

## Banasthali Vidyapith: List of Forthcoming Projects

The journey of Banasthali Vidyapith over the last eight decades has always been full of innovation. Originated in only of its kind situation, when a father lost his promising daughter at a tender age and decided to train others the same way to realize the dreams he had for his own daughter, the Vidyapith evolved a highly innovative 8 year school education programme called 'Sanskrita' to nurture cultured women in times when the concept of education for women did not exist. Subsequently, the Vidyapith evolved its five-fold educational ideology (Panchmukhi Shiksha) and incorporated: (i) Physical, (ii) Practical, (iii) Aesthetic, (iv) Moral and (v) Intellectual aspects into each of its programmes to develop an all-round balanced and integrated personality of students. *Today it stands as one of the world's largest fully residential women's universities having more than 11000 students on its 850-acre campus situated amidst rural setting in Rajasthan and having a distinct educational ideology and offering a variety of programmes from nursery up to doctoral level across a wide spectrum of disciplines to prepare enlightened citizens with strong value-base.*

The new world order brought about by globalisation and liberalisation of economy has revolutionised the knowledge assimilation and its utilisation for the betterment of mankind. Emerging and converging technologies have necessitated dialog among diverse fields and broken traditional boundaries. Despite the economic development, however, the social, emotional and spiritual fabric of the nation seems to have weakened as the youth of today predominantly exhibit individualistic and nihilistic tendencies. While emphasizing the need for Banasthali style value-based comprehensive education more than ever before, these developments have necessitated paradigm shifts in certain aspects. Vidyapith, the cradle of many innovative ideas in women's education and empowerment, has been in the process of re-inventing and re-defining itself for the next 20-25 years and beyond.

To this end, the following is a list of projects which over the next few years would facilitate Banasthali upgradation to the next level:

### A. Major only of its kind Projects

#### A1. School of Aviation Sciences: *Empowering women with wings!*

Banasthali is the only university in the country to start a flying club of it's own in early 60's. Flying activity was initiated with a view to develop self confidence amongst women who were joining formal education for the first time.



The Vidyapith is successfully imparting flying training for more than 50 years as a part of it's comprehensive education programme. All flying training related activities in India are regulated by DGCA & earning a pilot license has been relegated to flying clubs. Unfortunately aviation has hardly developed as an academic discipline.

With a view to develop enlightened pilots & other highly skilled professionals in various fields of aviation, the Vidyapith proposes to establish Banasthali School of Aviation Sciences. The proposed school shall introduce the following innovative programmes.

1. B.Tech. (Avionics)
2. B.Tech. (Aircraft Maintenance)
3. B.Sc. (Aviation Science)
4. M.B.A. (Aviation Management)



The School would procure Multiengine Aircrafts, Simulators, and other laboratory and maintenance training equipment. The Vidyapith shall also construct a hard top runway, a well equipped hangar and other support facilities.

## **A2. Center for Automation: *Re-engineering the engineering education!***

There is no denying the fact that mindless expansion of engineering education has brought about staleness so much so that it is believed that only 20% of the engineering graduates are employable. Whereas the challenges of modern times have posed engineering problems requiring high degree of innovation. Drawing from the German school of engineering education and from the "Aalborg model", the Vidyapith proposes to re-engineer its engineering programmes by exposing the students to facilities where they would be able to design entire manufacturing plants on a table top. This would bring in interdisciplinary character with input from various branches of Engineering such as Mechanical, Electrical, Electronics, Instrumentation, Chemical, Computer Sciences and Information Technology. More than 25% of the programme in the final two years shall be conducted through projects and in self-learning mode. Entrepreneurship development shall also be incorporated. In addition the center would introduce two highly advanced and innovative M.Tech. programmes in fields: (1) Process Automation and Mechatronics and (2) Embedded Robotics.



Center shall also serve as a centralized facility in the country. The center will also have collaborations with international level organizations and industries to provide the live input to the existing curriculum.

The proposed center would only be of its kind in India. The uniqueness of the programs lies in labs which will be equipped with world class industrial level trainings kits, software and teaching aids providing the latest technological inputs required to all aspirants in the field of technology.



### **A3. Center for Water and Energy Research: *वयं रक्षामः***

Water occupies most of our planet in terms of oceans, rivers, glaciers etc. However a very small portion (<1%) of the total water is available for human consumption. Water contaminated by various pollutants including pesticides and heavy metals, high salinity and pathogenic microbes gives rise to lethal waterborne diseases. Contaminated water accounts for an estimated 4-5 million deaths per year, of which a majority are children affected by virulent but preventable diarrhoeal diseases. Scarcity of rainfall in areas such as semi-arid rural Rajasthan surrounding Banasthali further intensifies the problem.

At the same time, the world is grappling with major crisis due to depletion of fossil fuel and overuse of certain forms of energy even raising questions about the sustainability of planet earth. It is, therefore, time for a progressive University like Banasthali Vidyapith to establish “Interdisciplinary Center for Water and Energy Research” to tackle problems related to Water and Energy which are daunting to the world as well as Rajasthan.

The proposed Center would endeavor to utilize the rich traditional knowledge system in India and combine it with modern technological innovations like nanotechnology to provide economically viable and environmentally sustainable solutions to the problems in water and energy for the betterment of common man. The center would introduce three new programmes: M.Tech. (Nano-technology), M.Tech. (Energy Management & Auditing) and M.Des. (Green Design). It will also create awareness in conservation, sustainable utilization of the depleting energy and water resources, undertake cutting edge research across interdisciplinary boundaries of Physics, Remote Sensing and GIS, Chemistry, Pharmacy, Biology and Biotechnology and initiate dialogue with industry and rural community to develop low cost solutions for the masses.

More specifically the center would endeavor to develop solar cell, heat insulating material, synthesize and characterize carbon based nano-material, transparent-UV resistant polymer-metal oxide panels for solar thermal applications and Zinc, Cadmium and lead based nano-wires for solar cell fabrication, water pollution sensors and novel water filters (anions-fluoride and nitrate, heavy metals, microbes) through electrospun nanofibre for safe potable water and evaluate engineered nano-particle toxicity and do molecular screening, detection and quantification of water borne pathogens, assessment of the physiological state of drinking water and determine epidemiological correlations with molecular and environmental data to assess the risk for waterborne microbial infections.

### **A4. SHANTA-School of Heritage and Traditional Arts: *भारतस्य प्रतिष्ठे द्वे संस्कृतं संस्कृतिस्तथा***

Creation of Banasthali Vidyapith was inspired by eternal Shantabai and its five-fold educational ideology is derived from her multi-faceted personality. As a result, Vidyapith has always emphasized on Indian culture and traditional arts for the harmonious development of personality of students and it is reflected in the inclusion of the aesthetic dimension in its mission statement.

The ancient Sanskrit literature is the richest fountain head of knowledge, but all this heritage is losing the attention it deserves and as a result an entire generation is alienated from the roots and is unable to derive the benefits of the rich Indian knowledge systems. The center would undertake studies to link traditional Indian wisdom with contemporary ideas of science, technology, management, language, grammar, phonetics, fine arts, medical science, ethics, values, spirituality, environmental balance and aesthetics. Popularization of Sanskrit and study of its various aspects would also be undertaken.

The Vidyapith also has a very rich tradition of fine arts. Established in 1943 the Department of Music has the honor of having great personalities as its architects such as Raja Bhaiyya Poonchwale, V.R. Patwardhan, Narayan Rao Vyas and B.R. Deodhar. The department was the first to start M.A (Music) programme way back in 1953. Carrying forward its distinguished legacy, the department intends to revive some dying folk instruments, folk tunes and dance

forms. It also intends to develop best practices and test emerging standards for archival of audio/video, preservation and storage in the digital domain in order to preserve critically endangered and highly valuable unique field recordings of extraordinary national interest.

Banasthali is also the proud host of some of the leading artists such as Binod Behari Mukherjee and Shailendranath Dey. The Department of Visual Arts has one of the richest collections of fresco paintings based on techniques largely invented at Banasthali.

The rich visual art heritage available with the Vidyapith needs to be restored and exhibited. The center would undertake research on preservation techniques and anthropological aspects of arts and would also work on various techniques for mural paintings.



Moreover the Vidyapith is situated in the state of Rajasthan which has a glorious past reflected in its festivals, paintings, music and ballads of nomadic tribes. The focus areas of the center would be to revive dying folklore, folk instruments, songs and dances, ballads, traditional art material (vegetable colors and eco-friendly fresco), traditional and contemporary dance forms with special reference to Rajasthani art and culture, popular music and cultural discourse. The Vidyapith would build a museum to showcase rare folk instruments, paintings and manuscripts and an art exhibition center which will display works of the center and participants from community.

#### **A5. Center for Interfaith Discourse and Intercultural Studies: [संस्कृति-सेतु](#)**

Of all nations of the world, India has the most viable potential to create models of comprehensive nonviolence and communication among the inharmonious polarities of religion, ideology and culture. Ancient Indian Culture with its diverse Philosophy has been a great paradigm of interfaith discourse. Drawing its sustenance from scores of Vedic and Vedantic cultural streams, the classical Indian systems epitomize harmonious amalgamation and assimilation. This juggernaut of ancient Indian systems has merging streams from the faiths and cultures of diverse immigrant and native communities. Classical Indian literature in an elite language on the one hand, and the medieval Indian literature in various local dialects on the other; classical Indian music and dances on the one hand, and the various medieval folk forms of music and dance on the other; the elite classical faiths growing from the classical philosophical thought on the one hand, and the various medieval folk faiths of various regions and tribes on the other-all these carry some excellent, but forgotten, models of interfaith discourse and intercultural communication.

With its unique blend of traditional values and virtues of modernity, Banasthali Vidyapith proposes to establish a Center for Interfaith Discourse and Intercultural Studies to reinvent and restructure those models of intercultural communication. The Center would be a broad platform for the leaders and pontiffs and experts of various religious, cultural, philosophical and other ideologies to come together and find out manners of positive communication. The Center would seek to facilitate unique syntheses of various religious and cultural forms. Also, the Center would facilitate scholars to pursue long and short term research in theological and Intercultural Studies. The findings and outcome of the research would be published and promoted worldwide.



## B. Some New Initiatives

Having brought the girl child to education over the first 25-30 years of its existence and having retained them for higher education over the next 25-30 years, Banasthali Vidyapith underwent major expansion over the last 15 years and has opened up several new emerging areas to offer professional training opportunities to women.

Banasthali has identified development of leadership as its major mission as it aims towards its centenary year 2035. Development of leadership is planned to be carried out through entrepreneurship development, capacity building programmes and through policy research particularly gender base.

### B1. Centre for Skill Enhancement and Entrepreneurship Development (C-SEED)

Banasthali has been identified by the Government of India for its Technology Incubation & Development of Entrepreneurs (TIDE Programme) with an initial mandate to incubate five companies. Major universities around the world such as MIT and Stanford have successfully



implemented this forward integration model. In the knowledge era Banasthali also intends to showcase these C-SEED entrepreneurs and developed leadership women through these new generation areas.

### B2. Banasthali Leadership Institute for Women

Even after 104 International Women's Days have gone by, it is evident that even though the world business scenario is being revolutionized by women, the gender composition of business leadership has hardly changed. Progression of women at workplace has not kept pace with the substantial rise in the number of working women. **Women after completing their studies aggressively take up entry level management roles but there appears to be a bottleneck at the middle management levels.** McKinsey report (2012) states that, in India at the entry level, women constitute for about 29% of workforce, but this falls rapidly to 9% at the middle and top management level which in comparison to other Asian countries is the lowest. The number dramatically falls to less than 1% at the CEO level implying that **entry is easy but advancement of women slows down after the middle level.** In most situations it has been felt that in spite of their technical and specialized education or accomplishments, women are either prevented or not encouraged to climb up the corporate ladder and reach the top and at the same time the new role and responsibilities in family and their own mindset the glass ceiling within; also serve as the barrier.

**In view of the current business landscape, Banasthali Vidyapith, the world's largest fully residential university for women's education, proposes to join hands with appropriate partners to develop Leadership Potential of India's Young Women which would help them in their career progression. The proposed Leadership Institute will work with the industry to enhance and increase women's involvement, contribution and participation in the overall economic development of the country.** The institute will provide a platform for sharing practice by interacting around problems, solutions and, insights, and building a common store of knowledge.

The Centre would operate through capacity building programme and mentorship programmes aiming at transition of women from junior to middle level and would also have advance leadership programme which would train them for corporate governance.

### **B3. Banasthali Centre for Policy Research**

To further enhance its rapidly expanding research profile the Vidyapith intends to establish Centre for Policy Research for strengthening and consolidating its research activities in the following three areas in which it has shown a great deal of potential: (i) Higher Education, (ii) Gender Studies and (iii) Economics.

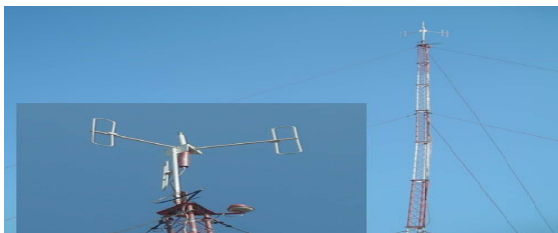
### **B4. Banasthali Centre for Gender Studies**

Banasthali established UGC supported Women's Studies and Research Centre (WSRC) way-back in 2005 but due to rigid UGC requirements the centre could function only in limited ways. Banasthali believes that the women's study is not merely a subject to be studied in the class room but to create a women friendly environment in the society where every woman irrespective of her place of birth and economic status, will get due opportunity to realize her identity. The proposed centre for gender studies shall launch academic activity and research in gender specific areas at international levels.

## **C. New Academic Programmes**

Having brought the girl child to education over the first 25-30 years of its existence and having retained them for higher education over the next 25-30 years, Banasthali Vidyapith underwent major expansion over the last 15 years and has opened up several new emerging areas to offer professional training opportunities to women. As a result the total enrollment of the Vidyapith increased 5 times to its current level of 12500. Computer Science, Electronics, Instrumentation, Biotechnology, Management, Pharmacy, Earth Sciences, Design and Law were introduced gradually. Continuing this trend the Vidyapith has identified Journalism, and Architecture as its immediate priority areas.

### **C1. School of Journalism & Mass Communication**



Journalism and Mass Communication is the profession of the day and the proposed school shall blend very well with our School of Performing Arts and School of Design.

Banasthali already has a established Community Radio Station, Radio Banasthali 94.4 FM through which it broadcasts useful programmes for the students and for the rural population within around 20 km radius. Banasthali believes that the ground is ready and time has come for high quality Journalism and Mass Communication programmes.



## **C2. School of Architecture**

Having a long tradition of excellence in Visual Arts and having one of the best Schools of Design, it is only natural that the Vidyapith thinks of establishing School of Architecture.

## **D. World Class Sports Infrastructure**

Vidyapith has never treated sports as extra-curricular or even co-curricular activity as it always regarded Physical Education as an integral part of its comprehensive educational ideology. As a result, Banasthali nurtured likes of Champion Marathon runner, Ms. Sunita Godara, and at the same time incorporates basic physical training into every student's life.

In line with the national thinking, Banasthali believes it is time for it to upgrade its sports infrastructure to world levels and has identified the following new projects:

**D1. Olympic Size Swimming Pool**

**D2. Astro turf based Hockey Field**

**D3. Shakuntalam Sports Complex**

**D4. Multipurpose Gymnasium**

**D5. Indoor Sports Training facility**

Having brought the girl child to education over the first 25 years of its existence, having retained them in higher education over the next 25 years and having trained them in new emerging areas over the last 25 years, the Vidyapith intends to focus on developing leadership, over the next 20-25 years as it approaches its centenary year in 2035, to prepare them to acquire positions which in theory belonged to them but in reality occupied mostly by men. The Vidyapith has already answered in the affirmative the eternal question, 'Are women fit for higher education?' Being not only a women's university but more importantly a university for women the Vidyapith would continue to look at higher education from women's perspective and would continue to question on the contrary, "Is higher education fit for women?". And if not so, would continue to enrich and strengthen its unique brand of education, so that is more and more the case.

The Vidyapith believes that all the above initiatives if launched with full vigor would define Banasthali for the next 20-25 years as it would approach its centenary year in 2035 and would nurture women leaders in all walks of life with such moral character as to remove whatever gender disparity that still remains in the society and nurture leaders who would also possess such competencies to firmly establish India as a superpower.