects.
- vii. Establishment of lecture series and focused-workshops for faculty and students on topics of technical interest and on-design thinking, innovation, entrepreneurship and social service.
- viii. Incubation support for start-up activities of students and alumni.
- ix. Earn-while-you-learn framework for students.
- x. Enhancement of the first year academic experience through support for academic and general mentoring
- xi. Ensuring increase in student participation in co-curricular activities

#### (ii) To Facilitate Quality Technical Education through Collaborative Partnerships

Work in partnership with industry, government agencies, academic and research institutions from India and abroad to continuously improve the quality, flexibility and efficiency of programs, curricula and services

- Collaboration with other major industries like automobile, as it is happening now, to design specialized programs with flexi-timing, and flexi-modes with credits for work experience to keep abreast of current trends practically.
- ii. Creation of intellectual resources and infrastructural facilities including workplace, simulation labs and networking &sharing of resources and infrastructure with other institutions, industries, funding agencies and government.
- iii. To design and offer programs on technology for other professional areas. For example, areas like agriculture and health in collaboration with respective institutions; Legal issues in technology and industry will be imparted in collaboration with law University.
- iv. To design training programmes and conduct research in coordination with government agencies oriented in solving specific national goals.

#### (iii) To recruit, reward and retain high quality workforce

Provide conducive working environment that brings out the best in the teachers, technical and administrative staff

- Recruit fresh and experienced faculty including foreign faculty with diverse backgrounds in thrust and emerging areas to achieveFaculty student ratio of 1:10
- ii. Provide intellectually stimulating eco system and support system to ensure their productivity right from their joining
- iii. Create conducive systems to accommodate proactively their requirements for enabling enhancement of their skills and productivity
- iv. Associate industries related to the areas and ensure smooth collaboration and develop products

- v. Involve industries in mentoring entrepreneurs and start-up business to ensure achieve the larger objective of engagement in economic development of the country through technology.
- vi. Design, collect and use student feedback to improve systems, processes and practices.
- vii. Continue to provide desired training for faculty in technical as well as pedagogical aspects.
- viii. Ensure that the performance review and appraisal process supports faculty to deliver strategic objectives.
- ix. Recognize and reward faculty for developing high quality multi-media course content.
- x. Encourage faculty from multiple disciplines to jointly offer courses.
- xi. Reward faculty for designing innovative methods of teaching and evaluating modules of courses.
- xii. Develop a mechanism for having a symbiotic Industry Institute Interface.
- xiii. Provide sabbatical leave for faculty.
- xiv. Provide graduate student support, travel, equipment and laboratory space as research incentives to faculty

Encourage faculty to undertake sponsored research and consultancy, transfer technology, create IPR and have equity partnership.

#### (iv) To expand, sustain and excel in research (Research Excellence)

Attainment of prominence in research by providing a congenial working environment and encouraging excellence in sustainable, collaborative and multidisciplinary research. Development and strengthening of nation-wide and global networking with top class institutions to ensure a robust growth of innovative research and product development for national and global need.

- i. Encouragement of interdisciplinary and translational research through funding from Government sources, industries, IRG and CSR fund and Alumni contributions
- ii. Motivation and fostering of quality research to tackle socially relevant challenges and issues.
- iii. Encouragement of interaction between faculty ofbasic science and engineering& technology disciplines.
- iv. Expanding and intensifying the activities of the Centre for Technology Development and Transfer to translate research outcomes to patents and products
- v. Special incentives for faculty who bring in research funding.
- vi. Establish a Research Advisory Council and Technology Board with internal and external members to interact with faculty and suggest long term opportunities and trends.
- vii. Increase institutional fellowship numbers to attract meritorious students towards research pursuit.
- viii. Provide on-campus housing for all full-time research scholars.
- ix. Create a support system for visiting researchers similar to the VAJRA program of DST.
- x. Establish a research open house to engage community, industry and students.
- xi. Provide an Integrated Ph.D. programme with exit for M.S.

# (v) National and Global Collaborations (To expand our national and global influence and spread through appropriate interactions)

Enhance the image of the institution both nationally and internationally through sustained focussed interactions, with specific plans to bring in students from diverse groups

- i. Promotional activities to increase the visibility of the undergraduate, postgraduate and research programmes through sustained campaigns in India and foreign countries
- ii. Promotions to enrich the national and international character of the university by recruitment of foreign faculty, invited experts and admitting more students
- iii. Setting up a Global University Network Campus that embodies the ideals of an open, democratic and global society catering to the needs of the global community and satisfying cultural, ethnic and racial diversity.
- iv. Expanding global participation spread across continents with the aid of web based education and the extensive use of digital library.
- v. Benchmarking against technologically sound global leaders with a view towards continuous improvement.
- vi. Enhancing and standardizing a model for international semester exchange or internships.
- vii. Establishing Collaborations for student and faculty exchange and coming up with suitable economic models.
- viii. Developing and studying best practices of international collaboration including financial support.
- ix. Identifying key institutions (having similar or higher global rankings) world-wide to target as prospective collaborators and develop a plan of action to secure these collaborations.
- x. Encouraging joint offering of advanced courses through online or on-site mode for students of both institutions.
- xi. Joint research publication and conference presentations
- xii. Joint research projects, funding and guidance.
- xiii. Establishing country-wide alumni associations' network for establishing contacts in India and abroad.
- xiv. Developing dual degree programs with one or more foreign universities.
- xv. Offering English language course as bridge course for International students.
- xvi. Offering basic Foreign Language courses to enable better interaction while in foreign countries.

### (vi) Industry and Community Interactions (To improve and increase the scope of interaction with Industry and Community)

Establish 360° interaction with industry for placements, internships, training, work experience, research, technology transfer, commercialization, designing and offering programs. Have community interaction to identify socially relevant critical problems, find solutions and disseminate knowledge through various outreach programme.

i. Enhance and expand the career and placement opportunities to include more national and multinational industries and wider varieties of careers.

- ii. Provide a focus-building approach to career through appropriate dissemination programs that exposes students to industries right from the first year.
- iii. Interact with industry through an annual open house for public where the strength of the departments and the requirements of the industries are showcased and discussed.
- iv. Establish a feedback mechanism for employers during and after internship or job placements.
- v. Encourage social entrepreneurship by establishing a framework and information exchange mechanism where student, faculty, industry or community can interact to discuss social problems and provide specific solutions.
- vi. Ensure a communication mechanism which will connect interested faculty members with external opportunities.
- vii. Provide specialized regulations with flexibility for M.S (by Research) /M.E and PhD for industry personnel.

## (vii) State-of-the-art Infrastructure (To improve the academic, administrative, residential infrastructure facilities)

Establish a world-class infrastructure facility to cater to domestic and foreign students and faculty

- i. Construction of AU Research and Development Accelerators for the proposed thrust areas (Data Science, Energy&Materials, Design&Manufacturing, Health-care&Bio Technology and Environment & Climate Change) to ensure conversion from idea to prototype to commercialization.
- ii. Construction of Smart Classroom complexes enabling technology based learning and Li-fi based communication and networking system for continuous and effective learning
- iii. Direct-to-home technologies to augment learning even from home with access to GIAN and other study resources.
- iv. Construction of sufficient accommodation facility for Boys and Girls of UG, PG and Ph.D. courses, International hostel and residency complexes for international students and faculty. Alumni transit facility for visiting or transiting alumni.
- v. Setting up of new state-of-the art academic laboratories and expanding the IT infrastructure facilities for learning through out the campus with latest technologies such as cloud computing
- vi. Modernization of the multimedia centre and other support systems with high quality Video-conferencing and other international communication facility with studies to expand and enrich collaborative activities
- vii. Enhancing technology-enriched amenities for indoor and outdoor sports, gym, swimming, health-centre and recreation
- viii. Establishment of world class Green campus with efficient energy, water, waste and sanitation management.