

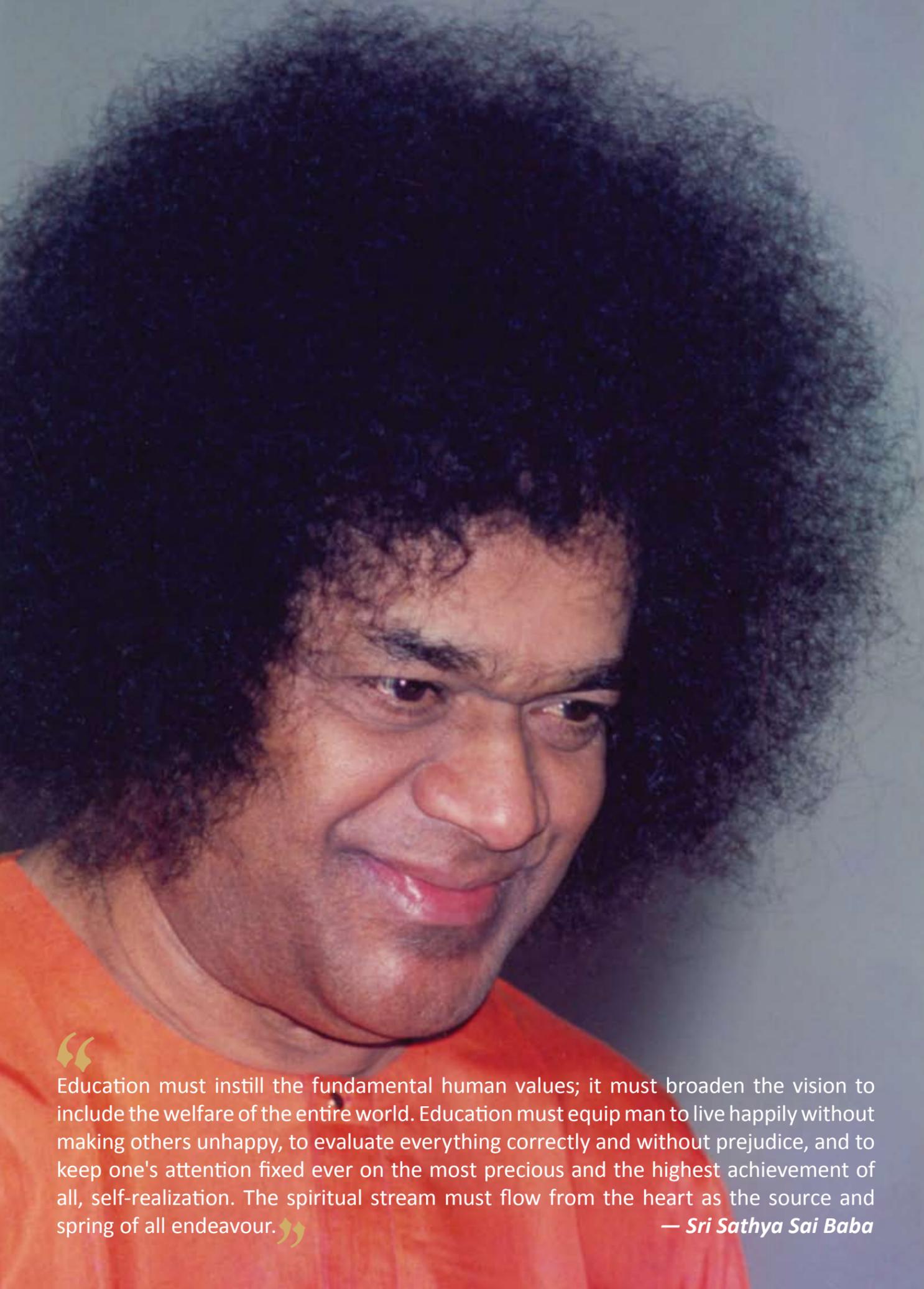


SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(DEEMED TO BE UNIVERSITY)



INFORMATION HANDBOOK



Education must instill the fundamental human values; it must broaden the vision to include the welfare of the entire world. Education must equip man to live happily without making others unhappy, to evaluate everything correctly and without prejudice, and to keep one's attention fixed ever on the most precious and the highest achievement of all, self-realization. The spiritual stream must flow from the heart as the source and spring of all endeavour.

— *Sri Sathya Sai Baba*



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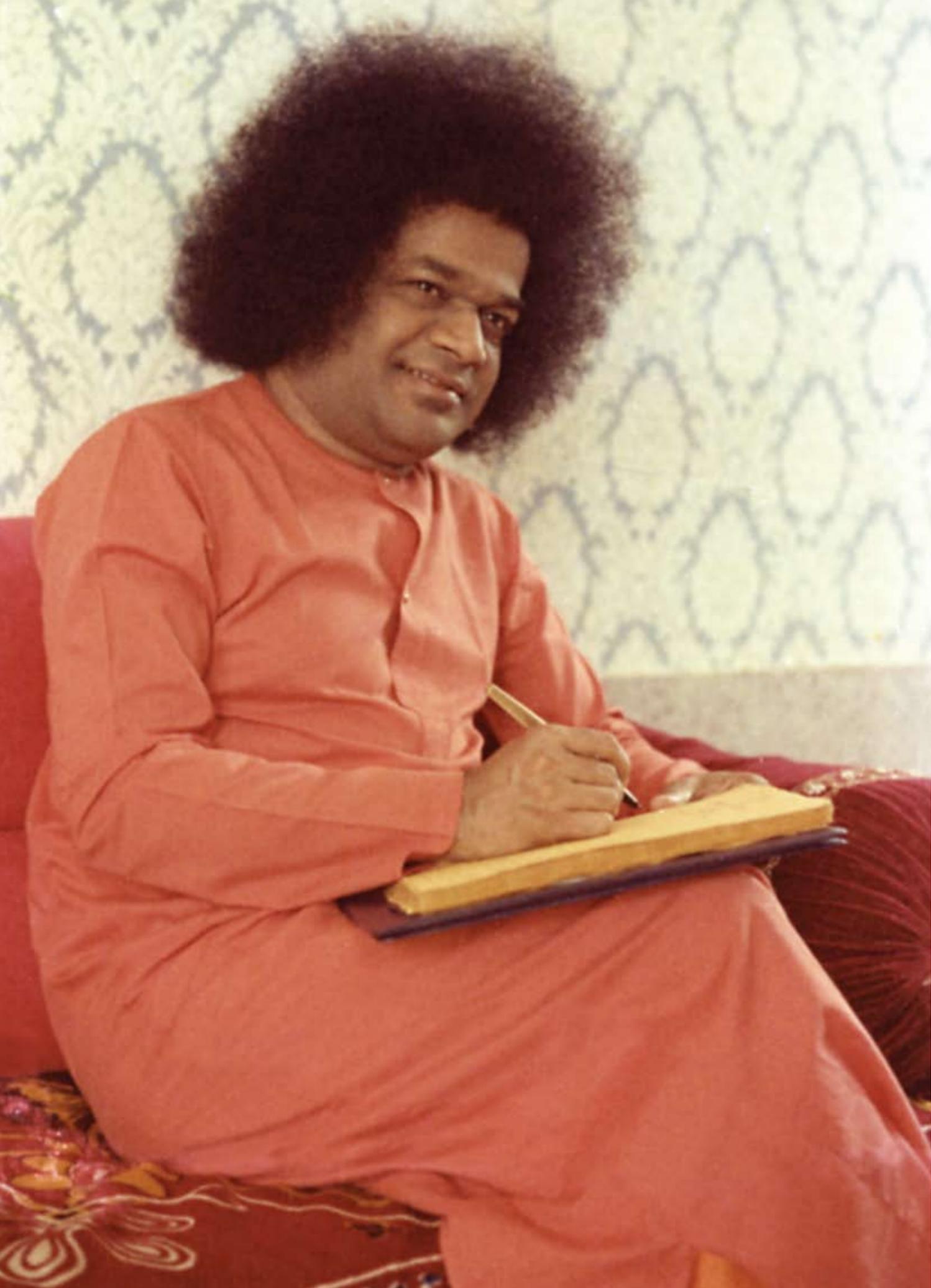
Revered Chancellor

Bhagawan Sri Sathya Sai Baba

Vidyagiri, Prasanthi Nilayam – 515 134
Anantapur District, Andhra Pradesh, India

Tele: +91 8555 287239 • Fax: 286919

Website: www.sssihl.edu.in
E-mail: registrar@ssshl.edu.in



Bhagawan Sri Sathya Sai Baba

Chancellor

Sri Sathya Sai Institute of Higher Learning
Prasanthi Nilayam - 515 134, Anantapur Dist., A.P.

Dear students!

Be like the star which never wavers from the crescent but is fixed in steady faith. When the sun is over your head; there will be no shadow; so too when faith is steady in your heart; it should not cast any shadow of doubt.

Do not talk ill of others; talk only of the good in them; all are good; if you see bad in them, it is because there is bad in you; if you do not like someone, do not mix with him. Grace is the sunlight which will ripen the fruit; sadhana is the sap which rises from earth. Both are needed by the tree in order that it may yield fruit.

*With Blessings
Sai.*



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

(Deemed to be University)

PROF. J. SHASHIDHARA PRASAD
Vice-Chancellor

Vidyagiri, Prasanthi Nilayam - 515 134
Anantapur District, Andhra Pradesh, India

From the Vice-Chancellor's Desk

Sri Sathya Sai Institute of Higher Learning was established by Bhagawan Sri Sathya Sai Baba in the year 1981, for the promotion of values-based integral education. Bhagawan Baba's philosophy of 'Educare', which forms the undercurrent of this system of education, focuses on 'education for life and not merely for living'. The objective enunciated by Bhagawan is to provide the youth with an education which while cultivating their intelligence also modifies their impulses and emotions, and equips them with the physical and mental discipline needed for drawing upon the springs of calmness and joy that lie in their own hearts. It also enables the students to acquire and put into practice the eternal values of truth, righteousness, peace, love and non-violence.

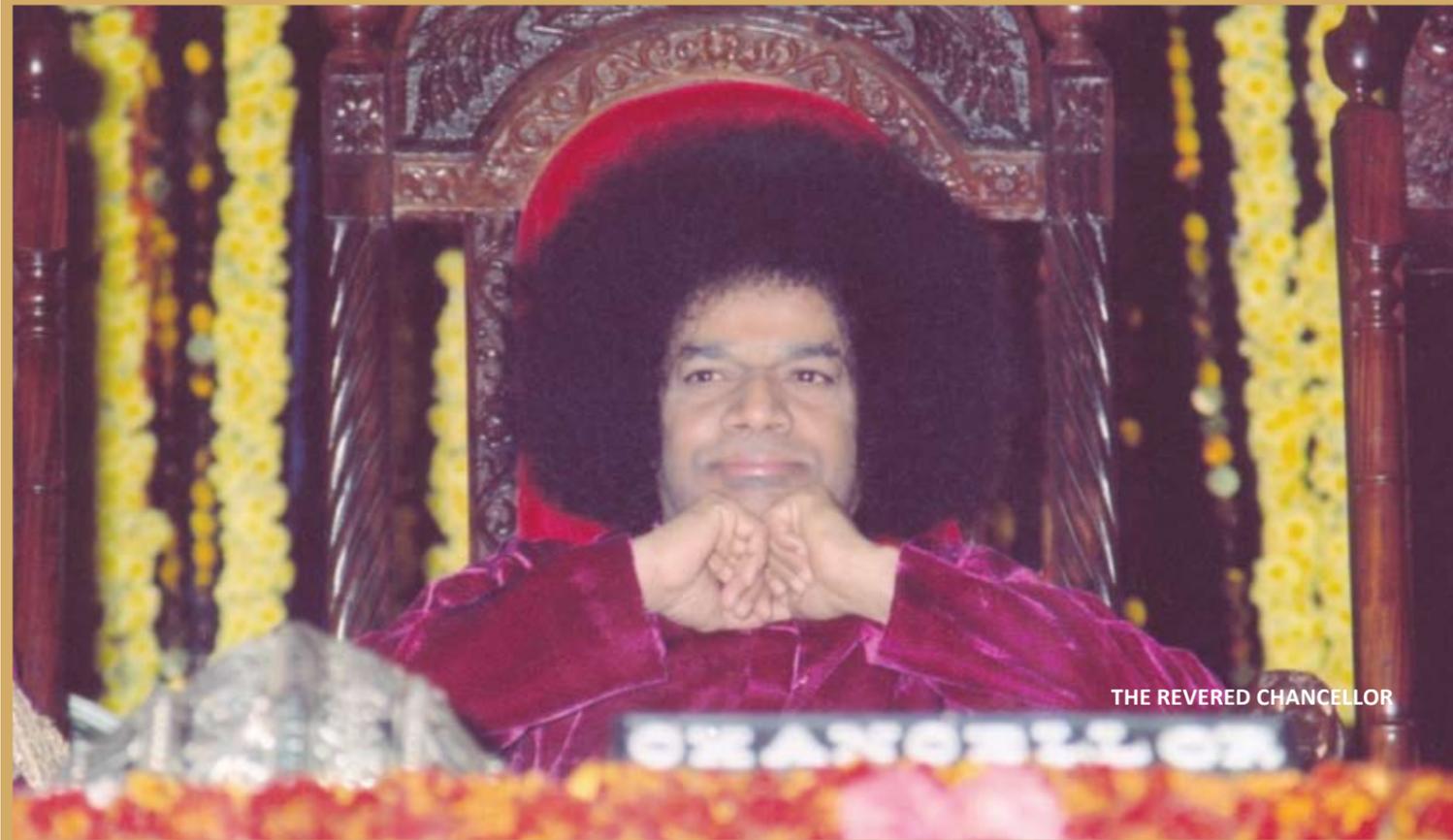
In today's times, where education has assumed the role of a commodity and as such has become a money-spinning business, this Institute provides high quality education in the ambience of a Gurukula system tuned to the present time, absolutely free of cost. As a part of the residential system, all the students stay in the hostels under the loving care of teachers who stay with them, dispelling the socio-economic disparities existing in the outside world, and promoting the spirit of 'brotherhood of man and fatherhood of God'. The self-reliance activities in the hostels help in inculcating in the students the dignity of labour and enable them to become self-confident and independent, thus contributing to the development of leadership and entrepreneurship. The prayer meetings in the College and the Mandir, and interactions with Bhagawan Baba, the Revered Chancellor of the Institute, help in the spiritual upliftment of the students. The Annual Sports Meet and the cultural Programmes presented before large gatherings, facilitate the development of values like team work, creativity and professionalism. The Annual Grama Seva programme enables the students to develop empathy and sensitivity. It makes them aware about the realities in rural India and kindles in them a life-long desire to work for the betterment of their less-fortunate brethren.

The Institute has been identified as one of its kind by several higher education commissions, eminent educationists, administrators and scientists, and has been considered as the 'crest jewel' of higher education system in India. The 'Sai experiment of education' has stood the test of time as evidenced by the impact made by the students who have passed out of the portals of this great Institution, in their work places, both within the country and across the world.

I am very happy to welcome you to this unique Institution which is without a parallel in the annals of higher education institutions. I wish you a fruitful stay here under the loving care of Bhagawan Sri Sathya Sai Baba.


J. Shashidhara Prasad

REVERED CHANCELLOR & CONVOCATION CEREMONY



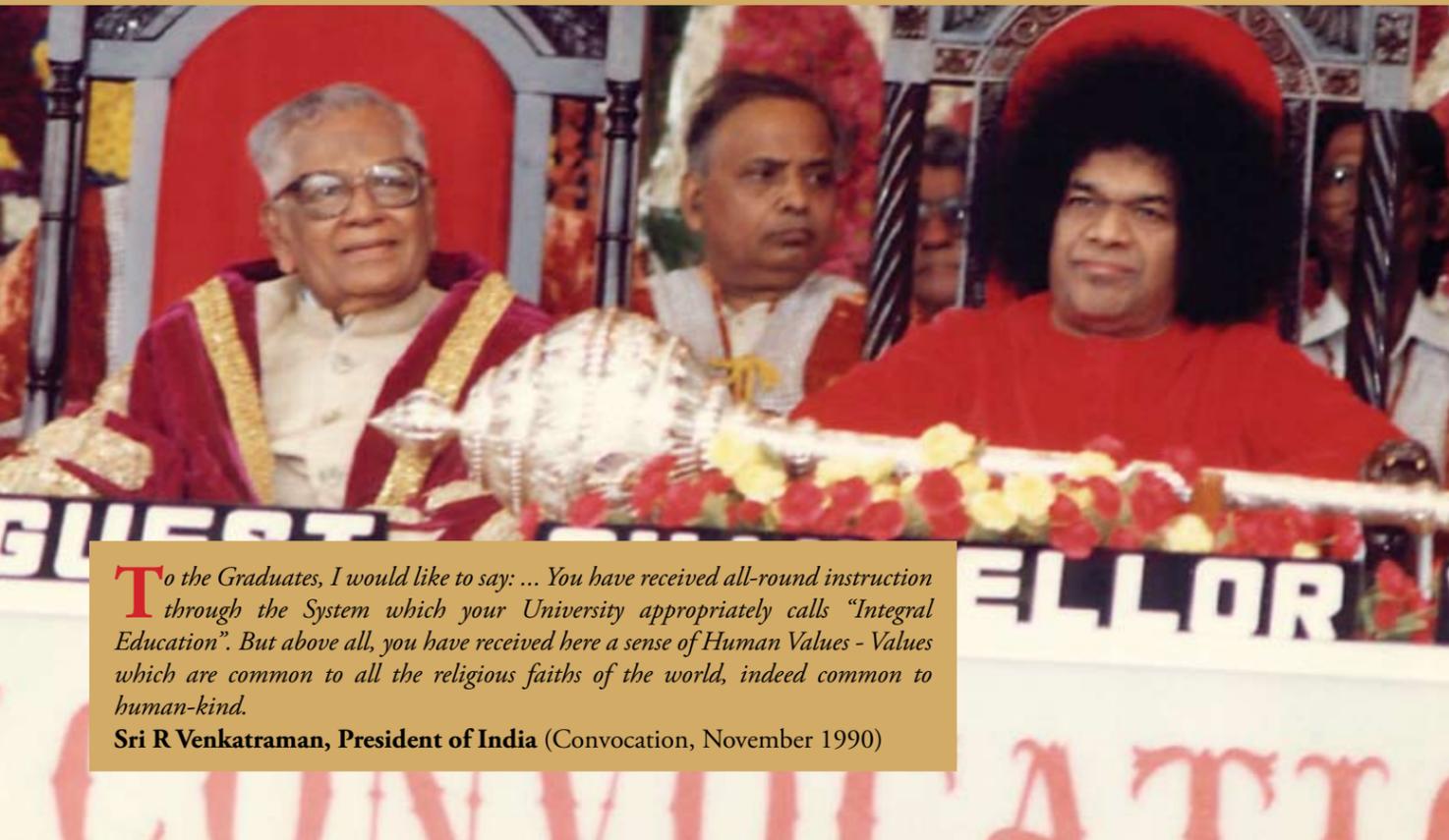
THE REVERED CHANCELLOR



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
CONVOCATION CEREMONY

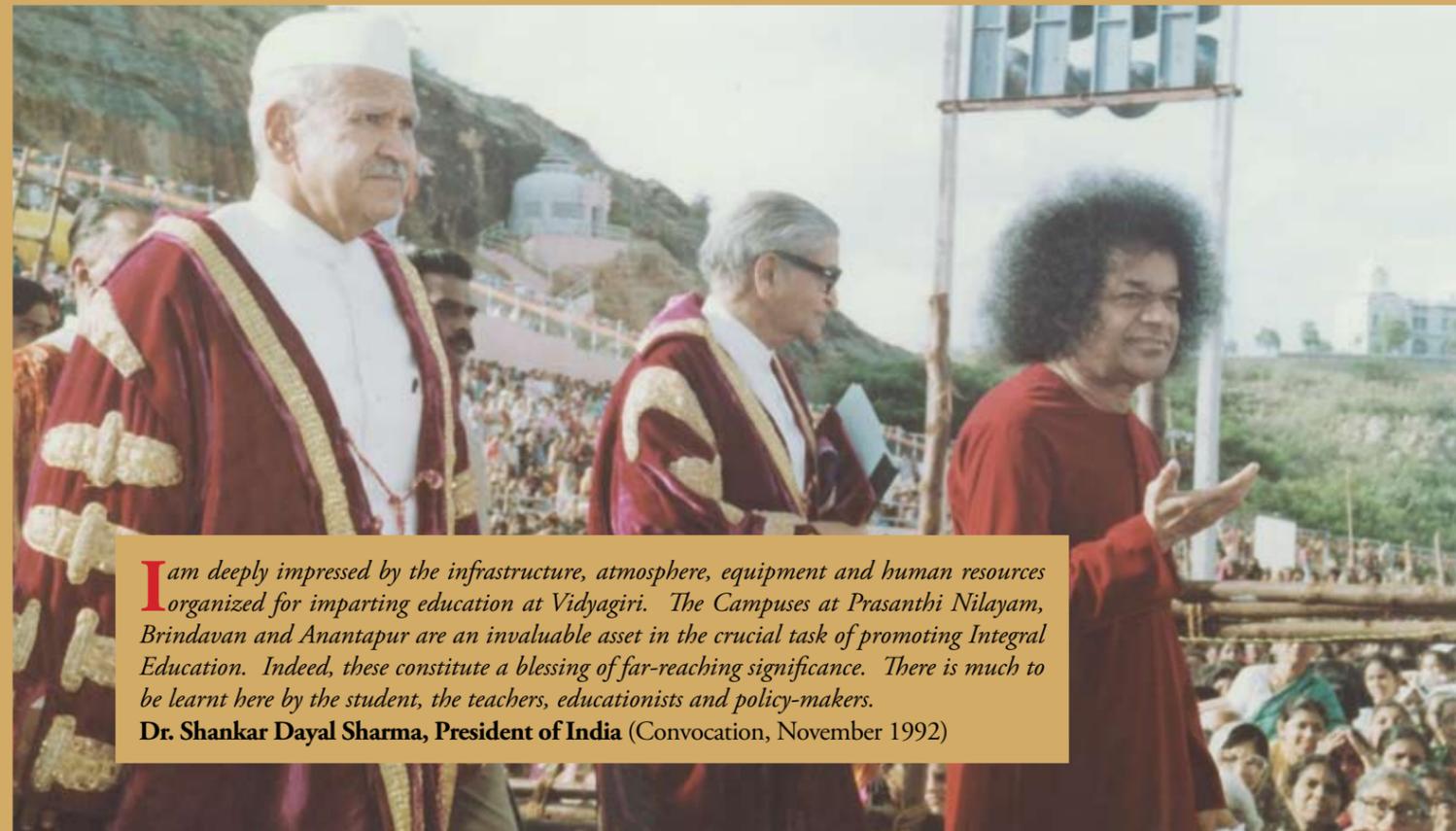
DIGNITARIES WITH THE

REVERED CHANCELLOR



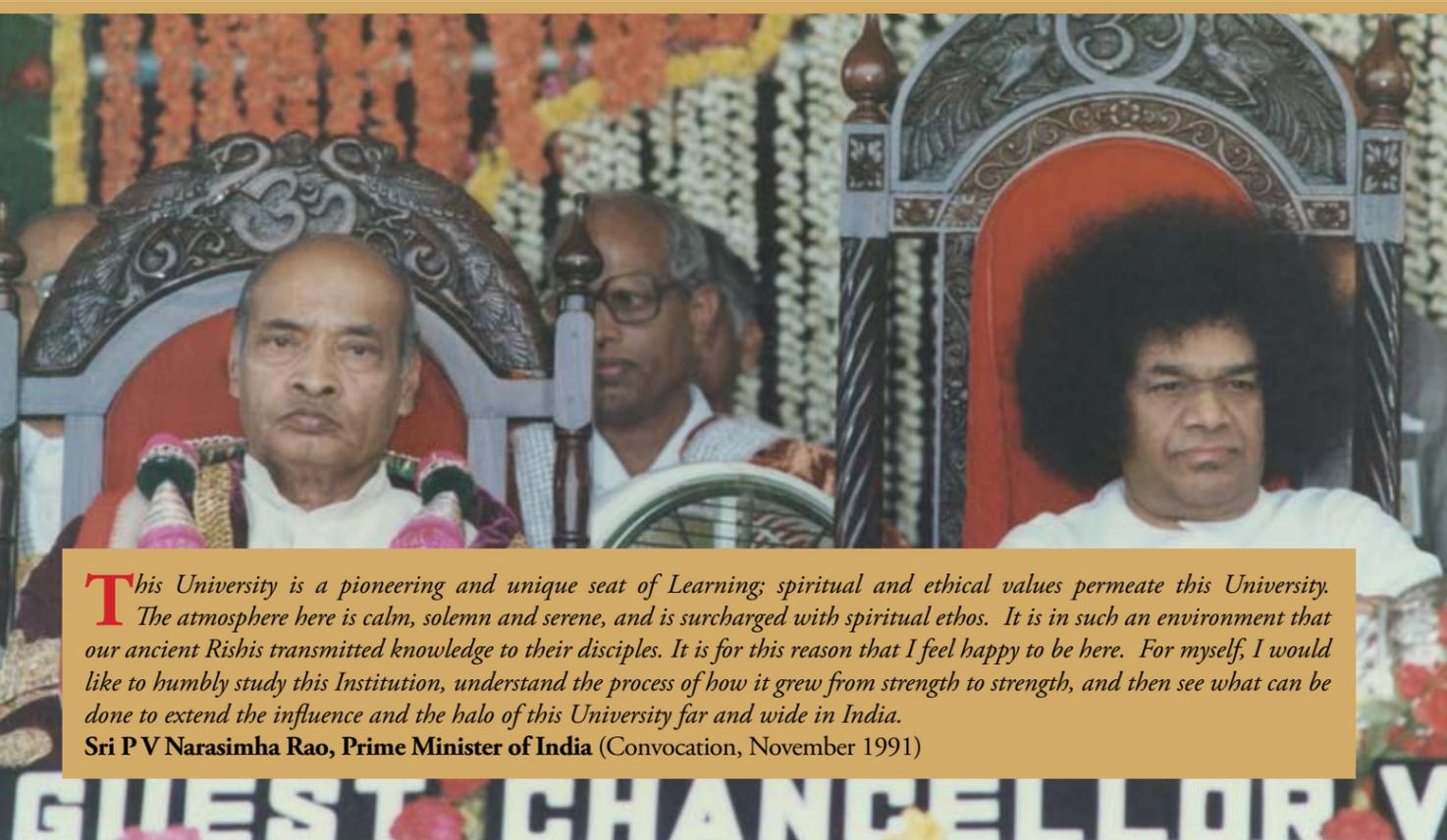
To the Graduates, I would like to say: ... You have received all-round instruction through the System which your University appropriately calls "Integral Education". But above all, you have received here a sense of Human Values - Values which are common to all the religious faiths of the world, indeed common to human-kind.

Sri R Venkatraman, President of India (Convocation, November 1990)



I am deeply impressed by the infrastructure, atmosphere, equipment and human resources organized for imparting education at Vidyagiri. The Campuses at Prasanthi Nilayam, Brindavan and Anantapur are an invaluable asset in the crucial task of promoting Integral Education. Indeed, these constitute a blessing of far-reaching significance. There is much to be learnt here by the student, the teachers, educationists and policy-makers.

Dr. Shankar Dayal Sharma, President of India (Convocation, November 1992)



This University is a pioneering and unique seat of Learning; spiritual and ethical values permeate this University. The atmosphere here is calm, solemn and serene, and is surcharged with spiritual ethos. It is in such an environment that our ancient Rishis transmitted knowledge to their disciples. It is for this reason that I feel happy to be here. For myself, I would like to humbly study this Institution, understand the process of how it grew from strength to strength, and then see what can be done to extend the influence and the halo of this University far and wide in India.

Sri P V Narasimha Rao, Prime Minister of India (Convocation, November 1991)

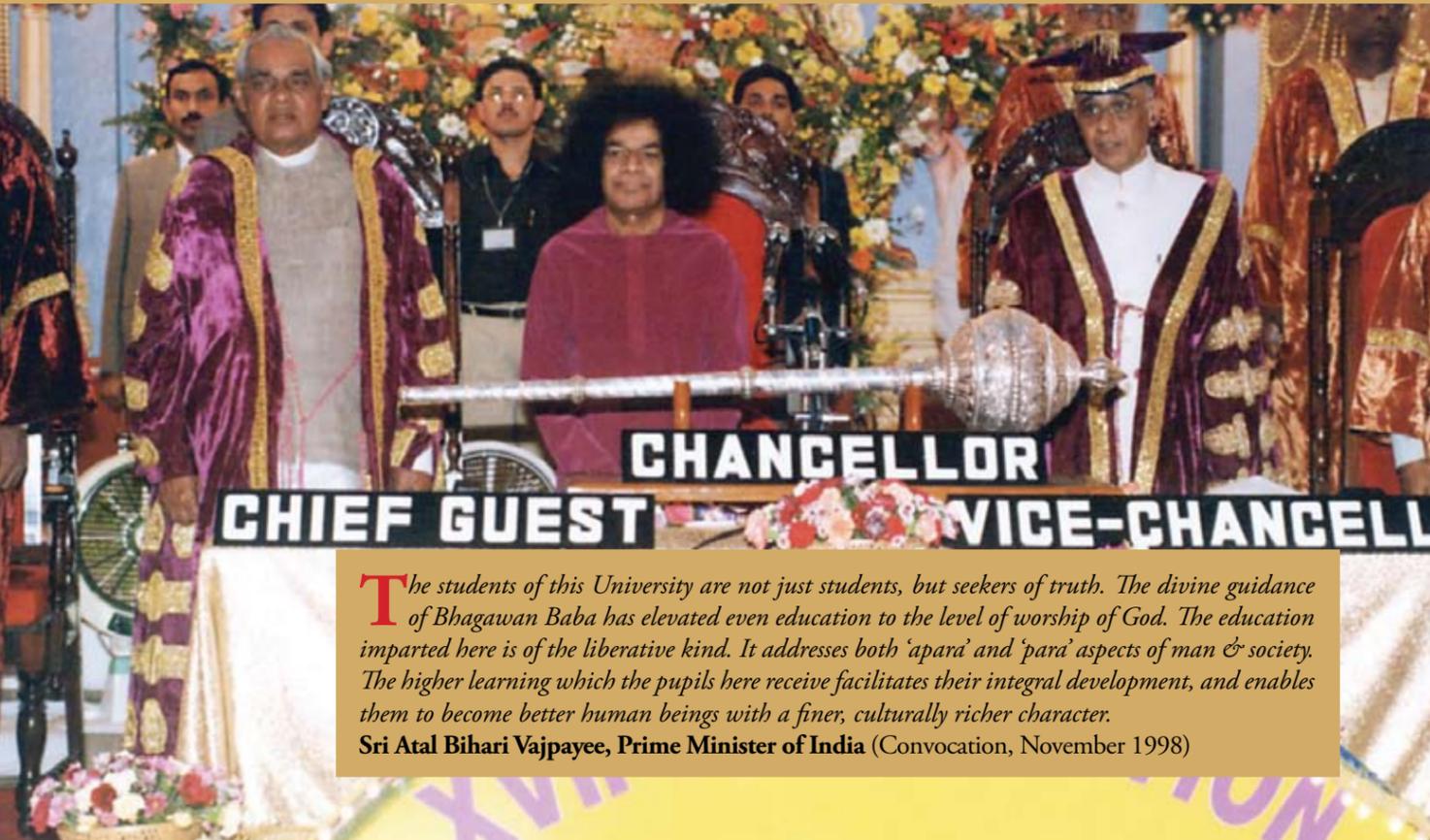


It is indeed rare to find Institutions of higher learning like the Sri Sathya Sai Institute of Higher Learning, where students receive free education, where voluntary service prevails, and where the acquisition of knowledge and wisdom is combined with duty and devotion. What is unique at this University is that it is founded by Bhagawan Baba; it is inspired by His teachings, and is guided by His concept of a wholesome education based on the fundamental values of Truth, Righteousness, Peace, Love and Non-violence.

Rt. Hon. Anerood Jugnauth, Prime Minister of Mauritius (Convocation, November 1993)

DIGNITARIES WITH THE

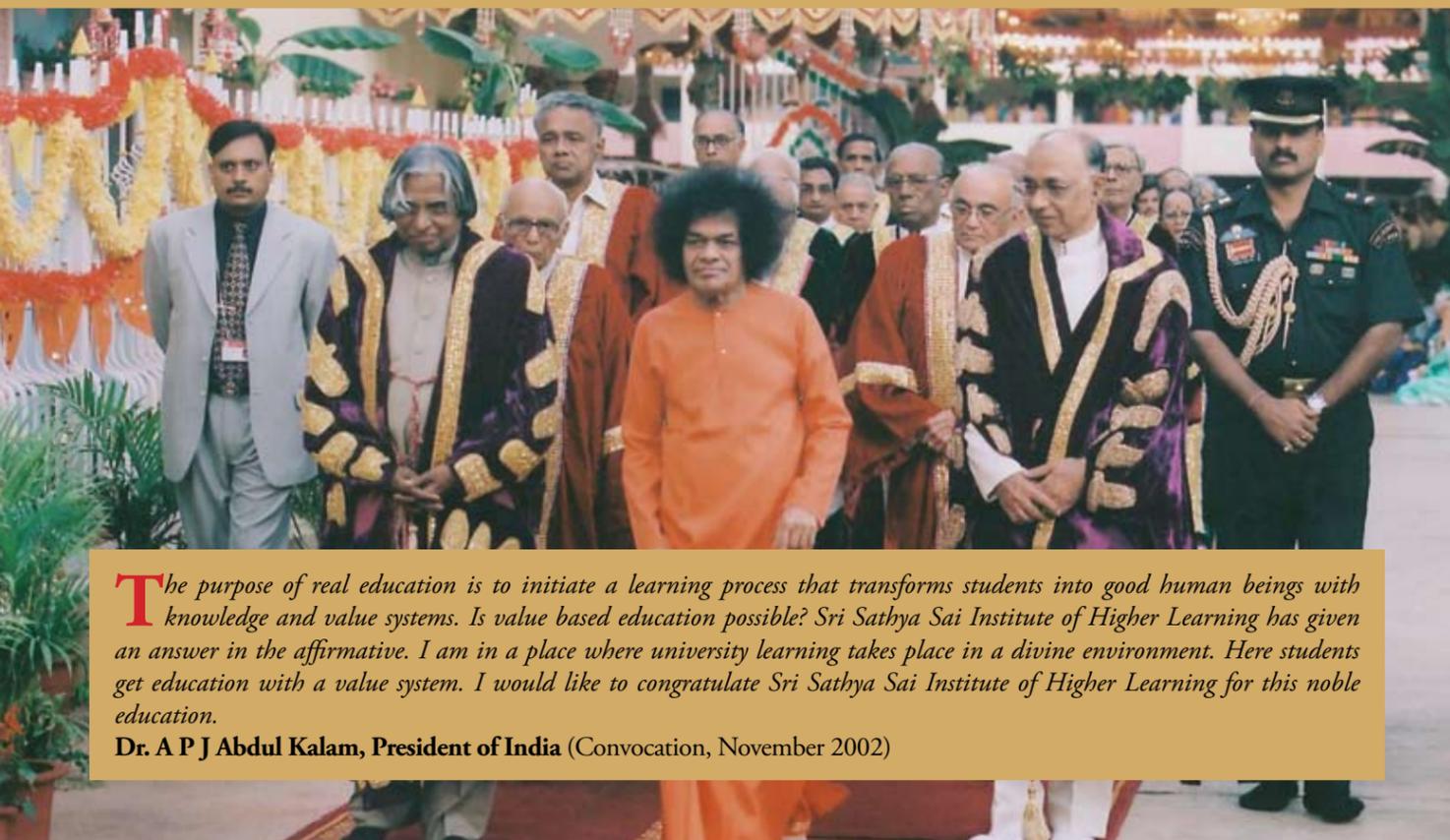
REVERED CHANCELLOR



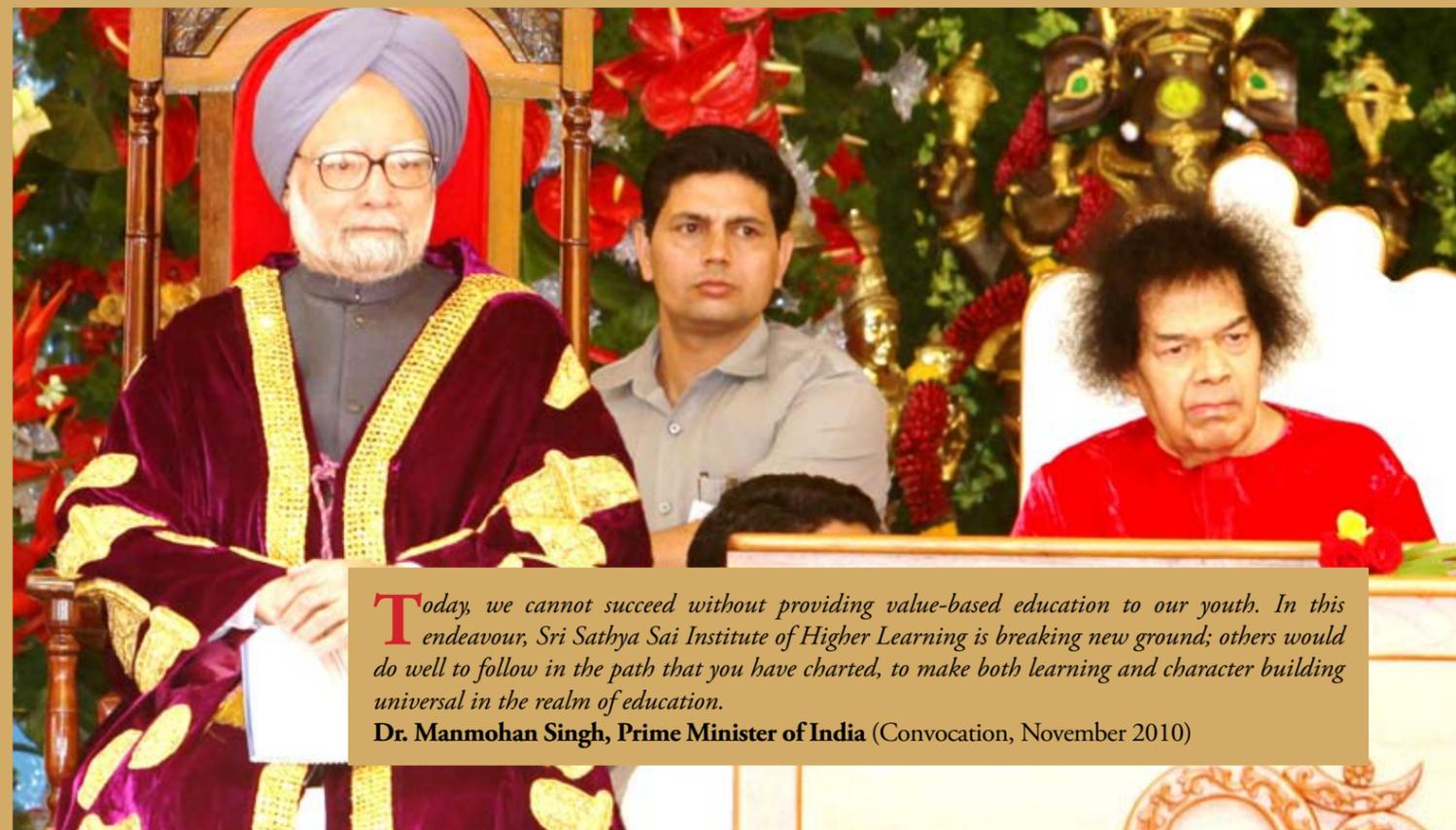
The students of this University are not just students, but seekers of truth. The divine guidance of Bhagawan Baba has elevated even education to the level of worship of God. The education imparted here is of the liberative kind. It addresses both 'apara' and 'para' aspects of man & society. The higher learning which the pupils here receive facilitates their integral development, and enables them to become better human beings with a finer, culturally richer character.
Sri Atal Bihari Vajpayee, Prime Minister of India (Convocation, November 1998)



Smt. Pratibha Patil, President of India, with the Revered Chancellor at Prashanti Nilayam (November, 2010)



The purpose of real education is to initiate a learning process that transforms students into good human beings with knowledge and value systems. Is value based education possible? Sri Sathya Sai Institute of Higher Learning has given an answer in the affirmative. I am in a place where university learning takes place in a divine environment. Here students get education with a value system. I would like to congratulate Sri Sathya Sai Institute of Higher Learning for this noble education.
Dr. A P J Abdul Kalam, President of India (Convocation, November 2002)



Today, we cannot succeed without providing value-based education to our youth. In this endeavour, Sri Sathya Sai Institute of Higher Learning is breaking new ground; others would do well to follow in the path that you have charted, to make both learning and character building universal in the realm of education.
Dr. Manmohan Singh, Prime Minister of India (Convocation, November 2010)

**AN INTRODUCTION TO
SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
(DEEMED TO BE UNIVERSITY)**

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) with its headquarters in Prasanthi Nilayam (Andhra Pradesh) in India is a visible manifestation of Bhagawan Sri Sathya Sai Baba's vision of education for human transformation. The Institute was recognised as a Deemed to be University by the Government of India in 1981. (vide their notification no. F9-11/81-U.3 dt.10.11.1981). The Institute has been admitted as a regular member of the Association of Indian Universities vide their letter no. Meet/Reg.Memb/86/97596 dt.20.4.1986.

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – A HISTORICAL OVERVIEW

In June 1966, Bhagawan Sri Sathya Sai Baba was at Anantapur, a town in Andhra Pradesh, 60 miles from Prasanthi Nilayam, at the invitation of a high school for girls. The plight of the girls who had to go to distant places for higher education, and also the kind of education for which they were spending much time and money, touched him. He announced that there would soon be a women's College in Anantapur, the headquarters of Anantapur District in Andhra Pradesh. On July 22, 1968, he laid the foundation for the College for women at Anantapur. At a time when gender issues had not even surfaced in the field of education in our country, he envisioned the importance of educating women who would serve as the foundation for the building of the nation. Bhagawan Baba's main aim of starting a women's college was to emphasise that if a woman is educated, the entire family benefits from her knowledge and wisdom as she plays an important role in moulding the future generations of the family into responsible citizens. While inaugurating the College building for women in 1971 in the presence of the His Excellency, the then President of India, Sri V. V. Giri and Smt. Saraswathi Giri, Bhagawan Baba declared that the College would soon be transformed into a University. On this occasion he outlined the overarching purpose of the future University. He said, *"The University will have to undertake the task of revitalizing the ancient culture of India and to train the rising generation on the path of love and service to humanity and self reliance."*

A year later, the Sri Sathya Sai Arts, Science and Commerce College for men was inaugurated on June 9, 1969, at Bangalore, Karnataka. And a decade later, on November 28, 1978 he laid the foundation stone for the Sri Sathya Sai College of Arts, Science and Commerce at Prasanthi Nilayam, Puttaparthi in Andhra Pradesh. The three campuses eventually merged under the umbrella of the Sri Sathya Sai Institute of Higher Learning (Deemed to be University) on 22nd November, 1981 with Bhagawan Sri Sathya Sai Baba as its Founder Chancellor. The Institute began its operation with two campuses at Prasanthi Nilayam and Anantapur. A year later in November 1982, the campus at Bangalore became part of the Institute. The foundation stone for the fourth campus of the Institute was laid on February 14, 2009, by the Revered Chancellor at Muddenehalli, Chickballapur District, Karnataka.

**SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
– PURPOSE, PHILOSOPHY, VISION AND MISSION**

On the occasion of the inauguration of the Institute, the Revered Chancellor highlighted its uniqueness in the existing University education system. Emphasizing the differentiating factors, he said, *"This Institute will not be imparting in Botany merely the knowledge of trees in nature; it will spread the knowledge of tree of true living. It will not be imparting the knowledge merely of Economics; the knowledge of theistic ethics too will be included. It will not be teaching mere Chemistry; it will also unravel the mystery of Raso Vai Saba - the Supreme Embodiment of nectarine sweetness - the Atma. It will teach not only the science of the material world (Padartha); it will also teach the science of the non-material world (Paraartha). It will not differentiate the material from the non-material or treat the non-material as irrelevant to the material. We have decided that this shall be the uniqueness of this Institute. This will not be like all other universities which adopt a few faculties and burden their alumni with degrees, which they can present as begging bowls while clamouring for jobs. This Institute will confer on its alumni the courage and confidence, the knowledge and skill to shape their careers by their own efforts, relying on their strength. So we have proposed that spiritual education be integrated harmoniously with ethical, physical, and metaphysical teachings in this Institute."*



This eventually went on to become the core philosophy and the *raison d'être* of the Institute. Elaborating the purpose and philosophy of the Institute, the Revered Chancellor says, *“This Institute has not been established just to prepare you for earning degrees. The main purpose is to help you cultivate Self-knowledge and Self-confidence, so that each one of you can learn self-sacrifice and earn Self-realization. Teaching you the curricula, preparing you for the examinations, and awarding you degrees - these are only means employed for the end, namely - spiritual uplift, Self-discovery and social service through love and detachment. Our objective is to provide the youth with an education, which while cultivating their intelligence will also purify their impulses and emotions, and equip them with the physical and mental disciplines needed for drawing upon the springs of calmness and joy that lie in their own hearts. Our hope is that by your lives, you will be shining examples of spiritual awareness and its beneficial consequences to the individual and society.”*

In light of the above purpose and philosophy of the Institute, its **Vision** can be stated as: **‘Endeavouring towards Human Excellence’**. As stated by the Revered Chancellor in one of his poetic works, *“Ibamunu Sukhimpā Hemataaraka Vidya; Paramuna Sukhimpā Brahma Vidya”*. (Secular knowledge for happiness in the physical world and spiritual knowledge for happiness in the world hereafter).

Human excellence aims at achieving excellence at all levels of the human existence – physical, mental, intellectual, psychological and spiritual. This calls for an integrated approach which blends secular education for the body and the mind with spiritual education for the soul. This forms the basis of the **Sathya Sai System of Integral Education**. The **Mission of the Sri Sathya Sai Institute of Higher Learning (SSSIHL)** is to provide such an integrated personality development to mould a well-rounded holistic individual: professionally sound, socially responsible and spiritually aware, embodying noble values and right attitude. As stated by the Revered Chancellor of the Institute, *“Education has two important characteristics. One is exposition of facts relating to any subject. The other is the unfolding of the individual’s personality. The first is concerned with matter. The second is with Divine energy. Education is a combination of the two. It is a combination of worldly and spiritual knowledge. Education cannot be confined to stuffing the head. It has to melt the heart, refine it and turn it towards God. Man has to be transformed into an ideal human being with a compassionate heart. Every effort should be made to utilize education for the purpose of Divinizing man.”*

The Revered Chancellor desires that students graduating from this Institute should possess:

- the 'Head of Shankara' that symbolizes Jnana or wisdom;
- the 'Hands of Janaka' that symbolizes a Karma Yogi or in simple terms: wisdom translated into self-less actions beneficial to the society; and
- the 'Heart of Buddha' that symbolizes Prema/Compassion for all beings.

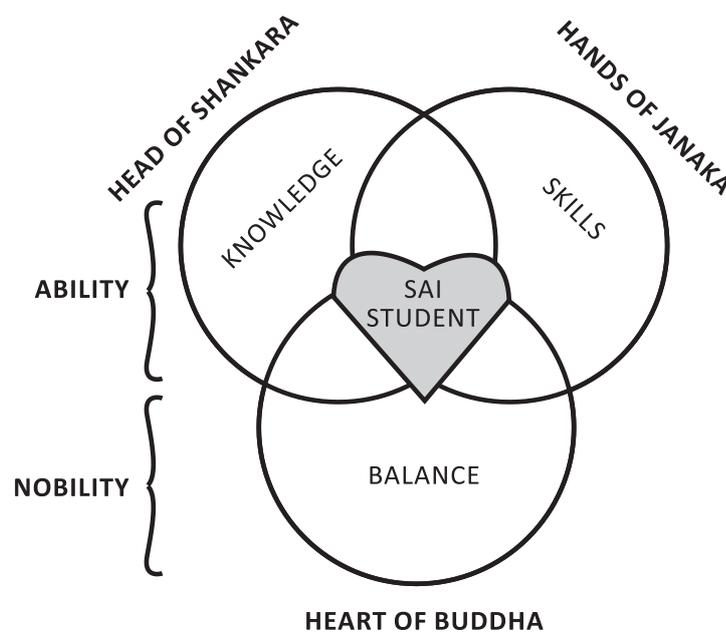


Figure 2 : IDEAL SAI STUDENT

In the words of the former Director General of CSIR-India, R.A. Mashelkar, the Institute strives to produce students with “innovation in the head, compassion in the heart and passion in the belly”.

Conventional education typically focuses on mere accumulation of knowledge and skills. However the Chancellor of this Institute states that in order to skill the knowledge and apply the same for benefit to the society, it is essential to have an appropriate balance. This balance is provided by the component of the ‘heart’ which is usually not catered to in the conventional system. It is for this reason that education at this Institute nourishes the mind, the body and the soul, thus catering to the development of personality in the physical, mental, psychological, intellectual and spiritual domains. The diagram of an ‘Ideal Sai Student’ depicts the interface between the three components of knowledge, skill and balance. Whereas conventional educational institutions, focus on providing knowledge (head factor) and skill sets (hands factor), the SSSIHL attempts to integrate these two with a sense of balance (heart factor). As stated by the Revered Chancellor, “*Knowledge when skilled leads to balance which in turn provides insights about the application of knowledge for the benefit of the society.*” Thus the Institute aims at producing good human beings with an ideal blend of ability and nobility.

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – DISTINCTIVE FEATURES

SSSIHL is redefining University education in India and elsewhere in many ways. The Institute is widely recognised today by eminent educationists and educational authorities as an institution providing integral education, character building of the youth, and academic excellence combined with sports, fine arts and social service. Some of the distinctive features of this Institute are:

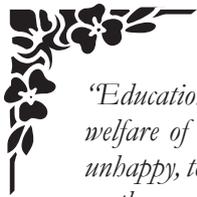
- Spiritual ambience that pervades the disciplined environment with residential nature of learning
- Lessons learnt through direct interaction with the Revered Chancellor – Bhagawan Sri Sathya Sai Baba
- Integral education with equal emphasis on curricular and co-curricular activities
- Synthesis of science and spirituality for societal benefit
- Integrating values with secular knowledge through curriculum and classroom teaching
- Institute curriculum steeped in the rich Indian culture and Universal brother hood
- Awareness Programmes and Moral Classes reinforcing Education in Human Values
- Inculcating the spirit of self-reliance and service to society
- Compulsory residential character of the Institute enabling translation of the lessons learnt into practical skills through experiential learning
- Free education for all students, selected on the basis of merit
- Open admission policy for all irrespective of income, religion or region
- Integrated five year programmes combining under graduate and post graduate studies for a systematic coverage and graduated learning process
- Professional faculties like Management, Technology and Education



- Development of scientific research at the doctoral level relevant to the local and national needs
- Exceptional infrastructure including a Space Theatre, International Centre for Sports (Indoor Stadium) and Cricket Ground, state of the art Multimedia Learning Centre and Information Technology and Artificial Intelligence Labs
- Favourable teacher pupil ratio for closer rapport
- Fuller utilisation of national holidays and important festivals for educational purposes and extension work

Accreditation by National Assessment and Accreditation Council (NAAC)

The Sri Sathya Sai Institute of Higher Learning (Deemed to be University) was granted reaccreditation with 'A' Grade and a Cumulative Grade Point Average (CGPA) of 3.66 on a scale of 4.00 by the NAAC in January 2011. Thus the Institute continues to be in the top bracket of Indian Universities.



“Education must instill the fundamental human values; it must broaden the vision to include the welfare of the entire world. Education must equip man to live happily without making others unhappy, to evaluate everything correctly and without prejudice, and to keep one’s attention fixed ever on the most precious and the highest achievement of all, self-realization. The spiritual stream must flow from the heart as the source and spring of all endeavours.”

- SRI SATHYA SAI



THE INSTITUTE, ITS OFFICE BEARERS AND ITS CAMPUSES

The Central Administrative Office of the Institute is located in Prasanthi Nilayam, Andhra Pradesh, while academic instruction is imparted in three different Campuses. To each Campus is attached a residential Hostel.

The following are the office Bearers of the Institute:

Vice Chancellor:	Prof. J. Shashidhara Prasad Phone: (08555) 289982 Email: vc@sssihl.edu.in
Registrar:	Dr. Naren Ramji Phone: (08555) 287239 Email: registrar@sssihl.edu.in
Controller of Examinations:	Sri G. Srinivas Srirangarajan Phone: (08555) 287191 Email: controller@sssihl.edu.in

The three Campuses are:

Anantapur Campus (For Women):

Principal: Dr.(Mrs.) Dwaraka Rani Rao
Anantapur Campus
Sri Sathya Sai Institute of Higher Learning
Anantapur - 515 001, Andhra Pradesh
Phone: (08554) 272567 Hostel: 273122
Email: principal.atp@sssihl.edu.in

Brindavan Campus (For Men):

Principal: Sri Sanjay Sahni
Brindavan Campus
Sri Sathya Sai Institute of Higher Learning
Kadugodi P.O.
Bangalore - 560 067, Karnataka
Phone: (080) 28452329 Hostel: 28452233
Email: principal.brn@sssihl.edu.in

Prasanthi Nilayam Campus (For Men):

Principial: Prof. U.S.Rao
Prasanthi Nilayam Campus
Sri Sathya Sai Institute of Higher Learning
Prasanthi Nilayam- 515 134
Anantapur District, Andhra Pradesh
Phone: (08555) 287235 Hostel: 287234, 287474
Email: principal.psn@sssihl.edu.in

As stated earlier, the Sathya Sai System of Integral Education aims at moulding a student's personality at all the three levels – intellectual, social and spiritual. An attempt has been made here to highlight and state in brief the three dimensions of the Institute and its system to achieve the objective of integrated personality development of the students.



This dimension of integral education caters to the intellectual component of a student. It includes the traditional secular inputs provided in a traditional University in India or abroad. However, the differentiating factor at the SSSIHL is the seamless integration of the secular inputs with the undercurrent of spiritual values leading to a holistic and wider perspective to education in specific and life in general.

The following programmes are offered in the three Campuses:

Anantapur Campus: (For Women)

Under Graduate Programme: (Duration: 3 years)

- 1) B.A. (with one of the following subjects being the major subject during the third year: History & Indian Culture, Economics, Philosophy, Political Science, Optional English or Optional Telugu)
- 2) B.Com.(Hons.)
- 3) B.Sc.(Hons.) Mathematics
- 4) B.Sc.(Hons.) Physics
- 5) B.Sc.(Hons.) Chemistry
- 6) B.Sc.(Hons.) Biosciences
- 7) B.Sc. Home Science

Post Graduate Programme: (Duration: 2 years)

- 1) M.A. (English Language & Literature)
- 2) M.A. (Telugu Language & Literature)
- 3) M.Sc. (Biosciences) with specialization in:(a) Biotechnology and (b) Mycology & Plant Pathology
- 4) M.Sc. (Food Science and Nutrition)
- 5) M.Sc. (Food Technology)

Professional Programme: (Duration: 1 year)

B.Ed.

Research Programme:

M.Phil. (Duration: 1½ year)
Ph.D.

Brindavan Campus: (For Men)

Under Graduate Programme: (Duration: 3 years)

- 1) B.Com. (Hons.)
- 2) B.Sc.(Hons.) Mathematics
- 3) B.Sc.(Hons.) Physics
- 4) B.Sc.(Hons.) Chemistry
- 5) B.Sc.(Hons.) Biosciences



Prasanthi Nilayam Campus: (For Men)

Under Graduate Programme: (Duration: 3 years)

- 1) B.A. (with one of the following subjects being the major subject during the third year: Economics, History, Political Science, Optional English) *Note: Those students who show exceptional academic performance in the first two years are offered B.A.(Hons) in Economics in the third year.*
- 2) B.A. (Hons.) Economics
- 3) B.Sc. (Hons.) Economics

Post Graduate Programme: (Duration: 2 years)

- 1) M.A. Economics
- 2) M.Sc. Mathematics with specialization in: (a) Pure Mathematics (b) Applied Mathematics (c) Computer Science
- 3) M.Sc. Physics with specialization in: (a) Photonics (b) Nuclear Physics (c) Electronics
- 4) M.Sc. Nanoscience and Nanotechnology
- 5) M.Sc. Chemistry
- 6) M.Sc. Biosciences with specialization in: (a) Biotechnology (b) Mycology & Plant Pathology

Professional Programme:

- 1) M.B.A. (Duration: 2 years)
- 2) M.B.A. (Finance) (Duration: 2 years)
- 3) M.Tech. (Computer Science) (Duration: 2 years)
- 4) M.Tech. (Applied Optics: Fiber Optics and Digital Image Processing) (Duration: 2 years)

Research Programme:

- M.Phil. (Duration: 1½ year)
Ph.D.

Note: The M.Sc. courses have been designed as part of the comprehensive five-year courses, leading from the Under Graduate level to the Master's degree. Candidates admitted to the Under Graduate courses are eligible for admission to the Post Graduate courses, provided they secure a minimum CGPA as prescribed by the Institute in the Bachelor's degree.

UNDER GRADUATE PROGRAMMES:

Languages

All students, irrespective of the Course they are admitted to, would have to take courses in:

- a) General English, and
- b) Hindi or Telugu or Sanskrit

In exceptional cases, where the student does not have an adequate background in Hindi or Telugu or Sanskrit, he/she will be permitted to take a course in Additional English.

B.Sc. (Hons.)

Students admitted to the B.Sc.(Hons) Course will, during the first two years, be given a pertinent, broad based training; the third year is set apart for specialization in a particular subject.



On admission, the student would have to choose one of the following subject combinations for study during the first two years.

- a) Mathematics, Physics, Chemistry (offered in Brindavan and Anantapur Campuses)
 - b) Chemistry and Biosciences (offered in Brindavan and Anantapur Campuses)
 - c) Mathematics, Economics, Statistics (offered only in Prasanthi Nilayam Campus)
- Students choosing the Chemistry and Biosciences combination can specialize either in Chemistry or in Biosciences during the third year.
 - Men students choosing the Mathematics, Economics, Statistics combination would have option of specializing in Mathematics or Economics during the third year.
 - In the case of students opting for the Mathematics, Physics, Chemistry combination, three options are available. During the third year the student can specialize in Mathematics or Physics or Chemistry.

In all cases where options are available, the student would be asked to indicate his/her preference. While every effort would be made to accommodate the student's choice, the Institute reserves the right to make the final allocation in accordance with its own internal criteria.

B.Com (Hons.)

The B.Com. (Hons) is a self-contained three-year course, whose academic content is at the Honours level and the syllabus outline is given in the annexure.

Bachelor of Home Science

The Bachelor of Home Science is a three-year composite course and the syllabus outline is given in the annexure.

B.A.

Students studying for the B.A. degree would have to major in one subject, which implies studying that particular subject in greater depth in the third year. The subjects' options are described in Section 3. Based on their aptitude as well as class-room performance, students would be guided by Teachers in the choice of the Major Subject.

POST GRADUATE PROGRAMMES:

M.A., M.Sc., M.Sc.(Nanoscience and Nanotechnology), M.Sc. (Food Science and Nutrition) and M.Sc. (Food Technology)

These Programmes are similar to those offered elsewhere and the syllabus outline for each course is given in the annexure.

PROFESSIONAL PROGRAMMES:

M.B.A. and M.B.A. (Finance)

These are two allied and closely related Programmes, designed to train the students in Business as well as Financial Management. What is unique about these courses offered in the Institute are:

- a) A values-based approach to business and management
- b) Focus on the practical aspects and
- c) Attention to problems of the nation and rural sector

The Institute does not run a placement programme at the end of the MBA / MBA (Finance) programmes as a matter of policy.



M. Tech. (Computer Science)

This course aims at equipping the students with skills both in the theoretical aspects of Computer Science as well as in various types of practical applications.

M. Tech. (Applied Optics)

The course equips the students with the advanced aspects of optoelectronics theory as well as hands on experience with application oriented experiments using the state-of-the-art equipment. Topics like Photonics switching and Networking, Broadband Communication and Information Systems. Network security and Management, Digital Image Processing, Digital Signal Processing, Wireless Communications, Telecommunication Technologies, Telecom Networking are some of the elective courses that are offered in addition to the core optoelectronics courses. Software laboratories are an added emphasis on developing software skills.

B.Ed.

This is a two-semester professional programme, intended to impart teacher training, with due emphasis on human values.

M.Phil. and Doctoral Research Programmes

Students of high academic calibre may be enrolled for M.Phil. and Doctoral Research Programmes in the Postgraduate departments of the Institute, subject to their meeting various criteria.

Subjects offered in all the Programmes is available in the Annexure

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – INFRASTRUCTURE FACILITIES

The Institute has spacious, beautiful and artistically designed buildings which stand out for their simplicity and elegance. The class rooms are designed to handle optimal sizes of 30 students for a course to facilitate effective teacher-student interaction. Supplementing these are the seminar halls and conference rooms with multi-media facilities. A central library caters to the intellectual development of students and staff through latest books and journals in diverse academic fields. The Institute also houses latest laboratories in the fields of Physics, Chemistry, Biosciences, Nano Sciences, Artificial Intelligence and Information Technology; and a Green House for off-season growing of floriculture, medicinal plants and planting material acclimatisation. It is one of the very few Universities in the country to implement the ERP software and also the English language Lab. Inspired by the spirit of self reliance, the faculty members, research scholars, students and support staff voluntarily look after the upkeep and maintenance of the laboratories, machinery, plant and equipment; to avoid any break down and minimise the maintenance costs. The striking characteristic is the feeling of ownership they have towards the Institute and its assets.

The Institute, though having a rural setup, houses many state-of-the-art infrastructural facilities that contribute to the co-curricular domain of the students' personality development process. Major among these are: the Sri Sathya Sai Space Theatre; a Multimedia e-learning centre with video-conferencing facilities for enhanced learning through inter-campus interaction; an International Centre for Sports housing amenities in Badminton, Table-tennis, Volley-ball, Basket-ball, Tennis, Squash and a world-class Gymnasium; an International Cricket Stadium and Footballground.

Research Initiatives and Facilities

Research at SSSIHL is always aligned with the apex objective of it being beneficial to the society at large. Given below is a glimpse of the research initiatives and infrastructure available in each of the departments in the Institute.



Department of Mathematics and Computer Science (DMACS) – DMACS is equipped with the Artificial Intelligence Center and currently houses 60 workstations, servers and graphics workstations from IBM, Dell and Sun. The availability of such high-end computing power has encouraged the faculty to diversify into various fields like Image Processing, High Performance Computing, Networking and Database applications. This has resulted in an Image Mosaicing Project funded by DRDO. Many of the software products developed by students as part of either M.Sc. dissertations or M.Tech projects have been included in the National Database on IT related projects compiled by the UGC, UNDP, APCTT, SCITECHPARK Initiative. Presently the DMACS hosts 5 labs for leading technological research projects viz., AI lab, Computer Vision & Machine Intelligence lab, High Performance Computing lab, Model-based Development Lab, PG computing lab.

DMACS fully utilizes its potential and ventures into interdisciplinary research. It has groups which actively pursue research in Image Processing, Image Enhancement, Cryptography, Pattern Recognition, Parallel, Distributed and Multi-core Computing, Artificial Neural Networks, Speech Enhancement, Genetic Programming, Fuzzy Logic theory with applications. DMACS has taken first steps into Robotics with a group working on Path Planning and Obstacle Avoidance.

Department of Physics – Active Research is being carried out in the areas of experimental and theoretical low energy nuclear spectroscopy; Applications of Nuclear Techniques in Hydrology, Environmental studies and Trace element studies; Biophotonics and Optical Image processing; Nonlinear Optics; Optical fiber sensors; Optical networks; Synthesis and characterisation of nanostructured materials; Spectroscopic investigations of Nanostructured materials; Water purification and desalination; and Solar Energy. The major equipments are High Power pulsed Nd:YAG laser system, Tunable Ti:Sapphire Laser and Dye laser systems, X-Ray Diffractometer, Scanning Tunneling Microscope, Raman Spectrometer system, HPGe and Si(Li) detector system for Nuclear Spectroscopy, and UV-Vis spectrophotometer.

Department of Chemistry – The major fields of research are Organic and Supramolecular Chem. The areas receiving attention are: Isolation and characterization of active compounds present in medicinal plants; Kinetic-catalytic methods for determination of trace label metals in chemical biolysis and exhausted samples; study of the type and mode of interaction of phytochemicals and natural product analogues with DNA, RNA and proteins; Design of naturally occurring polyphenolic based anion sensors; studies on edible and medicinal mushrooms evaluation of their anti-oxidant and neutralcentical potential; Biotransformations; Deflouridation of drinking water; clinical Bio-chemistry and Nano-particle based biosensors.

Department of Biosciences – Active Research is being carried out in the areas of: Stress proteins as biological indicators; Micro-propagation of medicinally important plants with emphasis on biochemical analysis, antimicrobial and antioxidant properties, Blue proteins: Spectroscopic and functional characterization of Haemocyanin; Novel antioxidant screening technique based on immobilized *sodA::gfp* gene construct; Microbial Fuel Cells – Indicators of Performance; Immunogenetics of endemic population in relation to the frequency of distribution of immune related genes viz., KIR and HLA1 genes among the individuals suffering from pre-eclampsia, type 2 diabetic and rheumatoid arthritis, Evaluation of anti-cancerous properties of nano silver capped *Vinca rosea* alkaloids using cell lines, Evaluation of cytotoxicity of synthetic drugs using primary cell cultures of PBMCs and hepatocytes and HepG2 cell lines and Fungal biology in relation hyphomycetes. The major equipments in the department are: PCR Thermal cyler, FPLC, FTIR, Spectrophotometer, Ultracentrifuge, 5.ELISA Reader, PHAST system, Animal cell culture facility, Bioinformatics infrastructural facility, Plant tissue culture facility, Proteomics facility.

Department of Home Science – The research efforts of the department are focused on the following major areas: Experimental Nutrition, Clinical Nutrition, Food Product Development and Community Nutrition. The work on

Experimental Nutrition involves screening of phyto nutrients enriched common and unconventional functional foods and enhancing nutraceutical potential of foods through technology upgradation. Clinical Nutrition aspect covers bio efficacy assessments of developed foods under normal and disease conditions such as diabetes, cardiovascular diseases, degenerative diseases, hypertension, etc. Technologies for the production of low cost nutritive therapeutic foods have been developed and validated for their physico-chemical characteristics. Work has been carried out on weaning foods, probiotic enriched foods, baked foods, fermented foods, fruit and vegetable based preserved foods etc. Community Nutrition oriented projects cover nutrition surveillance and demographic studies.

School of Business Management, Accounting and Finance – Significant Research has been carried out in the areas of – Values-based Management and Leadership, Spirituality in the work place, Corporate Governance and Corporate Social Responsibility, Corporate Stakeholders Management and Welfare, Performance Management Systems, Service Quality, Innovation Culture, Applied and Behavioural Finance, Risk Management and International Finance, Social Entrepreneurship, Logistics and Green Supply Chain Management, etc.

Economics – The thrust areas of the department are Policy Modelling for India, Financial Forecasting, Rural Development, Poverty and Employment, Energy Policy for India, Agricultural Economics and the LOCs etc.

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – EXAMINATION SYSTEM

The SSSIHL follows the semester system of education for all its programmes at the Under Graduate and Post Graduate levels including the professional programmes. The Institute believes that teaching, learning and evaluation constitute integrated and indissoluble components of education. The examination system is so designed as to help in the learning process of the students by providing feedback to the students and the teachers regarding what the students have learnt as against as what they are expected to learn. This is done through the minimum examination programme of the UGC constituting the continuous internal evaluation (CIE) which spreads across the entire semester and the end semester examination (ESE) which is conducted at the conclusion of a semester. The Institute has adopted a Grading System on a five point scale.

Continuous Internal Evaluation (CIE)

The CIE Programme includes components such as quizzes, tests, assignments, seminars, lab exercises, workshops and practicals. For each programme the relevant components are included in their CIE. The CIE marks are shown to students along with their answer scripts by the teacher concerned, enabling them to have access to the evaluated answer scripts before the marks are forwarded to the examination section. This exercise ensures:

- Providing a feedback to the students on the mistakes committed and an opportunity to learn the subject more accurately and adequately
- Providing a feedback to the faculty on where each student stands with respect to his/her subject which provides him/her an opportunity to take remedial action
- Transparency in the evaluation system

End Semester Examinations (ESE)

There are ESE at the end of each semester, the question papers for which are set by internal or external faculty. External faculty members include experts in the respective field of study from other reputed Universities The idea

of having external paper setters and examiners is to establish credibility to the evaluation process. A double evaluation scheme is followed for the Post Graduate courses. A double evaluation system involves evaluation of the answer scripts twice – once by the internal Institute faculty member handling the course and the second by an external expert from a reputed University in the respective area.

Holistic Evaluation

Keeping in line with the philosophy of holistic personality development of the students, the evaluation system incorporates both the academic and the non academic/integral item components in the students' evaluation system. These integral items include:

- i. Participation in Yogasanas/jogging, games and sports
- ii. Attendance at the morning prayer sessions in the Hostel
- iii. Attendance at the prayer sessions in the College
- iv. Attendance at the classes
- v. Participation in self-reliance activities

The grades are also awarded for the integral items stated above on a five point scale system. These grades appear on the grade cards along with the academic grades.

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – AWARENESS PROGRAMME

The Awareness Course is a multifaceted Course for both the Under Graduate and Post Graduate classes, aiming at purposeful cultivation in the students of a very broad view of the human condition. This view is interdisciplinary, cutting across all academic lines and cross-cultural, including the great contributions of cultures spanning a vast range of space and time. It is also inter-faith, bringing out the unity of all the great world religions and transpersonal, providing a link of understanding that reaches up to the highest plane of spiritual experience. At the same time it is practical and fosters the development of skills that are directly applicable to relieving human misery and distress wherever they may be found. The 3 principle objectives of the Awareness Programme are:

- Link between general knowledge and spiritual knowledge
- Practical knowledge and skills
- Implementing ideals in daily life

Experiential learning is the main teaching methodology used for teaching the awareness course that includes debates, symposia, discussions, role plays, quizzes, skits and the like. The Awareness Programme is a part of the curriculum of the students. The course content of this Programme at the Under Graduate level constitutes – philosophy of education, unity of religions and faiths, ethos and values and their relevance in the current milieu, life and its quest, study of Indian classics like the Ramayana and the Bhagavatam. At the Post Graduate level, the focus is on exposing the students to the practical aspects of spirituality and enabling them to use the spiritual principles as stated in the ancient scriptures for dealing with problems of the society.

Fees

In keeping with Bhagawan Baba's principle that education must be offered free and be made available to all eligible, **the Institute does not charge any fee whatsoever**, be it tuition fees, laboratory fees, library fees, sports fees, examination fees, medical fees etc. Caution deposits of various kinds (e.g, for the Library and the Laboratory) are also totally waived.



The social dimension of the Institute consists of such important facets such as the life in the Hostel, the Self-Reliance activities, the Sports and Cultural activities and the Grama Seva Programme.

Hostel Life

The Sri Sathya Sai System of Integral Education mirrors to a large extent the tried and tested *Gurukula* system of education of which the Hostel forms a critical cog. The Hostel buildings are architectural marvels resembling a temple and thus create a noble ambience for students to live an ideal life. The philosophy of the Sri Sathya Sai Hostels is based on the approach of community living wherein each one lives for the other and all live for God. Students hailing from different states of India, diverse cultures and varied economic and financial backgrounds live in dormitory styled accommodation with 10-14 students staying together in a room. The Pan Indian character of the Institute comes alive in the Hostel. The Hostel is a miniature model of the world outside with people of different habits, temperaments, living style, language and outlook staying together and working. This develops the qualities of understanding and adjustment and sharing and caring amongst the students. It nurtures virtues like adaptability, tolerance and sacrifice developing students into noble and responsible citizens. The Revered Chancellor states, “*The medium of instruction in this Institute is discipline. Love, Service and Sadhana (spiritual practice) are the first, second and third languages.*” This gets actually translated into action in the life at the Hostel.

The Hostel is a self-sufficient unit housing all the basic necessities of the students. This enables minimal movement of students outside the Hostel premises. To minimize the possible external negative influences, the students are encouraged to read only inspiring literature, listen to elevating music and view meaningful audio visuals. In keeping with the spiritual ambience of the Hostel, the students consume *Satwic*, vegetarian and nutritious food prepared by service-oriented people.

Daily Routine of a Sai Student at the Hostel

The daily routine at the Sri Sathya Sai Hostels is so designed that students are kept engaged in constructive and productive activities throughout the day leaving no scope for idle time. A brief overview of a typical day at the Sri Sathya Sai Hostel is given here.

The day starts at 5 am with a wake up bell accompanied by inspiring music played on the Hostel music system designed indigenously by the students. The students arise from bed and after their ablutions assemble in the Hostel prayer hall for the Morning Prayer from 5.20 am to 5.45 am. This is followed by physical exercise/yogasananas/jogging/ games/gymnastics at the Sri Sathya Sai International Centre for Sports or the Sri Sathya Sai International Cricket Stadium until 7 am. During this time period, coaching classes for music, band, traditional instrumental music like *Panchavadyam* and *Nadaswaram* and also Vedic chanting are conducted. Students can participate in any of the physical activities based on their preferences and interests. Bath and breakfast follows after which students head for the College at 8 am. During every dining session in the Hostel, students commence their eating with a common prayer inculcating a sense of gratitude in their hearts. The College commences with community prayer. The classes commence at 8.30 am and continue till 2.30 pm with a lunch break from 11.20 am to 12.20 pm. After a short tea break at 3 pm, the students move to the Ashram for participation in congregational chanting, singing and other spiritual activities. These also include talks by eminent speakers on a variety of spiritual topics and also interactions with the Revered Chancellor of the Institute. The students return to the Hostel at 6 pm and engage themselves in games, library, computer laboratory facilities, self reliance department work or personal studies as per the need. On certain days, subject experts address the students of various faculties on the latest developments in their fields of studies. Dinner is served at the Hostel between 7.15 – 8 pm after which the students are expected to devote themselves to their academic studies until 10 pm. The day ends with a night prayer wherein students keeping with the spiritual ambience of the Hostel environment, engage in self introspection and self audit to better themselves.

The busy routine as detailed above indicates that all aspects of the students' personality are catered to. It also trains them in time management, enhances their skill sets, fuels their latent talent and creativity and channelises it into productivity activities.

Spirit of Self-Reliance at the Hostel

One of the most unique features of Sri Sathya Sai Hostels is that the functioning of the Hostel is entirely by the students and resident staff members. The guiding principles of the Hostel are a simple life coupled with self-reliance. The students do their own work themselves without dependence on any external agencies. To inculcate dignity of labour and respect for work, all functions and departments of the Hostel are run by students under the able guidance of resident faculty. The departments include Hostel Maintenance (electrical, carpentry, plumbing), General Stores (providing daily needs in-house), Dispensary (providing paramedical and first aid assistance to doctors), Kitchen (designing menu and handling catering services), Dietics (providing food for the sick students), Fruit and Snacks Stall, Bakery, Hostel Library, Hostel Computer Centre, Photocopying Services, Reverse Osmosis Water Plant Maintenance, General Health and Hygiene, Arts and Crafts, Multimedia and Audio Visuals (providing in-house entertainment and preparing special audio visual documents of the students' cultural programmes), Hostel Publications (publishing books on various aspects relating to the education system and interactions and messages of the Revered Chancellor), Tutorials (wherein senior students assist the junior students in their academic work), Transport Services for emergency purposes, Landscaping, Training in *Panchavadyam* and *Nadaswaram* (traditional Indian music played during Indian festivals), Institute Brass Band, Costumes, Spiritual Activities (organizing mass prayers for special festivals and conducting traditional Indian rituals to upkeep the traditional Indian culture and heritage) and many others.

These self-reliance activities enable students to become self-confident and independent and also contribute to leadership and entrepreneurial development. The unique feature of these self-reliance departments is the aspect of continuity in spite of batches of students leaving every year. This is facilitated through an effective succession planning in the traditional *Gurukul* style; wherein the senior students train their junior successors before they move out.

Prohibition of Ragging

“The Deemed to be University complies with the ‘UGC Regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009’. (Under Section 26(1)(g) of the University Grants Commission Act, 1956) contained in their letter No.F.1-16/2007(CPP-II) dated 17th June, 2009 and published in Gazette of India dated 4th July, 2009”. For details, please refer to website www.ugc.ac.in.

Sri Sathya Sai Institute of Higher Learning – Sports and Cultural Activities

The Institute organizes an Annual Sports and Cultural Meet during the period from December 15th to January 15th. The Revered Chancellor of the Institute says, “*Bend the Body, Mend the Senses, End the Mind*”. He emphasises on the efficacy of a healthy body and states that, “A sound body ensures a sound mind and a sound mind ensures a sound body.” The month long sports and cultural activities are marked by a spirit of excellent teamwork and co-operation. The Annual Sports and Cultural Meet is an exercise of perfection in action. It is also another occasion when the cooperative effort overpowers the competitive spirit. In a world full of cut throat competition, it bears testimony to the power of cooperation and unity to achieve success and excellence. The cultural activities consist of events such as elocution, debates, dramatics, general knowledge quiz, vocal and instrumental music, orchestra, painting and pencil sketches, cartooning, poster making, mono acting, miming, photography, scriptural chanting etc. The sports and games include cricket, table tennis, tennis, shuttle and ball badminton, volleyball, basketball, football, long distance running, athletic, track field events.

The sports and cultural activities culminate on the 11th of January every year marked by a grand display of cultural, athletic and dare devilry items. These include national and international sports items like equestrian events, two and four wheeler stunts, para sailing and gliding, bungee jumping, martial arts, lion and dragon dances, gymnastics and many others. During these events, the best in the students emerges in myriad forms, not for their personal glory, but for Divine satisfaction. All the Campuses of the Institute get a chance to present their talents and skills before the Revered Chancellor; the uniqueness being that every student from all the Campuses of the Institute with no exception participates in some form or the other. Whether it is the well orchestrated march past or colourful formations or the harmonic brass band or just the skillfully engineered torch vehicle; every presentation is a manifestation of perfection in action.

Sri Sathya Sai Grama Seva Programme

In the Sri Sathya Sai Education System, social service has always been an integral component. As early as 1968-69, the first year of the college at Bangalore, students would go to the neighbouring villages to undertake service activities. For the past 3 decades, the 18th of November every year would mark an important occasion on the academic calendar of the students. Thousands of village folk from the surrounding villages would gather at the Sri Sathya Sai Hill View Stadium. Faculty and students under the guidance of the Revered Chancellor would distribute food and clothes to all those gathered on the occasion. However, from the year 2000 onwards, this service took a new turn in a different format suiting the requirements of the current millennium. The project christened as ‘Grama Seva’ (village service) is undertaken during the *Navaratri* celebrations when faculty and students of the Institute visit the nearby villages and deliver the tokens of food and clothes with love at the doorstep of every village member. Nearly 150 villages with a population of around 1,50,000 are serviced within a period of 10 days. This exercise plays a major role in sensitizing the students to the ground realities of rural India and to inspire them to take up service projects in future aiming at rural development. The Grama Seva is also an exercise in management and communication which gives the students hands on experience in managing mega projects within stiff timelines. The under current of the Grama Seva is love and compassion. As the Revered Chancellor says, *“When you offer milk to a hungry child, or a blanket to a shivering brother on the pavement, you are but placing a gift of God into hands of God! God serves; He allows you to claim that you have served! Without His Will, not a single blade of grass can quiver in the breeze. Fill every moment with gratitude to the Giver and the Recipient of all gifts.”* It is He who is the doer, it is who is the recipient, it He himself who is the act of service.

Sri Sathya Sai Grama Seva – Modus Operandi

The Grama Seva activity involves great deal of planning. The faculty and other support staff go for an advanced survey of the villages in each of the 3 Mandals around the Institute to collect and verify census data and road maps of the selected villages. Dividing themselves into smaller sub groups they then go around identified groups of villages and prepare the detailed road maps, meet the local village heads and collect data regarding number of households, population figures, number of schools, etc. The Central Planning Committee divides the entire student body of the Institute into a number of groups. Each group is headed by a teacher coordinator assisted by a team of teachers and is deployed to cover a fixed number of villages per day. On any given day, around 15-20 villages are covered using about 45-50 vehicles (trucks, tractors, pick up vans, etc.) connected with wireless sets for effective communication in managing the logistics. As the students of the men’s campuses take up the responsibility of serving the tokens of love, the students of the women’s campus undertake the task of food preparation and packing.

Each day, all the vehicles go in a convoy to pre-identified villages early in the morning. On reaching their destination, the students go around the village doing congregational singing of devotional songs and hymns, after which they distribute the food and clothes to the inmates of each house at their doorstep with love and care. Stationary material is distributed to the school children in their respective schools. Each vehicle keeps in constant touch with the home base through the wireless and whenever there is any need for additional food or clothes, the crisis management team



rushes to replenish the same. The striking feature of the Grama Seva is that the students and faculty partake the same food for their lunch in an egalitarian spirit. Even as the teams return to their home base by evening, the Central Planning Committee gets ready with the action plan for the next day's service. This routine goes on for the entire period of the Grama Seva.

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING – SPIRITUAL DIMENSION

The Prasanthi Nilayam Ashram is the place where a deep transformation takes place in the lives of the students. The Revered Chancellor's selfless love for his students and concern for their welfare is extraordinary. He uses every opportunity to communicate to them the subtle truths of life directly and indirectly. The Ashram is 500 meters away from the Hostel, sprawling over 200 acres of and houses the Revered Chancellor's residence, temples, an auditorium and boarding and lodging arrangements for visitors. The students from the men's campus at Bangalore and the women's campus at Anantapur come to Prasanthi Nilayam on all important festival occasions such *Guru Pournima*, *Navaratri*, Christmas and New Year, *Shivaratri*, Institute Convocation and Annual Sports and Cultural Meet. These festivals are celebrated in their true traditional fervour and the Revered Chancellor addresses the students explaining to them the real inner significance of these rituals and ceremonies. Thus these festivals act as an eye opener for the students and enable them to know of the rich culture and heritage of India which has survived the test of time of the last many millennia.

The students, teachers, administrators and non-teaching staff of the Institute visit the Ashram every day to benefit from interactions with the Revered Chancellor and for congregational multi religious chanting and singing in his presence. The Revered Chancellor interacts with them individually and collectively and discusses personal issues, administrative issues and also answers ethical, moral and spiritual queries. These interactions make the students more socially responsive and spiritually aware. The congregation commences with chanting of Vedic hymns that represent the essence of Universal Truths prescribed in all religions. Various spiritual based skits and plays are put up by the students and members of the Sri Sathya Sai Seva Organisation with the objective of sharing and depicting the values and morals manifest in the lives of great saints and sage such as *Jayadeva*, *Tyagaraja*, *Kabir*, *Meerabai*, *Surdas*, *Tukaram*, Spirit of Islam, Jesus Christ, Zorashtra, Prophet Moses, Gautam Buddha, *Adi Shankaracharya*, *Ramanujacharya*, *Madhavacharya*, *Annamacharya*, *Narsi Mehta*, *Chaitanya Mahaprabhu*, *Jhulelal*, *Ramakrishna Paramahansa*, *Swami Vivekananda*, *Shirdi Sai Baba* and many others and also episodes from the great Indian epics such as the Mahabharata, the Ramayana, the Bhagavatam and the Bhagavad Gita. Students also get several opportunities to share their views on a variety of topics in the presence of the Revered Chancellor and many other dignitaries. These serve as a training ground in public speaking and self confidence.

Discourses by the Revered Chancellor form a very component in expanding the spiritual understanding, shaping attitudes and widening perspectives of the students and faculty of the Institute. Apart from the festivals when the discourses focus on the significance and inner meaning of the festival, they also cover a very wide range of themes such as: education and its true purpose, Indian culture and spirituality, true purpose of human life, lives of great prophets, saints and sages of the world, insights from Indian and world epics and scriptures, science and spirituality, human values in personal and professional life, family values, individual and national character, patriotism, unity of religions, leadership, service to society, devotion and discipline, role of youth in society, humanized health care, rural development and village upliftment and many others.

In addition to this, talks by eminent personalities from a galaxy of professions such as heads of state, politicians, administrators, defense personnel, educationists, businessmen, scientists, spiritual leaders, sportsmen, film celebrities, musicians, poets, royal personalities and many others play an important role in influencing the thinking and shaping the mental personalities of the students. The personal and professional experiences shared by them, facilitate in broadening the perspective and widening the world view of the students.

The lessons learnt by the students in the portals of this Institute are not confined to the period of their stay in the Institute alone. They carry these lessons and the message of the Revered Chancellor into the wide world and strive to get a good name for themselves, their parents and the Institute. This is the expectation of Bhagawan Baba from each of the students leaving the portals of the Institute.

As a matter of policy and keeping in line with the Revered Chancellor's philosophy that 'Education is for life and not merely for earning a living', the Institute does not organise campus placements. The objective of the Placement Policy of the SSSIHL is to enable the students to focus purely on the academic learning and benefit from the Institute ambience to its fullest extent without any distraction associated with jobs, salaries and the like. However, the Institute and its system of education fully equip them with the knowledge, skill sets and the confidence necessary to be self sufficient in the outside world. Highlighting this role of the SSSIHL, the Revered Chancellor emphasizes, "*The Institute will confer on its alumni the courage and confidence, the knowledge and skill to shape their career by their own efforts, standing on their own legs and relying on their own strength*". The success of the Institute's philosophy is visible from the fact that the alumni of the SSSIHL are spread across the globe including North and South America, Europe, Africa, the Middle East, Australia and New Zealand and Asia. They hold prestigious positions in several organisations and many of them have won great appreciation from their employers.

A sample of the organisations/institutions where the alumni of the Institute are employed include Indian Institute of Sciences, Indian Institutes of Technology, Indian Institutes of Management, Government of India, Tata Institute of Fundamental Research, Raman Research Institute, Indian Institute of Astrophysics in India and some among other countries are: University of Florida, University of Missouri, University of California, John Hopkins, Arizona State University, University of South Mississippi, University of Texas, University of Kentucky, Texas Tech University, The Pennsylvania State University, Northwestern University, Florida Institute of Technology, University of Minnesota, University of Tennessee, The Scripps Research Institute, Massachusetts Institute of Technology, University of Kansas, University of Edinburgh Management School, University of Glasgow, University of Nottingham, Karolinska Institute, Macquarie University and many others.

Some of the business organisations where the students are in very senior positions are HDFC Bank, Barclays Bank, Citibank, Standard Chartered Bank, ABN Amro Bank, HSBC Bank, ICICI Bank, Bank of America, Oracle, Microsoft, GE, HP, Accenture, TCS, Infosys, Wipro, Dun & Bradstreet, Siemens, Philips, TVS Motors, L&T, Reliance, the Tata group companies and some public sector organisations. Among the overseas organisations, students are employed in Walmart, Canarys, SAP America, Inc., Intel Corporation, Lucent Technologies, Citigroup, Nortel, PricewaterhouseCoopers, Microsoft, IBM, Ernst & Young LLP, McKinsey & Company, Perot Systems, Sun Microsystems Inc, Cognizant Technology Solutions, Symantec, Reuters, Motorola and many others.

SRI SATHYA SAI SYSTEM OF INTEGRAL EDUCATION – A MODEL

The Model of Education at the Sri Sathya Sai Institute of Higher Learning is represented as a 'Temple of Learning' in the figure. The foundation for this temple is the values based integral education system referred to by the Revered Chancellor as 'Educare'. Standing on this foundation are the two central pillars forming the main structure of the temple. One pillar represents the 'Character' (spiritual) component whereas the other pillar represents the 'Academic' (secular) component. Though they have been represented as independent pillars, they truly are intertwined like the DNA spiral. The Revered Chancellor compares the secular and spiritual component of the education system to the two wheels of a bicycle or the two wings of a bird; both of which are critical for effective functioning.



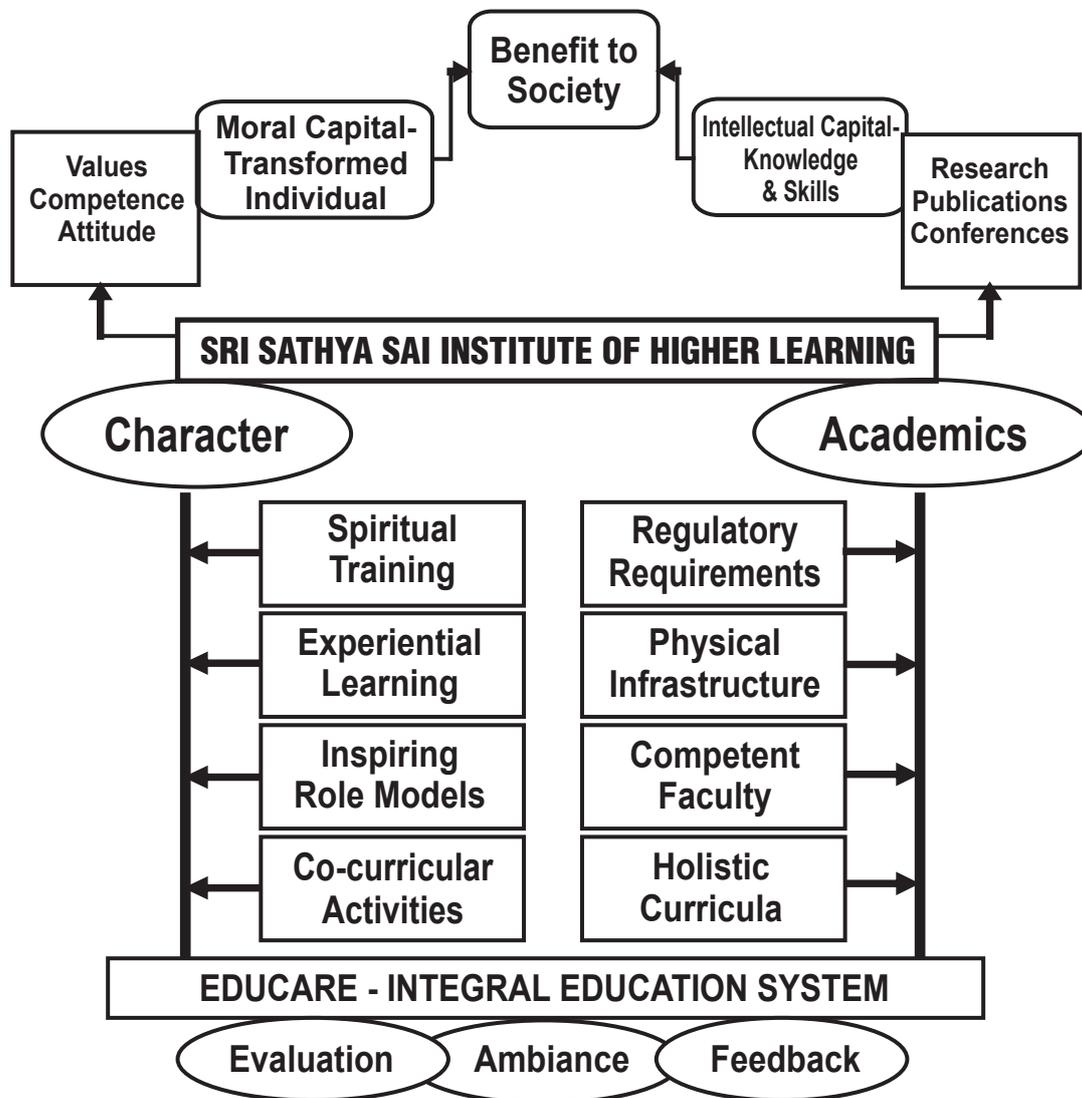


Figure 3 : TEMPLE OF LEARNING

Inputs

The critical inputs to the ‘Academic’ Pillar are:

1. **UGC/AICTE (Regulatory) Requirements** – Adherence to statutory requirements of the apex academic bodies such as the University Grants Commission (UGC) and the All India Council for Technical Education (AICTE) are a primary necessity to lend credibility to any educational institution. All educational processes and activities at the Institute are conducted within the ambit of these requirements.
2. **Physical Infrastructure** – Right infrastructure serves as the backbone of an education system. Firstly, it provides the right ambience for the students’ learning process. Secondly, it gives them hands-on experience with respect to their field of study. The SSSIHL is equipped with well designed classrooms, state-of-the-art science laboratories, computer centres, well equipped libraries, multimedia facilities, video conferencing facilities, etc. that go a long way in enhancing the learning process and in clarifying the concepts and fundamentals of the subjects.

3. **Competent and Committed Faculty** – The Institute houses faculty with ‘competence and commitment’; virtues that are equally important in a faculty member. Absence of either renders the teaching process ineffective. This combination is very critical for developing intellectually sound students who are not only well-versed in theory but are also adept at understanding the practical implications and ramifications of translating the theory into practice in varied contexts.
4. **Holistic Curricula** - The key factor in designing any curriculum is to keep it updated and in alignment with current requirements. However, while doing this, the need for values integration into the curriculum is given paramount importance. Values form the undercurrent and the very fabric of the curriculum content and curriculum design process. Also, co-curricular activities form an important and vital component of this system of education and hence demand a significant amount of time in the students’ academic calendar. This aspect is factored into the curriculum design with greater focus on the basic requirements of concepts and fundamentals and lesser on the peripherals.

The critical inputs to the ‘**Character**’ Pillar are:

1. **Spiritual Training** - The core of spiritual training is discipline – disciplining not just of the body, but of the mind and senses. Physical discipline includes punctuality, time management, a well-regulated life, healthy food habits, self reliance, community living, etc. Mental discipline includes honesty, sensitivity, empathy, thrift, humility, duty consciousness, adherence of rules, abstinence from undesirable habits, etc. Students are encouraged to follow such a discipline both in the letter and spirit and live a well-regulated life within stipulated boundary conditions.
2. **Inspiring Role Models** – The role of teachers in our education system is crucial as it is two pronged: one being the provider of secular knowledge and the other being the exemplar of character and noble virtues. As the latter cannot be taught, it is put into practice by the teachers so that they can be role models in personal and professional lives, worthy of emulation by the students. They strive to avoid any dichotomy in their classroom behaviour and their out-of-classroom public life.
3. **Experiential Learning** – The theoretical knowledge gained in the classrooms need to be translated into practical insights through experiential learning. A lot of lessons and inputs can be imbibed by the students through community life at the residential hostel. Nearly 12 to 14 students coming from different cultural backgrounds and varied geographical coordinates live together in one room. The living style is simple with minimum conveniences. Such a thrifty community life enhances the qualities of sharing and caring with understanding and adjustment. The hostel thus serves as a laboratory where students put into practice, values that are imbibed in the system; they learn to apply theoretical knowledge gained in classrooms into their day-to-day lives. Two major experiential modules in the education system are: The Annual Sports and Cultural Meet and the Grama Seva.
4. **Co-curricular activities** – Co-curricular activities take place in and out of the classroom. Activities such as elocution, dramatics, music, debates, sports and games, social service activities such as rural development initiatives, self reliance activities in the Hostel, etc. play a major role in shaping and honing students’ talents and skills. In particular, the self-reliance departments in the hostel enable students to develop the spirit of team work and nurture leadership qualities. Most of the lessons in values and morals are imbibed through these co-curricular modules.

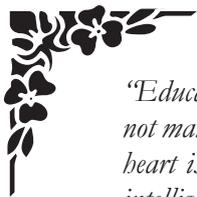
The twin pillars of Academics and Character seamlessly blend into a unified whole through an integrative process. Every member of the Institute facilitates and participates in this integration. Also, every process is designed to enable this integration.

Enablers

1. **Ambience** – The right ambience plays a very important role in any educational institution in setting the right atmosphere for academic pursuits. The organizational culture representing the complex patterns of beliefs, expectations, ideas, values, attitudes and behaviours shared by the members of the organisation constitute an integral component of ambience. The culture at the SSSIHL is one that focuses on responsibilities rather than rights, duties rather than privileges, on self motivation and inspiration and on the pursuit for excellence – personal, academic and professional. The quiet and peaceful environment enables a healthy intellectual and emotional development. Spacious, beautiful and artistically designed buildings contribute significantly in setting the right ambience. A place of worship surrounded by gardens, lawns and water bodies further enhance the environment. It provides an opportunity to the students to be in a contemplative and self-reflective mood and even facilitates a healthy and novel way of student-teacher interaction. The key is the aspect of simplicity and elegance.
2. **Evaluation and Feedback** – No system is complete without the evaluation – feedback loop. Evaluation and Feedback are very essential tools to gauge the level and quality of performance in every aspect of the educational process, with respect to the identified benchmarks and bridge the gap if any. Performance review by all stakeholders at frequent intervals forms part of the system. Constant self-audit at the institutional and individual level is carried out to check for alignment of actual performance with the core philosophy and mission of the Institute. An open mind, willingness to accept suggestions, keenness to change and adaptability to the changing scenario within the framework, characterize the evaluation and feedback system at the Institute.

Outputs

The outcomes of the Values-Based Integral Education system are twofold. On one hand is the knowledge and skills capital built through the process of research and its sharing through various fora such as publications in journals and conferences/workshops: both national and international. On the other hand is the moral capital built through the transformation of the students who go through the system imbibing noble values, positive attitude and professional competence. Both the knowledge and skills capital along with the moral capital ultimately leads to direct/indirect benefit to the local community and society. This forms the apex of the ‘temple of learning’ which is the culmination of the process of education. As the Revered Chancellor states, “Education is for life and not merely for a living”.



“Education is like insipid water. Educare is like sugar. Merely adding sugar to water does not make it sweet. It is only on stirring, does the sugar mix with water making it sweet. The heart is the tumbler, Divinity is the sugar and secular education is tasteless water. With intelligence as the spoon and enquiry as the process of stirring we experience the all pervasive Divinity.”

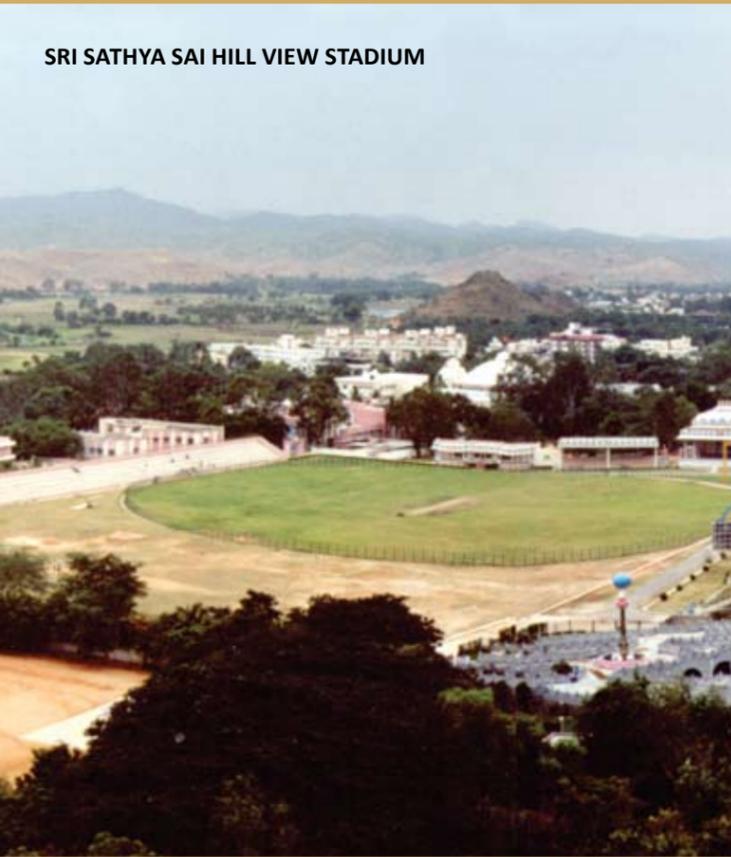
- SRI SATHYA SAI



INSTITUTE INFRASTRUCTURE

SRI SATHYA SAI INTERNATIONAL CENTRE FOR SPORTS

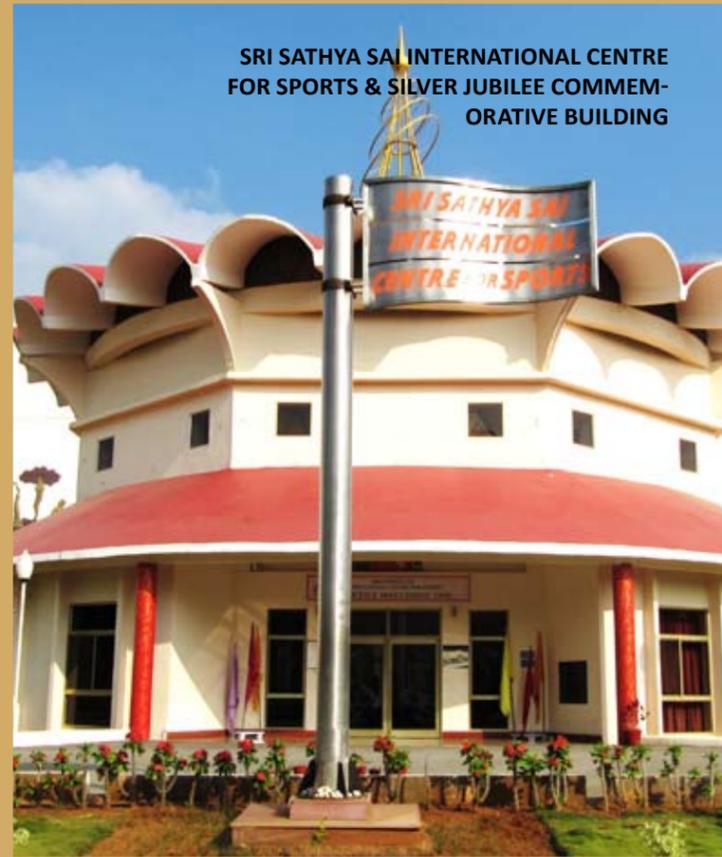
SRI SATHYA SAI HILL VIEW STADIUM



INSTITUTE CENTRAL LIBRARY



SRI SATHYA SAI INTERNATIONAL CENTRE FOR SPORTS & SILVER JUBILEE COMMEMORATIVE BUILDING



TENNIS COURTS



HUMANITIES BUILDING, PRASANTHINILAYAM CAMPUS



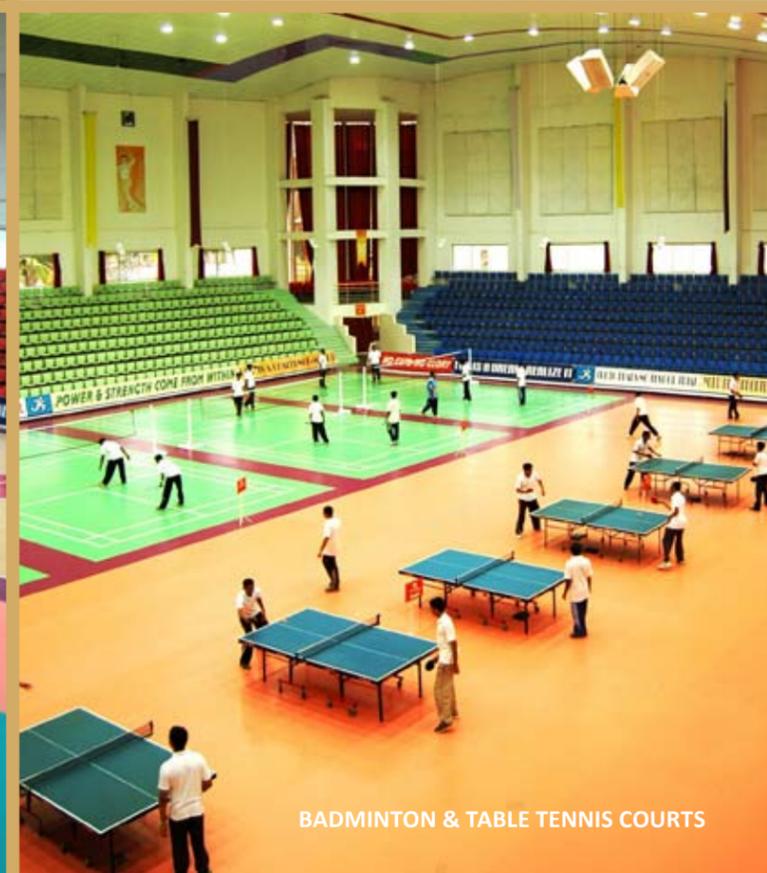
SRI SATHYA SAI SPACE THEATER



BASKETBALL & VOLLEYBALL COURTS



BADMINTON & TABLE TENNIS COURTS

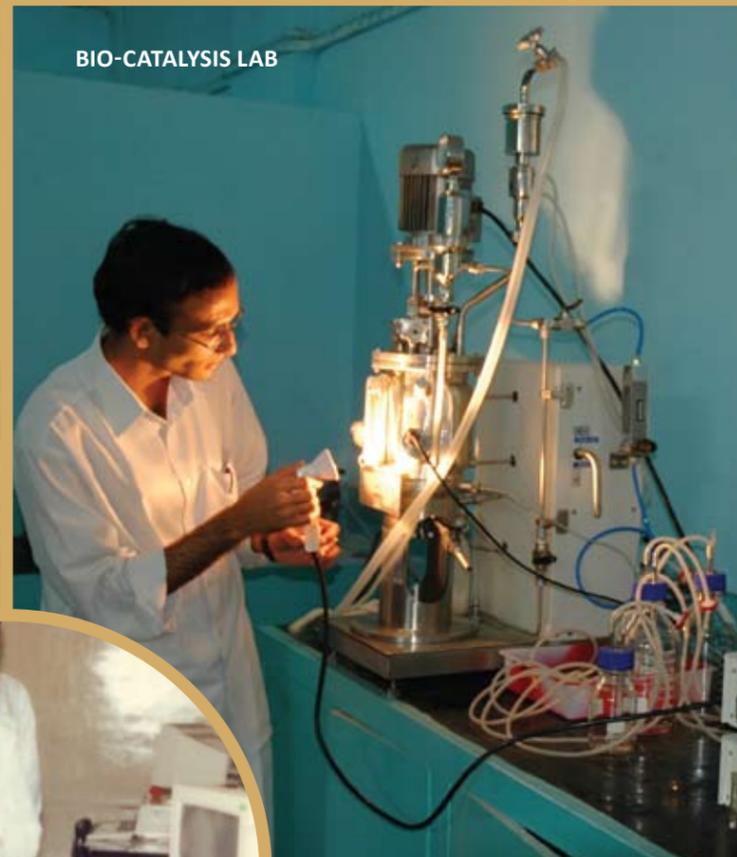


MODERN WELL

EQUIPPED LABS



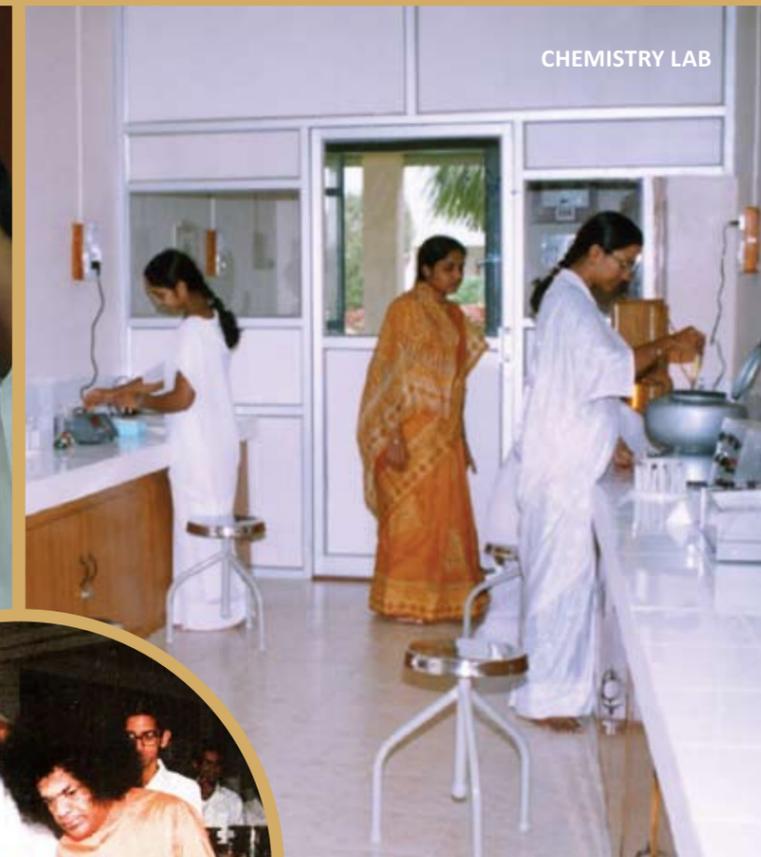
ARTIFICIAL INTELLIGENCE LAB



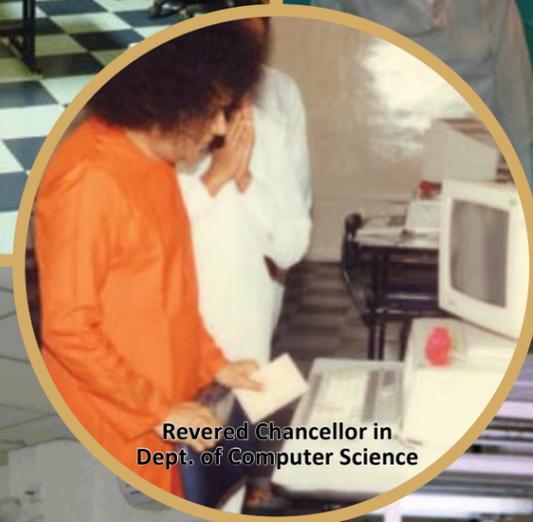
BIO-CATALYSIS LAB



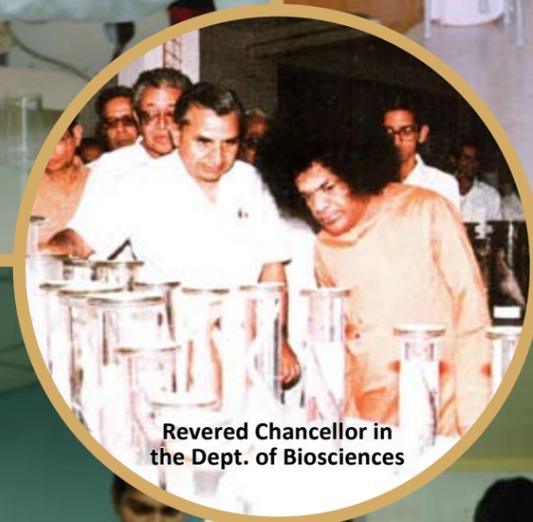
BIO-SCIENCE LAB



CHEMISTRY LAB



Revered Chancellor in
Dept. of Computer Science



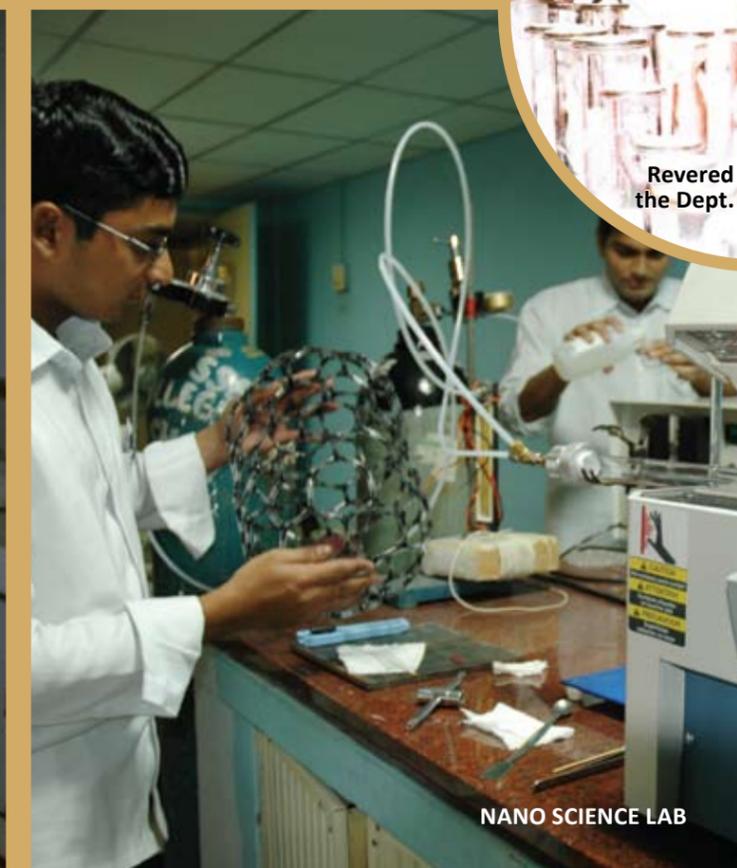
Revered Chancellor in
the Dept. of Biosciences



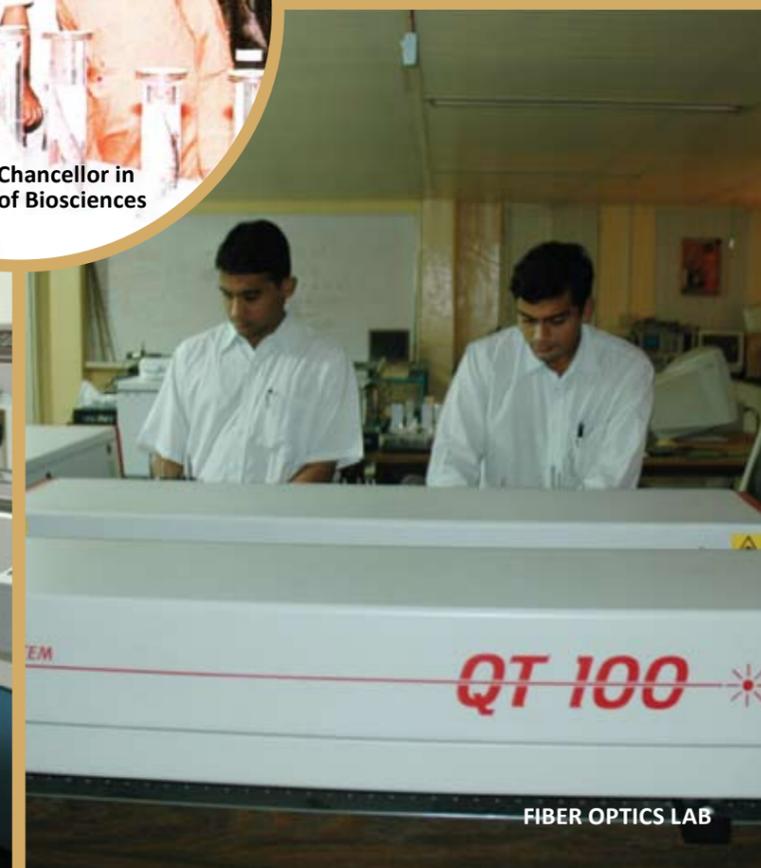
INSTRUMENTATION CENTRE, DEPT. OF CHEMISTRY



BIO-SCIENCE LAB



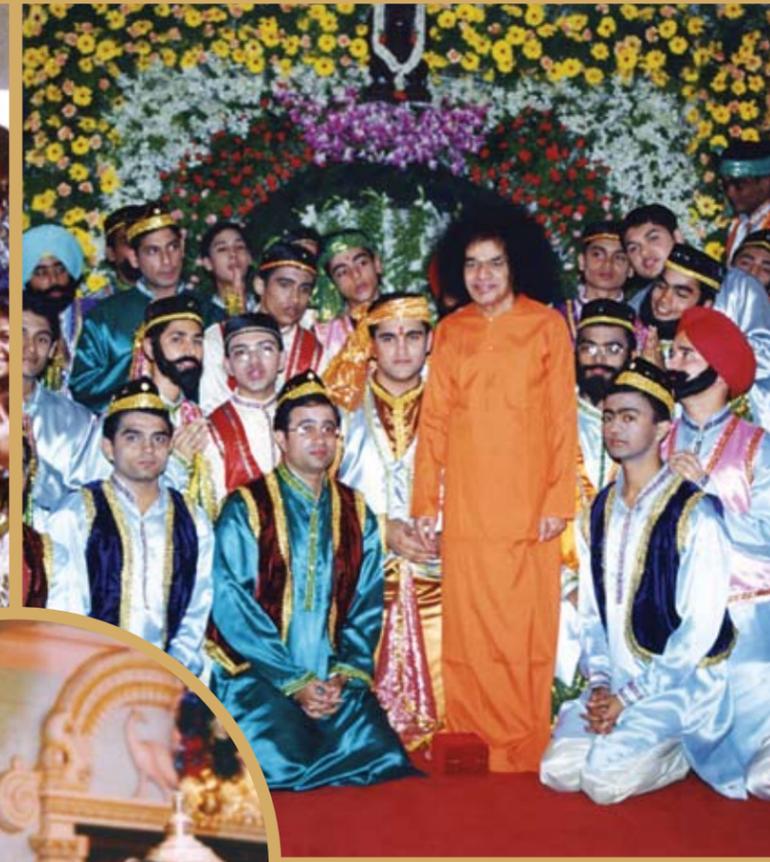
NANO SCIENCE LAB



FIBER OPTICS LAB

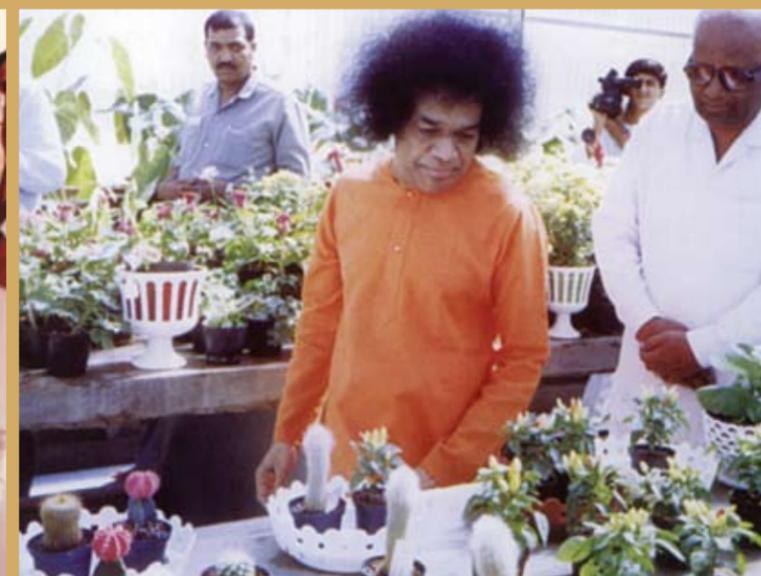
STUDENTS WITH

REVERED CHANCELLOR



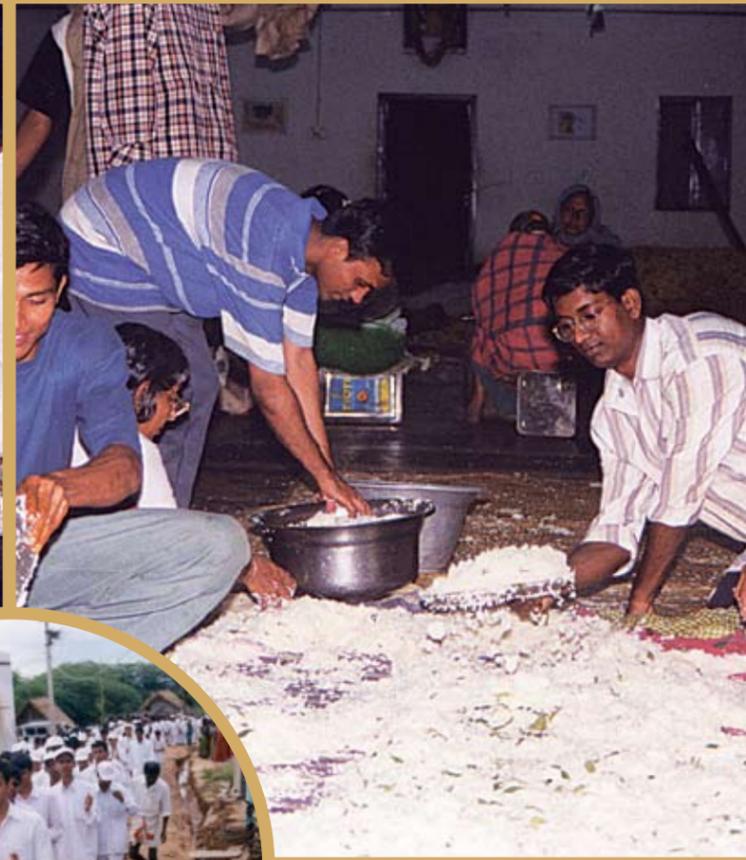
TEACHERS & STUDENTS WITH REVERED CHANCELLOR

REVERED CHANCELLOR IN THE CAMPUS



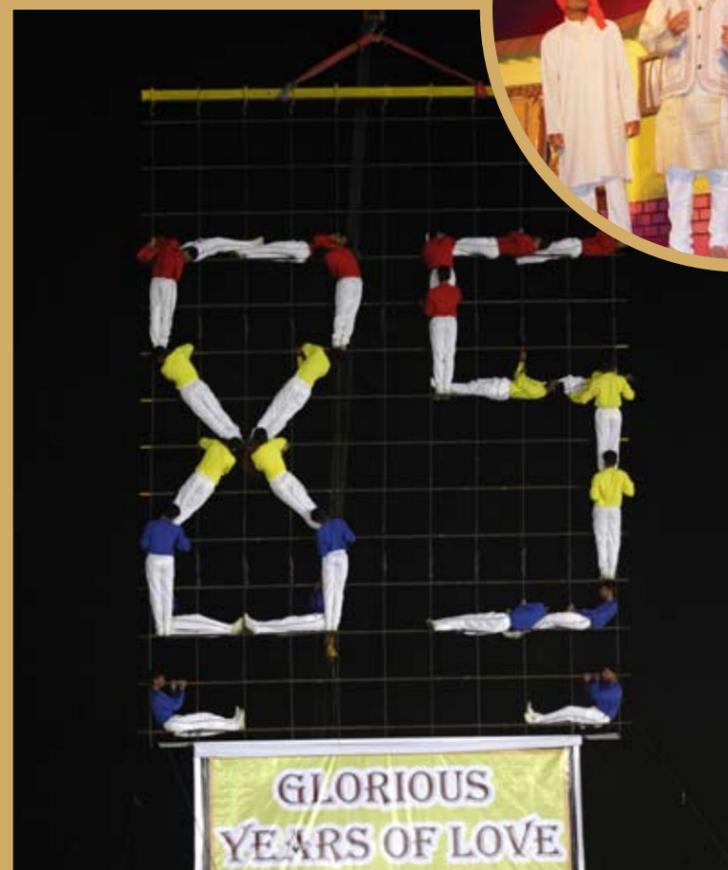
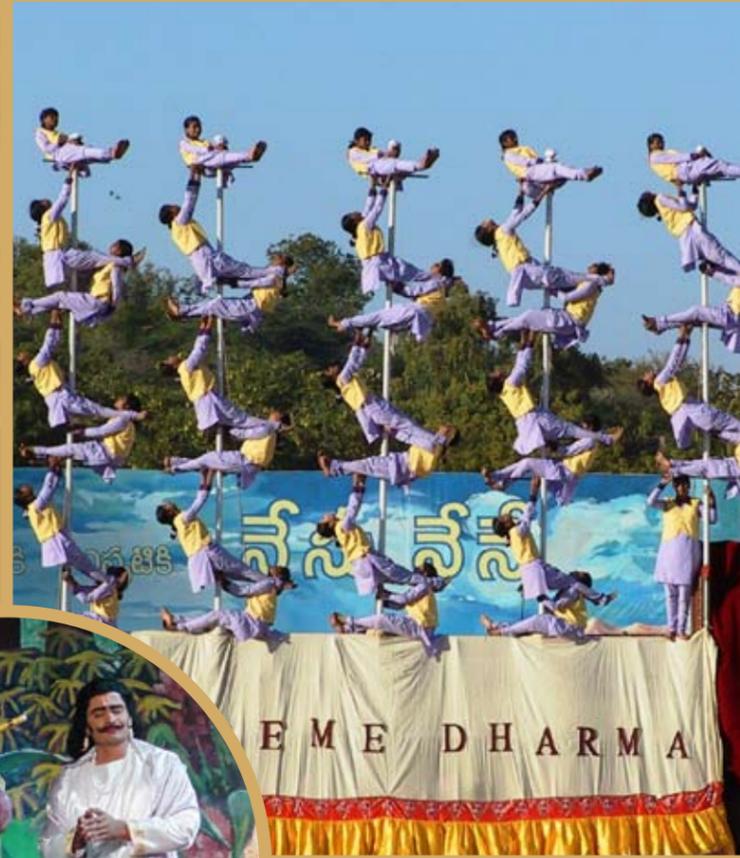
SRI SATHYA SAI

GRAMA SEVA



ANNUAL SPORTS

& CULTURAL MEET



SPECIAL OCCASIONS



INDEPENDENCE DAY



JANMASHTAMI FESTIVAL



GANESHA FESTIVAL



DASERA FESTIVAL

INSTITUTE HOSTELS



ANANTAPUR HOSTEL



BRINDAVAN HOSTEL



PRASANTHI NILAYAM HOSTEL

ELIGIBILITY FOR APPLYING

Under Graduate Programmes:

1. The candidates should have completed 10 + 2 or 12 years of schooling of a recognized Board or CBSE, or equivalent thereof.
2. The candidates should have either passed or appeared for the Final Qualifying Examination at the XII Standard level before the date of Admission Test.
3. At the X Standard level, the candidate should have secured
 - a) a minimum of 55% marks in General English, and
 - b) a minimum of 60% marks in aggregate in all the subjects including General English and languages.Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.
4. Candidates who fall marginally short of the requirement in Para 3 may be considered for admission test, provided they have secured in the XI Standard,
 - a) a minimum of 55% marks in General English and
 - b) a minimum of 60% marks in aggregate in all the subjects including General English and languages.Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.
5. The candidate should preferably be below 19 years of age as on 31st May of the year of admission.

B.Ed. and Post Graduate Programmes:

1. The candidates should have had formal education for a minimum of 15 years, i.e., the 10 + 2 + 3 pattern or any other pattern recognized as equivalent thereto by the University.
2. The candidates should have passed or appeared for the Final Qualifying Examination at the Bachelor's degree level before the date of Admission Test.
3. Candidates who have passed the Final Qualifying Examination must have secured a minimum of 50% marks in General English and 60% marks in aggregate of all subjects. If CGPA is awarded, the eligibility is 3.5 and above in 5 point-scale grading with 'B' Grade in General English.
4. Candidates who have appeared for the Final Qualifying Examination but whose results have not yet been declared are also eligible to apply, provided:
 - a) They have secured a minimum of 50% marks in General English and a minimum of 60% marks in aggregate in all the preceding Years/Semesters put together,

OR

 - b) 'B' Grade in General English and a GPA of 3.5 and above in all the preceding Semesters / Years put together.

Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.

5. For B.Ed. Programme, the University offers teaching methodology in the following subjects only: *English, History, Civics, Mathematics, Physics, Chemistry, and Biology.*

Candidates who have studied any two of the above subjects in their qualifying degree should only apply. They have to appear for admission test also in the same subjects.

6. Under the department of Home Science M.Sc.(Food Science and Nutrition) and M.Sc.(Food Technology) are offered. Admission test is common for both the programmes. Candidates of *B.Sc.(Bioscience)/B.Sc.(MPC)* background are also eligible to apply for these two programmes.
7. For M.Sc.(Nanoscience and Nanotechnology) Programme, candidates of *B.Sc.(Physics)/B.Sc.(Bioscience)/B.Sc.(Chemistry)* background are also eligible to apply.
8. For M.A.(Economics) Programme, candidates of *B.A./B.A.(Hons) in (Economics) or B.Com./B.Com.(Hons)* background are also eligible to apply.
9. The candidate applying for MA/MSc Programmes should preferably be below 23 years of age as on 31st May of the year of admission.

M.B.A. and M.B.A. (Finance) Programmes:

1. The candidates should have had formal education for a minimum of 15 years, i.e., the 10 + 2 + 3 pattern or any other pattern recognized as equivalent thereto by the University.
2. The candidates should have passed or appeared for the Final Qualifying Examination at the Bachelor's degree level before the date of Admission Test.
3.
 - a) Candidates who have passed the Final Qualifying Examination must have secured a minimum of 50% marks in General English and 60% marks in aggregate of all subjects including General English and Languages. If CGPA is awarded, the eligibility is 3.5 and above on 5 point-scale grading.
 - b) Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.
4. Candidates who have appeared for the Final Qualifying Examination but whose results have not yet been declared are also eligible to apply, provided:
 - a) They have secured a minimum of 50% marks in General English and a minimum of 60% marks in aggregate in all the preceding Years/Semesters put together,

OR

 - b) 'B' Grade in General English and a CGPA of 3.5 and above in all the preceding Semesters/Years put together.

Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.

5. Candidates who have obtained a Postgraduate degree and secured a minimum of 60% aggregate or CGPA of 3.5 in the Postgraduate degree Examination, may be considered for admission at the discretion of the University, provided they have secured a minimum of 50% or 'B' Grade in General English in the Bachelor's degree Examination.
6. The minimum requirement of General English is exempted for candidates of Technical Courses like B.E., B.Tech., B.Pharm., B.Sc.(Agri) etc.
7. The candidate should preferably be below 27 years of age as on 31st May of the year of admission.

M.Tech. (Computer Science) Programme:

1. The candidate should have completed one of the following:
 - a) M.Sc.(Mathematics) or M.Sc.(Physics) or M.Sc.(Computer Science) or M.C.A.,
 - b) B.E.(Computer Science) / B. Tech.(Computer Science)
2. The candidate must be familiar with the following topics of Computer Science and the elements of Mathematics.

Computer Science: Data Structures and Simple Algorithms, Computer Organisation and Architecture, Data communications and Networks, Data base Systems, Languages Translators.

Mathematics: Calculus of one and several variable, Sequence and Series, Linear Algebra and Matrix Theory, Differential equations and Laplace Transforms, Mathematical logic.
3. The candidate should have passed or appeared for the Final Qualifying Examination at the Bachelor's degree level before the date of Admission Test.
4. Candidates who have passed the Final Qualifying Examination must have secured a First Class (60% and above) in
 - a) B.Sc./B.Sc.(Hons) and M.Sc./M.C.A. **OR**
 - b) B.E./B.Tech. in Computer Science. as applicable.If CGPA is awarded, the minimum eligibility is 3.5 (equivalent to 60%), in each of the Qualifying Examinations appeared for.
5. Candidates who have appeared for the Final Qualifying Examination but whose results have not been declared are also eligible to apply, provided they have secured
 - a) a minimum of 60% aggregate, or
 - b) a minimum CGPA of 3.5 on 5 point-scale grading in all the preceding Years/Semesters put together.
6. Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.
7. The candidate should preferably be below 27 years of age as on 31st May of the year of admission.

M.Tech. (Applied Optics: Fiber Optics and Digital Image Processing) Programme:

1. The candidate should have completed one of the following:
 - a) M.Sc.(Physics),
 - b) B.E./B.Tech. with background in Optics and Electromagnetic Theory.
2. The candidate should have passed or appeared for the Final Qualifying Examination at the Bachelor's degree level before the date of Admission Test.
3. Candidates who have passed the Final Qualifying Examination must have secured a First Class (60% and above) in
 - a) B.Sc./B.Sc.(Hons) and M.Sc. **OR**
 - b) B.E./B.Tech. as applicable.If CGPA is awarded, the minimum eligibility is 3.5 (equivalent to 60%), in each of the Qualifying Examinations appeared for.

4. Candidates who have appeared for the Final Qualifying Examination but whose results have not been declared are also eligible to apply, provided they have secured
 - a) a minimum of 60% aggregate, or
 - b) a minimum CGPA of 3.5 on 5 point-scale grading in all the preceding Years/Semesters put together.
5. Candidates belonging to Scheduled Castes/Scheduled Tribes are entitled to a relaxation of 5% marks.
6. The candidate should preferably be below 27 years of age as on 31st May of the year of admission.

RESERVATIONS OF SEAT UNDER SC/ST CATEGORIES

- a) Scheduled Castes: 15% - If sufficient number of candidates are not available to fill up the seats reserved for SCs, they shall be filled up by ST candidates. The left over seats, if any, shall be filled up by the candidates from the general pool.
- b) Schedule Tribes: Tribes: 7½% - If sufficient number of candidates are not available to fill up the seats reserved for STs, they shall be filled up by SCs. If ST seats still remain unfilled, they shall be filled up by the candidates from the general pool.



*Wealth has been apotheosized;
Arrogance has become a creed;
Peace has become remote from man;
Egoistic boast is fashionable;
Property has become an adornment;
Selfishness is installed in the hearth;
Sense of self-respect has declined;
Hypocrisy has become the hallmark;
Love and affection have become sickly;
Life has become a burden;
People have lost their mornings.
What does the future hold?
Make education values-based;
And ensure a glorious future for Bharat!*

- SRI SATHYA SAI



ANNEXURE

COURSE CONTENT

Brief Outline of the contents of the various Courses offered by each departments
of the Institute

**General English, Another Languages, and
Awareness Courses and Environmental Courses
for B.A./B.A(Hons)/B.Sc.(Hons)/ B.Sc.(Home
Science)/B.Com.(Hons.)**

**(COMMON FOR ALL UNDER GRADUATE
PROGRAMMES)**

SEMESTER-I

GEN ENGL – 101: English Language Skills – I
SANS-101: Sanskrit: Prose, Poetry and Grammar
HIN-101: Hindi: Gadya, Kahani Aur Vyakaran
TEL-101: Telugu: Prose, Poetry, Non-detailed Text
and General Composition
ADDL ENGL – 101: Literature and Life – I
AWR-100: Philosophy of Education (Based on
Bhagawan Baba's Life and Teachings)
ENT-101 Environment I

SEMESTER-II

GEN ENGL – 201: English Language Skills – II
SANS-201: Sanskrit: Prose, Poetry and Grammar
HIN-201: Hindi : Kavya, Ras Aur Alankara
ADDL ENGL – 201: Literature and Life – II
TEL-201: Telugu : Prose, Poetry, Non-detailed Text
and Essays of Creative Talent
AWR-200: Unity of Religions
ENT-201: Environment II

SEMESTER-III

GEN ENGL – 301: English Language Skills – III
SANS-301: Sanskrit: Mahakavya and Composition
HIN-301: Hindi: Natak, Ekanki, Sankshiptikaran Aur
Pallavan
TEL-301: Telugu: Poetry, Prose and Drama
ADDL ENGL – 301: Literature and Life – III
AWR-300: Eternal values for the changing world

SEMESTER-IV

GEN ENGL-401: English Language Skills – IV
SANS-401: Sanskrit : Drama and Composition
HIN-401: Hindi : Laghu Upanyas, Samanya Nibandh,
Prayojan Moolak Hindi & Sanschar Lekhan,
Aur Bhasha Computing

TEL-401: Telugu: Prose, Poetry and Drama
ADDL ENGL – 401: Literature and Life – IV
AWR-400: Study of Classics – Bhagavata Vahini
SEMESTER-V
AWR-500: Study of Classics - Ramakatha Rasavahini
SEMESTER-VI:
AWR-600: Life and Its Quest

**Three of the following subjects for doing BA
major is to be chosen by the students:
Economics, History & Indian Culture,
Philosophy, Political Science, Optional English
or Optional Telugu**

Department of Economics

1) B.A.(Major) Economics :

SEMESTER – I

ECON 101: Economic Analysis - I

SEMESTER - II

ECON 201: Economic Analysis - II

SEMESTER – III

ECON 301: Quantitative Methods for Economics

SEMESTER – IV

ECON 401: Money and Banking

SEMESTER – V

ECON 501: Indian Economy: Structure and
Development

ECON 502: Intermediate Microeconomic Theory

ECON 503: Introduction to Computer
Applications–I

SEMESTER-VI

ECON 601: Public Fiance and Fiscal Policy

ECON 602: Intermediate Macroeconomic Theory

ECON 603: Introduction to Computer
Applications–II

2) B.A.(Hons) Economics :

SEMESTER – I

ECON 101: Economic Analysis - I

SEMESTER - II

ECON 201: Economic Analysis - II

SEMESTER – III

ECON 301: Quantitative Methods for Economics

SEMESTER – IV

ECON 401: Money and Banking

SEMESTER – V

ECON 501: Indian Economy: Structure and
Development

ECON 502: Intermediate Microeconomic Theory

ECON 503: Introduction to Computer Applications

– I

ECON 504: Quantitative Economics

ECON 505: International Economics

ECON 506: Human Development

SEMESTER VI

ECON 601: Public Finance and Fiscal Policy

ECON 602: Intermediate Macroeconomic Theory

ECON 603: Introduction to Computer Applications

– II

ECON 604: Development Economics

ECON 605: Rural Development

ECON 606: Introduction to Finance

**3) For doing B.Sc.(Hons) in Economics
students have to choose three subjects viz.,
Mathematics, Economics and Statistics:**

SEMESTER – I

MECO 101: Economic Analysis - I

SEMESTER - II

ECON/ MECO 201: Economic Analysis - II

SEMESTER – III

MECO 301: Introduction to Mathematical Economic

SEMESTER – IV

MECO 401: Money and Banking

SEMESTER – V

MECO 501: Indian Economy: Structure and
Development

MECO 502: Intermediate Microeconomic Theory

MECO 503: Introduction to Computer Applications

– I

MECO 504: Introductory Econometrics

MECO 505: International Economics

MECO 506: Human Development

SEMESTER VI

MECO 601: Public Finance and Fiscal Policy

MECO 602: Intermediate Macroeconomic Theory

MECO 603: Introduction to Computer Applications

– II

MECO 604: Development Economics

MECO 605: Rural Development

MECO 606: Introduction to Finance

Statistics offered in B.Sc.(Hons) in

Economics

SEMESTER – I

STAT 101: Introductory Statistics

SEMESTER - II

STAT 201: Probability Theory and Distributions

SEMESTER – III

STAT 301: Statistical Inference

SEMESTER – IV

STAT 401: Applied Statistics

Department of Philosophy

SEMESTER-I

PHIL-101: Introduction to Indian Philosophy

SEMESTER-II

PHIL-201: Introduction to Western Philosophy

SEMESTER-III

PHIL-301: Twentieth Century Philosophers – Indian
and Western

SEMESTER-IV

PHIL-401: Western Logic (Formal and Symbolic)

SEMESTER-V

PHIL-501: The Philosophy of the Upanishads

PHIL-502: Major: Ethics – Normative and Applied

SEMESTER-VI

PHIL-601: General Psychology

PHIL-602: Major: Study of Classics – Eastern and
Western

Department of Political Science

SEMESTER –I

POL SCI – 101: Political Science: Elements of
Political Science

SEMESTER –II

POL SCI – 201: Political Science: Elements of
Government

SEMESTER –III

POL SCI – 301: Political Science: Modern
Governments-I

SEMESTER –IV

POL SCI – 401: Political Science: Modern
Governments-II

SEMESTER –V

POL SCI – 501: Political Science: Principles of
Public Administration

POL SCI – 502(A): Major: Political Science: Indian
Political Thought OR

POL SCI – 502(B): Major: Political Science: Western
Political Thought

SEMESTER-VI

POL SCI – 601: Political Science: Public Personnel Administration

POL SCI - 602: Major: Political Science: International Politics

Department of History and Indian Culture

SEMESTER-I

HIST-101:History: Ancient India - From the beginning to the end of the 3rd Century A.D.

SEMESTER-II

HIST-201: History : Ancient India (North India 600 A.D-1206 A.D and South India 600 A.D-1336A.D)

SEMESTER-III

HIST-301: History: History of Medieval India - (1206 A.D. to 1526 A.D.)

SEMESTER-IV

HIST-401: History: History of Medieval India (A.D. 1526 to 1761 A.D.)

SEMESTER-V

HIST-501: History: History of Modern India (from the Advent of the Europeans upto 1857 Revolt)

HIST-502: Major: History: Ancient Greek and Roman Civilisation

SEMESTER-VI

HIST-601: History: History of Modern India (From 1858 to 1950 AD)

HIST-602: Major: History: History of Modern World

Department of English Language & Literature

SEMESTER –I

OPT ENGL – 101: Optional English: Prose

SEMESTER –II

OPT ENGL – 201: Optional English: Poetry

SEMESTER –III

OPT ENGL – 301: Optional English: Drama

SEMESTER –IV

OPT ENGL – 401: Optional English: Novel

SEMESTER –V

OPT ENGL – 501: Optional English: Study of Literary Forms - Short Story and one-act play

OPT ENGL – 502: Major: Optional English: History of English Language

SEMESTER–VI

OPT ENGL – 601: Optional English: History of English Literature

OPT ENGL – 602: Major: Optional English: Literary Criticism

Three of the following subjects for doing B.Sc(Hons) is to be chosen by the students: Mathematics, Physics, Chemistry, Biosciences.

Department of Mathematics and Computer Science

SEMESTER-I

MATH 101: Multivariate Calculus

MATH 102: Linear Programming

SEMESTER-II

MATH 201: Elements of Real Analysis I

MATH 202: Vector Analysis

SEMESTER-III

MATH 301: Elements of Real Analysis II

MATH 302: Ordinary Differential Equations

SEMESTER-IV

MATH 401: Boundary Value Problems

MATH 402: Linear Algebra

SEMESTER-V

MATH 501: Discrete Mathematics

MATH 502: Algebraic Structures

MATH 503: Partial Differential Equations

MATH 504: Elective I

MATH 505: Elective II

MATH 506: Software Lab I

SEMESTER-VI

MATH 601: Complex Analysis

MATH 602: Numerical Analysis

MATH 603: Topology

MATH 604: Elective III

MATH 605: Elective IV

MATH 606: Software Lab II

List of Electives

Stream I (Pure Mathematics):

UPM-1: Geometry

UPM-2: Combinatorics

UPM-3: Elementary Number theory

UPM-4: Linear Transformations

Stream II (Applied Mathematics):

UAM-1: Graph Theory

UAM-2: Introduction to Fuzzy Sets

UAM-3: Difference equations

UAM-4: Biomathematics

UAM-5: Continuum Mechanics

UAM-6: Operations Research

UAM-7: Probability and Distributions

UAM-8: Introduction to Coding Theory

Stream III (Computer science):

- UCS-1: Introduction to Computer Science
UCS-2: Fundamentals of Computer Systems
UCS-3: Data Structures and Algorithms
UCS-4: Mathematical Logic for Computer Science

Department of Physics

SEMESTER-I

- PHY 101: Electronics I
PHYPRAC 102: Practical (Electronics)

SEMESTER-II

- PHY 201: Optics
PHYPRAC 202: Practical (Optics)

SEMESTER-III

- PHY 301: Classical Mechanics
PHYPRAC 302: Practical (Mechanics and Waves)

SEMESTER-IV

- PHY 401: Electromagnetism
PHYPRAC 402: Practical (Electromagnetism)

SEMESTER-V

- PHY 501: Mathematical Physics
PHY 502: Quantum Mechanics
PHY 503: Solid State Physics
PHY 504: Electronics II: Operational Amplifiers
PHY 505: Computational Techniques in Physics
PHYPRAC 506: Modern Physics Laboratory
PHYPRAC 507: Software Laboratory

SEMESTER-VI

- PHY 601: Mathematical Physics II
PHY 602: Nuclear Physics
PHY 603: Thermal & Statistical Physics
PHY 604: Elements of Atomic & Molecular Spectroscopy and Lasers
PHY 605: Microprocessors
PHYPRAC 606: Electronics & Microprocessor Laboratory
PHYPRAC 607 Project work

Department of Chemistry

SEMESTER-I

- CHEM 101: Theoretical Chemistry and Analytical Chemistry
CHEM PRAC 102: Laboratory course in Qualitative Inorganic Analysis

SEMESTER-II

- CHEM 201: Inorganic, Organic & Physical Chemistry-I
CHEM PRAC 202: Laboratory course in Quantitative Analysis

SEMESTER-III

- CHEM 301: Inorganic, Organic & Physical Chemistry-II
CHEM PRAC 302: Laboratory course in Organic Techniques

SEMESTER-IV

- CHEM 401 Inorganic, Organic & Physical Chemistry-III
CHEM PRAC 402 Laboratory course in Organic Analysis

SEMESTER-V

- CHEM 501: Analytical Chemistry & Nuclear Chemistry
CHEM 502: Physical Chemistry
CHEM 503: Dynamic aspects of Organic Chemistry
CHEM 504(E I): Chemistry of Biological Molecules
OR CHEM 504(E II): Theoretical Aspects of Spectroscopy
OR BIO SCI 503: (Inter Departmental Elective) Microbial Physiology and Genetics
CHEM PRAC 505: Laboratory course in Computer Applications in Chemistry
CHEM PRAC 506: Laboratory course in Physical Chemistry
CHEM PRAC 507: Laboratory course in Dynamic aspects Organic Chemistry
CHEM PRAC 508(E I): Laboratory course in Chemistry of Biological Molecules
OR CHEM PRAC 508(E II): Laboratory course in spectroscopy
OR BIOPRAC 508(E III): Laboratory course in Microbial Physiology and genetics

SEMESTER-VI

- CHEM 601: Spectroscopy
CHEM 602: Advanced Inorganic Chemistry
CHEM 603: Synthetic Organic Chemistry
CHEM 604 (E I): Industrial Chemistry and Environmental Chemistry
OR CHEM 604 (E II): Medicinal Chemistry
CHEM PRAC 605: Laboratory course in Computer Applications in Chemistry
CHEM PRAC 606: Laboratory course in Inorganic Chemistry
CHEM PRAC 607: Laboratory course in Synthetic Chemistry
CHEM PRAC 608(E1): Laboratory course in Industrial Chemistry and Environmental Chemistry
OR CHEM PRAC 608(E2): Laboratory course in Medicinal Chemistry

Department of Biosciences

SEMESTER-I

BIOSCI 101: Algae and Fungi
BIOSCI 102: Invertebrate
BIOPRAC 103: Practical Course on Algae & Fungi
BIOPRAC 104: Practical Course on Invertebrate

SEMESTER-II

BIOSCI 201: Bryophytes & Pteridophytes
BIOSCI 202: Chordata
BIOPRAC 203: Practical Course on Bryophytes & Pteridophytes
BIOPRAC 204: Practical Course on Chordata

SEMESTER-III

BIOSCI 301: Taxonomy and Economic importance of Angiosperms
BIOSCI 302: Embryology of Animals
BIOPRAC 303: Practical Course on Taxonomy & Economic importance of angiosperms
BIOPRAC 304: Practical Course on Embryology of Animals

SEMESTER-IV

BIOSCI 401: Biostatistics and Information Technology
BIOSCI 402: Bacteriology and Virology
BIOPRAC 403: Practical Course on Biostatistics and Information Technology
BIOPRAC 404: Practical Course on Bacteriology and Virology

SEMESTER-V

BIOSCI 501: Plant Physiology
BIOSCI 502: Animal Physiology
BIOSCI 503 CHEM 503: (IDE) Microbial Physiology and Genetics/Bio-Polymer Chemistry
BIOSCI 504: Cell Biology
BIOSCI 505: Anatomy and Embryology of seed Plants
BIOPRAC 506: Practical Course on Plant Physiology
BIOPRAC 507: Practical Course on Animal Physiology
BIOPRAC 508: Practical Course on Microbial Physiology & Genetics / Bio-Polymer Chemistry
BIOPRAC 509: Practical Course on BIOSCI 504 & BIOSCI 505

SEMESTER-VI

BIOSCI 601: Genetics and Evolution
BIOSCI 602: Environmental Biology
BIOSCI 603: Introductory Molecular Biology
BIOSCI 604: Biological Chemistry
BIOPRAC 606: Practical Course on BIOSCI 601 & BIOSCI 602

BIOPRAC 607: Practical Course on Introductory Molecular Biology
BIOPRAC 608: Practical Course on Biological Chemistry
BIOPRAC 609: Practical Course on Biotechnology

Department of Home Science

SEMESTER-I

HOME SCI 101: Personal Empowerment
HOME SCI 102: Applied Chemistry
HOME SCI PRAC 104
HOME SCI 103: Fiber to Fabric
HOME SCI PRAC 105

SEMESTER-II

HOME SCI 201: Applied Physics
HOME SCI PRAC 205
HOME SCI 202 Human Development
HOME SCI 203: Human Physiology
HOME SCI PRAC 206
HOME SCI 204: Clothing and Textile Designs
HOME SCI PRAC 208

SEMESTER-III

HOME SCI 301: Consumer Economics
HOME SCI 302: Microbiology
HOME SCI PRAC 305
HOME SCI 303: Introductory Foods
HOME SCI PRAC 306
HOME SCI 304: Home Science Extension Education
HOME SCI PRAC 307

SEMESTER-IV

HOME SCI 401: Bakery and Confectionary
HOME SCI PRAC 404
HOME SCI 402: Humanistic Psychology
HOME SCI 403: Nutritional Biochemistry
HOME SCI PRAC 405
HOME SCI PRAC 404: Computer Basics

SEMESTER-V

HOME SCI 501: Human Nutrition
HOME SCI PRAC 506
HOME SCI 502: Food Storage and Preservation
HOME SCI PRAC 507
HOME SCI 503: Family Resource Management
HOME SCI PRAC 508
HOME SCI 504: Clothing Construction
HOME SCI PRAC 509
HOME SCI 505: Community Nutrition
HOME SCI PRAC 510

SEMESTER-VI

HOME SCI 601: Food Processing and Technologies
HOME SCI PRAC 606
HOME SCI 602: Nutrition in Health

HOME SCI PRAC 607
HOME SCI 603: Dietetics
HOME SCI PRAC 608
HOME SCI 604: Housing and Interior Design
HOME SCI PRAC 609
HOME SCI 605: Nutrition in Emergencies and
Disasters

Department of Commerce

SEMESTER - I

COMM 101: Business Communication
COMM 102: Financial Accounting – I
COMM 103: Business Economics
COMM 104 : Introduction to Quantitative
Techniques (non-credit)

SEMESTER – II

COMM 201: Principles of Management
COMM 202: Financial Accounting – II
COMM 203: Economic Environment of Business
COMM 204: Quantitative Techniques – I

SEMESTER – III

COMM 301: Company Law
COMM 302: Corporate Accounting
COMM 303: International Business
COMM 304 : Quantitative Techniques – II

SEMESTER – IV

COMM 401: Business Statistics
COMM 402: Accounting for Financial Services
COMM 403: Elements of Costing
COMM 404: Computer Practicals – I: Computer
Theory and Accounting Package

SEMESTER – V

COMM 501: Elements of Income Tax
COMM 502: Banking Theory and Practice
COMM 503: Financial Management
COMM 504: Elective: Paper I*
COMM 505: Elective: Paper II*
COMM 506: Computer Practicals – II: Spreadsheet
Applications

SEMESTER – VI

COMM 601: Principles of Marketing
COMM 602: Commercial Law
COMM 603: Auditing
COMM 604: Elective: Paper III*
COMM 605: Elective: Paper IV*
COMM 606: Computer Practicals – III: Database
Applications (non-credit - Optional)

List of Electives

Semester V

E51) Foreign Trade Procedures
E52) Fundamentals of Insurance

E53) Methods of Costing
E54) Advanced Accountancy

Semester VI

E61) Management of International Business
E62) Regulation and Management of Insurance
E63) Management Accounting
E64) Investment Analysis

Note: Any two out of the four electives (mentioned
under semesters V & VI) have to be chosen in
the fifth and sixth semesters respectively.

Following are the Post Graduate Programmes offered:

M.A.(Economics)

SEMESTER - I

ECON – 701: Microeconomic Theory
ECON – 702: Macroeconomic Theory
ECON – 703: Statistical Methods
ECON – 704: Agricultural Economy of India
ECON – 705: Computer Applications In Economics
I : Introduction To IT And Economic
Analysis

AWR – 700: Awareness Course – I

SEMESTER - II

ECON – 801: Industrial Economy of India
ECON – 802: Public Economics
ECON – 803: Econometrics
ECON – 804: Ethics, Economy and Society
ECON – 805: Elective – I
ECON – 806: Computer Applications In Economics
II : Introduction to SPSS

AWR 800: Awareness Course – II

SEMESTER – III

ECON – 901: Monetary Theory and Policy
ECON – 902: Applied Econometrics
ECON – 903: Economic Institutions, Systems and
Theories
ECON – 904: Finance Theory
ECON – 905: Elective Course – II
ECON – 906: Computer Applications in Economics
III: Econometric Modelling using E - Views
AWR 900: Awareness Course – III

SEMESTER - IV

ECON – 1001: Indian Economy: Contemporary
Issues and Policies
ECON – 1002: International Economics and
Finance
ECON – 1003: Elective Course – III
ECON – 1004: Elective Course – IV
ECON – 1005: Dissertation

ECON – 1006: Computer Applications In

Economics IV: Advanced SPSS

AWR 1000: Awareness Course – IV

List of Electives

- 1) Environmental Economics
- 2) Economics of Education
- 3) Labour Economics
- 4) Energy & Resource Economics
- 5) Economic Regulation & Legal System
- 6) Time Series Modeling
- 7) Forecasting Methods for Business & Economics
- 8) Stochastic Process
- 9) Structural Modeling for Policy analysis
- 10) Theory of Statistics
- 11) Topics in Microeconomic Theory
- 12) Topics in Macroeconomic Theory
- 13) Modeling Financial Markets
- 14) Topics in Mathematical Finance
- 15) Economics of Health
- 16) Water Resources Management
- 17) Actuarial Studies

M.A.(English Language & Literature)

SEMESTER-I

ENGL – 701: English Literature : Chaucer and 1550-1660

ENGL – 702: Shakespeare

ENGL – 703: English Literature : 1660-1789

ENGL – 704: English Literature : 1789-1830

AWR – 700: Awareness Course – I

SEMESTER-II

ENGL – 801: English Literature : 1830 – 1900

ENGL – 802: English Literature : 20TH Century

ENGL – 803: Indian Writing in English

ENGL – 804: Commonwealth Literature

AWR – 800: Awareness Course – II

SEMESTER-III

ENGL – 901: American Literature

ENGL – 902: Literary Criticism

ENGL – 903: Structure of Modern English – I: (Elements of Linguistics and Phonetics)

ENGL – 904: Structure of Modern English – II: (Grammar)

AWR – 900: Awareness Course – III

SEMESTER-IV

ENGL – 1001: English for the Media

ENGL – 1002: To be chosen out of two**

ENGL – 1003: To be chosen out of two**

ENGL – 1004: Dissertation/Open Course : World Drama

AWR – 1000: Awareness Course – IV

Elective-I**:

Course A: Comparative Literature

Course B: European Classics in Translation (Drama & Novel)

Elective-II**:

Course A: Women's studies (Drama and Fiction)

Course B : Teaching of English as a second language

M.A.(Telugu Language & Literature)

SEMESTER-I

TEL 701: Itihasa & Purana

TEL 702: General Linguistics

TEL 703: History of Literature - II

TEL 704: Grammar and Prosody

AWR 700: Awareness Course-I

SEMESTER-II

TEL 801: Drama-II

TEL 802: Modern Fiction

TEL 803: History of Literature-III

TEL 804: Grammar and Poetics

AWR 800: Awareness Course-II

SEMESTER-III

TEL 901: Comparative Dravidian

TEL 902: Philology

TEL 903: Sanskrit Drama and Grammar

TEL 904: Literary Criticism

AWR 900: Awareness Course-III

SEMESTER-IV

TEL 1001: Evolution of Prose in Telugu Literature

TEL 1002: Sanskrit Prose, Poetry and Grammar

TEL 1003: Trends in Modern Telugu Poetry

TEL 1004: South Indian Literature

AWR 1000: Awareness Course-IV

M.Sc.(Mathematics)

with specialization in 1) Pure Mathematics,
2) Applied Mathematics and
3) Computer Science

SEMESTER-I

MATH 701: Advanced Real Analysis

MATH 702: Advanced Algebra

MATH 703: Techniques in Applied Mathematics

MATH 704: Elective - 1

MATH 705: Elective - 2

MATH 706: Software Lab I
 AWR 700: Awareness Course - I
SEMESTER-II
 MATH 801: Measure Theory
 MATH 802: Functional Analysis
 MATH 803: Numerical Linear Algebra
 MATH 804: Elective - 3
 MATH 805: Elective - 4

MATH 806: Software Lab II
 AWR 800: Awareness Course - II

SEMESTER-III
 MATH 901: Theory of Ordinary Differential Equations

MATH 902: Probability Theory
 MATH 903: Differential Geometry
 MATH 904: Elective - 5
 MATH 905: Elective - 6
 MATH 906: Software Lab III
 AWR 900: Awareness Course - III

SEMESTER-IV
 MATH 1001: Mathematical Modelling
 MATH 1002: Optimization Techniques
 MATH 1003: Theory Of Statistics
 MATH 1004: Elective - 7
 MATH 1005: Elective - 8
 MATH 1006: Software Lab IV
 AWR 1000: Awareness Course – IV

Notes:

1. In lieu of MATH 1004 and MATH 1005 a dissertation (for 6 credits) could be taken by a candidate.
2. Students taking 5 Electives from one particular stream will be entitled to specialization in that stream. If the number of papers chosen by the candidate is in different specializations and not 5 from one particular stream that candidate will be given only M.Sc.(Mathematics) with no specialization mentioned therein.
3. The choice of electives is at the discretion of The Head of the Department.

List of Electives

Stream I: PURE MATHEMATICS

PM 1 Algebraic Topology
 PM 2 Boolean Algebras
 PM 3 Category Theory
 PM 4 Differentiable Manifolds
 PM 5 Fuzzy Mathematics
 PM 6 Sobolev Spaces and Sobolev Functions
 PM 7 Theory of PDE
 PM 8 Dynamical Systems

PM 9 Spectral Theory of Linear Operators
 PM 10 Wavelet Analysis
 PM 11 Time scale
 PM 12 Integral Equations
 PM 13 Control Theory
 PM 14 Functional Analytic Methods in Partial Differential Equations

Stream II: APPLIED MATHEMATICS

AM 1 Topics in Special Functions
 AM 2 Calculus of variations and Mechanics
 AM 3 Numerical Solutions of Partial Differential Equations
 AM 4 Fluid Dynamics
 AM 5 Advanced Fluid Dynamics
 AM 6 Computational Fluid Dynamics
 AM 7 Bio-fluid Dynamics
 AM 8 Finite Element Methods
 AM 9 Finance Theory
 AM 10 Foundations of Fuzzy Systems
 AM 11 Wavelets & Wavelet Transforms
 AM 12 Time scale
 AM 13 Integral Equations
 AM 14 Control Theory
 AM 15 Dynamical Systems
 AM 16 Numerical Analysis of Partial Differential Equations
 AM 17 Decision Analysis: Bayesian Approach
 AM 18 Decision Theory: Utility Approach
 AM 19 Game Theory
 AM 20 Multi-criteria Decision Making
 AM 21 Introduction To Simulation
 AM 22 Mathematical Biology
 AM 23 Bioinformatics
 AM 24 Computational Bioinformatics (IDE)**
 AM 25 Structural Bioinformatics (IDE)**

Stream III: COMPUTER SCIENCE

CS 1 Artificial Intelligence
 CS 2 Computer Networks
 CS 3 Computer Organization and Architecture
 CS 4 Database Systems
 CS 5 Computer Graphics
 CS 6 Systems Programming
 CS 7 Formal Languages
 CS 8 Pattern Recognition
 CS 9 Signals And Linear Systems
 CS 10 Cryptography
 CS 11 Digital Systems
 CS 12 Microprocessors and Microcontrollers
 CS 13 A First Course in Embedded Computing

Note: ** IDE: Inter-Departmental Electives

**M.Sc.(Physics) with specialization in
a) Photonics, b) Nuclear Physics and c) Electronics**

SEMESTER – I

PHY 701: Classical Mechanics
PHY 702: Mathematical Physics
PHY 703: Classical Electro Dynamics
PHY 704: Quantum Mechanics - I
PHYPRAC 705: General Physics Laboratory
PHYPRAC 706: Software Laboratory - I
AWR 700 Awareness Course - I

SEMESTER – II

PHY 801: Statistical Physics
PHY 802: Nuclear and Particles Physics
PHY 803: Condensed Matter Physics
PHY 804: Applied Optics
PHYPRAC 805: General Physics Laboratory
PHYPRAC 806: Software Laboratory - II
AWR 800 Awareness Course - II

SEMESTER – III

PHY 901: Quantum Mechanics - II & Molecular Spectroscopy
PHY 902: Elective – I
PHY 903(A): Photonics - I: Physics of Lasers and Laser Applications
PHY 903(B): Nuclear Physics - I: Nuclear Spectroscopy
PHY 903(C): Electronics I: Micro Electronics
PHY 904(A): Photonics - II: Fiber Optics
PHY 904(B): Nuclear Physics - II: Nuclear Reactions
PHY 904(C): Electronics - II: Digital Systems
PHYPRAC 905: Special Laboratory
PHYPRAC 906: Software Laboratory - III
AWR 900 Awareness Course - III

SEMESTER – IV

PHY 1001: Electronic Devices
PHY 1002: Elective - II
PHY 1003(A): Photonics - III: Non Linear
PHY 1003(B): Nuclear Physics - III: Accelerator & Reactor Physics
PHY 1003(C): Electronics - III: Microprocessors, Microcontrollers and Embedded Systems
PHY 1004(A): Photonics - IV: Optical Fiber Communications
PHY 1004(B): Nuclear Physics - IV: Nuclear Techniques
PHY 1004(C): Electronics - IV: Electronic Communications
PHY 1005 Project Work
AWR 1000 Awareness Course - IV

List of Electives

PHY EL1: Artificial Intelligence
PHY EL2: Computer Networks
PHY EL3: Computer Organization and Architecture

PHY EL4: Data Base Systems
PHY EL5: Signals and Linear Systems
PHY EL6: Introduction to Simulation:
PHY EL7: Advanced Computational Techniques in Physics
PHY EL8: Nanosciences & Nanotechnology - I
PHY EL9: Nanosciences & Nanotechnology - II
PHY E10: (BIOSCI 1002 IDE) Biomolecular structure and function (Interdepartmental Elective)

M.Sc.(Nanoscience and Nanotechnology)

SEMESTER - I:

NANO 701: Introduction to Nanoscience
NANO 702: Mathematical Methods for Nanoscience
NANO 703 (CHEM 701(i)): Quantum Chemistry and Group Theory
NANO 704: Elective I
NANO LAB 705: Nanoscience Laboratory I
NANO LAB 706: Computational Nanoscience laboratory
NANO 707: Term Seminar
NANO 708: Viva Voce
NANO 709(PHY 701) + Classical Mechanics (Non-Credit)
NANO 709(CHEM 703) † Coordination Chemistry (Non-Credit)
NANO 709(BIOSCI 703) § Molecular Systematics and Plant Taxonomy (Non-Credit)
AWR 700 Awareness Course - I

SEMESTER - II:

NANO 801: Nanomaterials: Characterization and Properties
NANO 802 (BIOSCI 804): Bio-Chemistry
NANO 803: Biophysics
NANO 804: Elective II
NANO LAB 805: Nanoscience Laboratory II
NANO LAB 806: Nanoscience Laboratory III
NANO 807: Term Seminar
NANO 808: Viva Voce
NANO 809(PHY 803)+: Condensed Matter Physics (Non-Credit)
NANO 809(CHEM 802)†: Chemical Kinetics and Surface Chemistry (Non-Credit)
NANO 809(BIOSCI 803)§: Plant Resource Utilization and Conservation (Non-Credit)
AWR 800: Awareness Course - II

SEMESTER - III:

NANO 901: Nanotechnology: Applications and Devices
NANO 902: Elective III

NANO 903: Elective IV
 NANO 904: Term Seminar
 NANO 905: Viva Voce
 NANO 906(PHY 703)+: Classical Electrodynamics
 (Non-Credit)
 NANO 906(CHEM 903)† : Synthetic Organic
 Chemistry (Non-Credit)
 NANO 906(BIOSCI 901)\$: Molecular Biology
 (Non-Credit)
 NANO 1004: Project Work (Review) (Non-Credit)
 AWR 900: Awareness Course - III

SEMESTER - IV:

NANO 1001: Mesoscopic Physics
 NANO 1002: Elective V
 NANO 1003: Elective VI
 NANO 1004: Project Work
 NANO 1005: Term Seminar
 NANO 1006: Viva Voce
 NANO 1007(PHY 801)+: Statistical Physics (Non-
 Credit)
 NANO 1007(CHEM 1002)†: Special Topics from
 Bio-Organic Chemistry (Non-Credit)
 NANO 1007(BIOSCI 1001)\$: Immunology (Non-
 Credit)
 AWR 1000: Awareness Course - IV

+ This paper would be taken by B.Sc. (Phy) students
 (Non Credit Course)

† This paper would be taken by B.Sc (Chem)
 students (Non Credit Course)

\$ This paper would be taken by B.Sc. (Bioscience)
 students (Non Credit Course)

List of Electives

NANO EL1: Nanoelectronics
 NANO EL2: Nanophotonics
 NANO EL3: Nanobiotechnology
 NANO EL4: Bio-medical Applications of
 Nanomaterials
 NANO EL5: Nanomaterials and composites
 NANO EL6: Nanomagnetic Materials
 NANO EL7: Computational Nanoscience
 NANO EL8: Advanced Course in Nanomaterials
 NANO EL9: Surface Science with Nanomaterials
 NANO EL10: Quantum Mesoscopic Structures
 NANO EL11: Advances in Soft Condensed Matter
 NANO EL12: Physics and technology of thin films
 NANO EL13: Quantum Transport
 NANO EL14: Semiconductor nanostructures for
 Optoelectronics

NANO EL15: Sociological and Ethical Issues in
 Nanotechnology
 NANO EL-16: BIOSCI 1002 (IDE) Biomolecular
 structure and function

M.Sc.(Chemistry)

SEMESTER-I

CHEM 701(i): Quantum Chemistry and Group
 Theory
 CHEM 701(ii): Mathematics for Chemistry (Non
 Credit Course)
 CHEM 702: Analytical Chemistry
 CHEM 703: Coordination Chemistry
 CHEM 704: Advanced aspects of Organic structure
 and Stereochemistry
 CHEM PRAC 705: Practicals: Coordination
 Chemistry (Preparation & Analysis)
 CHEM PRAC 706: Practicals: Analytical Chemistry
 (Conductometry, Potentiometry, Voltammetry)
 CHEM PRAC 707: Practicals: Organic Qualitative
 Analysis (mixture analysis & drug analysis)
 AWR 700: Awareness Course - I

SEMESTER-II

CHEM 801: Structural Inorganic and Bio-Inorganic
 Chemistry.
 CHEM 802: Chemical Kinetics and Surface
 chemistry
 CHEM 803: Thermodynamics and Electrochemistry
 CHEM 804: Physical and Mechanistic aspects of
 Organic Chemistry
 CHEM PRAC 805: Practicals: Inorganic Chemistry
 CHEM PRAC 806: Practicals: Chemical Kinetics and
 Electro chemistry
 CHEM PRAC 807: Practicals: Synthetic Organic
 Chemistry
 AWR 800: Awareness Course - II

SEMESTER-III

CHEM 901: Organometallic Chemistry
 CHEM 902: Polymer Chemistry and Special Topics
 from Physical Chemistry
 CHEM 903: Synthetic Organic Chemistry
 CHEM 904: Elective – 1
 CHEM PRAC 905: Practicals: Inorganic Chemistry
 CHEM PRAC 906: Practicals: Computer
 Applications
 CHEM PRAC 907: Practicals: Organic Synthesis
 (multistep) and Spectral analysis
 For students opting for projects:
 CHEMPRAC 905(a): Computational chemistry and
 Integrated Experiments-I

CHEMPRAC 906(a): Project work-Part I
AWR 900: Awareness Course - III

SEMESTER-IV

CHEM 1001: Solid State Chemistry and Nano Materials
CHEM 1002 Special Topics from Bio-organic Chemistry
CHEM 1003: Medicinal Chemistry
CHEM 1004: Elective – 2 (Inter-departmental Electives)
CHEM 1005: Elective – 3 (Inter-departmental Electives)
CHEM PRAC 1006: Practicals: Inorganic Chemistry
CHEM PRAC 1007: Practicals: Solid State Chemistry and Polymers
CHEM PRAC 1008: Practicals: Organic Chemistry
For students opting for projects:
CHEMPRAC 1006(a): Computational chemistry and Integrated Experiments-II
CHEMPRAC 1007(a): Project work-Part II
AWR 1000: Awareness Course - IV

Elective Papers in the III and IV Semesters

III SEMESTER (Choose any ONE paper from the following Interdepartmental electives) :

ELECTIVE – 1: (Interdepartmental elective)
CHEM 904: Theory and Application of Physical Methods in Chemistry
PHY 902: Nanoscience and Nanotechnology I: Synthesis and Characterization of Materials

IV SEMESTER (Choose any ONE paper from each of the Electives listed below) :

ELECTIVE – 2: (Interdepartmental elective)
CHEM 1004: Environmental Chemistry
BIO SCI1002: Environmental Biotechnology
ELECTIVE – 3: (Interdepartmental elective)
CHEM 1005 (i): Biocatalysis for Industry, Medicine and Environment
CHEM 1005 (ii): Organic Chemistry of Natural Products
BIO SCI 1001: Immunology
PHY1002: Nanoscience and Nanotechnology II: Applications

NOTE: The students of the department during their third and fourth semesters may choose one elective in the Third semester and two electives (one each from Electives - 2 & 3) in the Fourth semester out of the elective courses listed above, under the guidance and the recommendation of the Head of the Department.

M.Sc. (Biosciences)

SEMESTER-I

BIO SCI 701: Molecular Cell Biology
BIO SCI 702 (ELECTIVE): A) Molecular Evolution & Systematic Zoology/ B) Genetic Engineering
BIO SCI 703: Molecular Systematics & Plant Taxonomy
BIO SCI 704: Morphology & Phylogeny of Plants
BIOPRAC 705: Practical I
BIOPRAC 706: Practical II
AWR 700: Awareness Course - I

SEMESTER-II

BIO SCI 801 (IDE): (i) Instrumentation techniques and Bioinformatics; (ii) CHEM 801: Structural and Bio-inorganic Chemistry
BIO SCI 802: Molecular Developmental Biology
BIO SCI 803: Plant Resource Utilization and Conservation
BIO SCI 804: Biochemistry
BIOPRAC 805: Practical III
BIOPRAC 806: Practical IV
AWR 800: Awareness Course - II

SEMESTER-III

BIO SCI 901: Molecular Biology
BIO SCI 902: Cytogenetics and Plant Breeding
BIO SCI 903 (Elective): A) Mycology, Pathology and Fungal Biotechnology, B) Advanced Mycology
BIO SCI 904 (Elective): A) Molecular Evolution & Human Genetics, B) Pathology
BIOPRAC 905: Practical V
BIOPRAC 906: Practical VI
AWR 900: Awareness Course - III

SEMESTER-IV

BIO SCI 1001 (IDE): Immunology/ CHEM 1001 Bio catalysis
BIO SCI 1002 (IDE): Environmental Biotechnology/
CHEM 1002: Environmental Chemistry
BIO SCI 1003: (Elective)
A-I) Microbial Biotechnology
A-II) HomSci 1003: Horticultural products technology (IDE)
B) Medical Mycology
BIO SCI 1004 (ELECTIVE)
A-I) Plant Biotechnology
A-II) Biotechnology of Secondary Metabolites
B) VAM Fungi

BIOPRAC 1005 Practical VII
BIOPRAC 1006 Practical VIII
AWR 1000: Awareness Course - IV
Note: Students can choose either A/B elective courses for a corresponding specialisation namely Biotechnology / Mycology & Plant Pathology respectively.

**M.Sc. (Food Technology) and
M.Sc.(Food Science and Nutrition)**

Common for M.Sc. (Food Technology) and
M.Sc.(Food Science and Nutrition) - First year:

SEMESTER-I

HOME SCI 701: Concepts in Food Science & Technology
HOME SCI PRAC 705
HOME SCI 702: Advanced Nutritional Biochemistry
HOME SCI PRAC 706
HOME SCI 703: Research Methodology & Applied Statistics
HOME SCI PRAC 707
HOME SCI 704: Food Microbiology
HOME SCI PRAC 708
AWR 700 Awareness Course - I

SEMESTER-II

HOME SCI 801: Design & Formulation of Foods
HOME SCI PRAC 805
HOME SCI 802: Food Chemistry
HOME SCI: PRAC 806
HOME SCI 803: Instrumentation Techniques
HOME SCI PRAC 807
HOME SCI 804: Food Standard & Quality Management
HOME SCI PRAC 808
AWR 800: Awareness Course - II

**Second Year:
Specialization in Food Technology:**

SEMESTER-III

HOME SCI 901 (FT): Food Grain & Oil Technology
HOME SCI PRAC 905 (FT)
HOME SCI 902 (FT): Dairy Technology
HOME SCI PRAC 906 (FT)
HOME SCI 903 (FT): Packaging Technology
HOME SCI PRAC 907 (FT)
HOME SCI 904 (FT): Entrepreneurship & Food Plant Management
HOME SCI PRAC 908 (FT): Experimental Methods
AWR 900: Awareness Course - III

SEMESTER-IV

HOME SCI 1001 (FT): Food Processing Unit Operation
HOME SCI 1002 (FT): Sensory Evaluation
HOME SCI PRAC 1005 (FT)
HOME SCI 1003 (FT): Horticultural Products Technology
HOME SCI PRAC 1006 (FT)
HOME SCI 1004 (FT): Dissertation Project
HOME SCI 1007: Comprehensive and Dissertation Viva-voce
AWR 1000: Awareness Course - IV
NOTE: The particular stream of specialization for the students will be decided by the HOD at the end of second semester.

Specialization in Food Science and Nutrition:

SEMESTER-III

HOME SCI 901 (FSN): Macro Nutrients
HOME SCI PRAC 905 (FSN)
HOME SCI 902 (FSN): Maternal and Child Nutrition
HOME SCI PRAC 906 (FSN)
HOME SCI 903 (FSN): Diet Engineering
HOME SCI PRAC 907 (FSN)
HOME SCI PRAC 904 (FSN): Clinical Biochemistry
HOME SCI PRAC 908 (FSN): Experimental Methods
AWR 900 Awareness Course - III

SEMESTER-IV

HOME SCI 1001 (FSN): Micro Nutrients
HOME SCI PRAC 1005 (FSN)
HOME SCI 1002 (FSN): Public Nutrition
HOME SCI PRAC 1006 (FSN)
HOME SCI 1003 (FSN): Toxic Constituents of Foods
HOME SCI 1004 (FSN): Dissertation Project
HOME SCI 1007: Comprehensive and Dissertation viva-voce
AWR 1000: Awareness Course - IV

B.Ed.

SEMESTER-I

EDN – 101: Teacher and Education in emerging Indian Society
EDN – 102: Psychological Foundations of Education
EDN – 103: Technology of Teaching and Learning
EDN – 104: Educational Evaluation and Elementary Statistics

EDN – 105: Methods of Teaching – I
(Any one of the following)
105(1.a.1): Teaching of English
105(1.a.2): Teaching of Mathematics
105(1.a.3): Teaching of Chemistry
105(1.a.4): Teaching of Physical Sciences
EDN – 106: Methods of Teaching – II
(Any one of the following)
(1.b.1): Teaching of History
(1.b.2): Teaching of Civics
(1.b.3): Teaching of Geography
(1.b.4): Teaching of Economics
(1.b.5): Teaching of Social Studies
(1.c.1): Teaching of Physics
(1.c.2): Teaching of Biology
(1.c.3): Teaching of Biological Sciences
EDN – 107: Students Practice Teaching
EDN – 108: Sessional Work (Experiments and tests
in Psychology)
EDN – 109: Information and Communication
Technology

SEMESTER-II

EDN – 201: School Administration Supervision and
Management
EDN – 202: Broad Trends in Indian Education
EDN – 203: Education in Human Values
EDN – 204: Electives
(Any one of the following)
(3.a.1): Moral and Spiritual Education
(3.a.2): Early Childhood Education
(3.a.3): Education for Home Making
(3.a.4): Audio-Visual Education
(3.a.5): School Library Organization
(3.a.6): Co-curricular Activities in Schools
(3.a.7): Guidance and Counselling
EDN – 205: Methods of Teaching – I
(Any one of the following)
(1.a.1): Teaching of English
(1.a.2): Teaching of Mathematics
(1.a.3): Teaching of Chemistry
(1.a.4): Teaching of Physical Sciences
EDN – 206: Methods of Teaching – II
(Any one of the following)
(1.b.1): Teaching of History
(1.b.2): Teaching of Civics
(1.b.3): Teaching of Geography
(1.b.4): Teaching of Economics
(1.b.5): Teaching of Social Studies
(1.c.1): Teaching of Physics
(1.c.2): Teaching of Biology
(1.c.3): Teaching of Biological Sciences

EDN – 207: Student Practice Teaching
EDN – 208: (2.1 – 2.11) Work Experience (OR
Socially Useful Productive Work)
(Any one of the following)
(2.1) Kitchen Gardening
(2.2) Applied Fine Arts
(2.3) Paper-Craft
(2.4) Knitting and Embroidery
(2.5) Electrical Repairing
(2.6) Elementary Electronics
(2.7) Office Management
(2.8) Food Preservation
(2.9) Music
(2.10) Type-Writing
(2.11) Handicrafts
EDN – 209: Community Work

Following are the Professional Programmes offered:

M.B.A.

SEMESTER-I

MGT-101: Self Development
MGT-102: Values - Based Management
MGT-103: Financial & Cost Accounting
MGT-104: Financial Management
MGT-105: Quantitative Methods
MGT-106: Marketing Management
MGT-107: Computer Applications – I
AWR 100N: Awareness Course - I (Non-Credit)

SEMESTER-II

MGT-201: Human Resources Management
MGT-202: Economics for Decision making
MGT-203: Research Methodology
MGT-204: Management Accounting
MGT-205: Management Science
MGT-206: Communication Skills
MGT-207: Computer Applications – II
MGT-208: Internal Viva-Voce
AWR 200N: Awareness Course - II (Non-Credit)

SEMESTER-III

MGT-301: Total Quality Management
MGT-302: Production & Operations Management
MGT-303: Business Laws
MGT-304: Management Information and Decision
Support Systems
MGT-305: Elective – I
MGT-306: Elective – II
MGT-307: Elective – III
MGT-308: Computer Applications – III
AWR 300N: Awareness Course - III (Non-Credit)



SEMESTER-IV

- MGT-401: Values - Based Leadership
MGT-402: Strategic Management
MGT-403: National Perspectives and Rural Development
MGT-404: Group Dynamics & Team Building
MGT-405: Elective – IV
MGT-406: Elective – V
MGT-407: Elective – VI
MGT-408: Computer Applications – IV
MGT-409: Comprehensive Viva-Voce
MGT-410: Project
AWR 400N: Awareness Course - IV (Non-Credit)

List of Electives for MBA

GENERAL MANAGEMENT:

1. Business Ethics
2. Corporate Governance
3. Diagnostics
4. Entrepreneur Development
5. Frontiers in Management and Management Thought
6. Managing in the Information Age
7. Managing Innovation
8. Reengineering

FINANCE:

1. Advanced Computational Finance
2. Advanced Financial Derivatives
3. Alternative Investments
4. Bank Management
5. Computational Finance
6. Corporate Banking
7. Corporate Financial Strategy
8. Corporate Taxation
9. Enterprise Risk Management
10. Financial Theory
11. Financial Derivatives
12. Financial Markets and Institutions
13. Financial Reporting and Analysis
14. Financial Services
15. Fixed Income Securities
16. Forecasting Methods for Business & Economics
17. Insurance and Risk Management
18. Insurance for Corporate
19. Insurance for Retail
20. Investment Strategies
21. Investment Valuation
22. Legal Aspects of Insurance Management
23. Legal Aspects of Life Assurance
24. Management of Bank Portfolio Risk

25. Management of Global Financial Resources
26. Mergers and Acquisitions
27. Modeling Financial Markets
28. Personal Financial Planning
29. Portfolio Management and Asset Planning
30. Project Financing and Control
31. Retail Banking
32. Risk Management in Banks
33. Rural Finance
34. Short Term Financial Management
35. Underwriting and Actuarial Applications

HUMAN RESOURCES MANAGEMENT:

1. Career Management and Competency Mapping
2. Employee Administration
3. Employee Empowerment
4. Employee Welfare
5. Employee Relations
6. Organization Development & Transformation
7. Performance Management
8. Personnel Counseling
9. Quality of Working Life
10. Training & Development
11. Transactional Analysis
12. Wages and Salary Administration
13. Negotiation Skills

INTERNATIONAL BUSINESS:

1. Cross-Cultural Management
2. Global Outsourcing
3. International Accounting
4. International Economics and Finance
5. International Financial Management
6. International Human Resource Management
7. International Marketing
8. World Class Manufacturing

MARKETING:

1. Advertising and Promotion Management
2. Brand Management
3. Consumer Behaviour
4. Industrial Marketing
5. Marketing Channels
6. Marketing Financial Services
7. Marketing Research
8. Marketing Strategy
9. New Product Management
10. Relationship Marketing
11. Rural Marketing
12. Sales Management
13. Services Marketing

PRODUCTION:

1. Advanced Operations Research Applications
2. Industrial Engineering
3. Management of Technology and Innovation
4. Production Planning & Control
5. Project Management
6. Statistical Quality Control
7. Supply Chain Management

SYSTEMS:

1. Artificial Intelligence
2. Computer Organization and Architecture
3. Customer Relationship Management
4. Database Management Systems
5. Data Communications and Networks
6. Data Mining Applications
7. Decision Support and Expert Systems
8. E-Commerce
9. IT Project Management
10. Geospatial Information Systems
11. Knowledge Management
12. Operating Systems
13. Software Engineering
14. Systems Analysis and Design

M.B.A.(Finance)

SEMESTER-I

- MBF-101: Self Development
MBF-102: Values - Based Management
MBF-103: Financial Applications Lab
MBF-104: Financial Management
MBF-105: Quantitative Methods
MBF-106: Marketing Management
MBF-107: Computer Applications – I
AWR 100N: Awareness Course - I (Non-Credit)

SEMESTER-II

- MBF-201: Human Resources Management
MBF-202: Financial Markets & Institutions
MBF-203: Research Methodology
MBF-204: Management Accounting
MBF-205: Management Science
MBF-206: Communication Skills
MBF-207: Computer Applications – II
MBF-208: Internal Viva-Voce
AWR 200N: Awareness Course - II (Non-Credit)

SEMESTER-III

- MBF-301: Financial Derivatives
MBF-302: Operations Management-Financial Services
MBF-303: Corporate & Tax Laws
MBF-304: Management Control & Decision Systems
MBF-305: Elective – I
MBF-306: Elective – II
MBF-307: Elective – III
MBF-308: Computer Applications – III
AWR 300N: Awareness Course - III (Non-Credit)

SEMESTER-IV

- MBF-401: Values - Based Leadership
MBF-402: Corporate Financial Strategy
MBF-403: National Perspectives and Rural Development
MBF- 404: Group Dynamics & Team Building
MBF-405; Elective – IV
MBF-406: Elective – V
MBF-407: Elective – VI
MBF-408 : Computer Applications – IV
MBF-409 : Comprehensive Viva-Voce
MBF-410 : Project
AWR 400N: Awareness Course - IV (Non-Credit)

List of Electives for MBA(Finance)

FINANCE:

1. Advanced Computational Finance
2. Advanced Financial Derivatives
3. Alternative Investments
4. Bank Management
5. Computational Finance
6. Corporate Banking
7. Corporate Taxation
8. Enterprise Risk Management
9. Finance Theory
10. Financial Reporting and Analysis
11. Financial Services
12. Fixed Income Securities
13. Forecasting Methods for Business Economics
14. Insurance and Risk Management
15. Insurance for Corporate
16. Insurance for Retail
17. International Accounting
18. International Economics and Finance
19. International Financial Management

20. Investment Strategies
21. Investment Valuation
22. Legal Aspects of Insurance Management
23. Legal Aspects of Life Assurance
24. Management of Bank Portfolio Risk
25. Management of Global Financial Resources
26. Mergers and Acquisitions
27. Modeling Financial Markets
28. Personal Financial Planning
29. Portfolio Management and Asset Planning
30. Project Financing and Control
31. Retail Banking
32. Risk Management in Banks
33. Rural Finance
34. Short Term Financial Management
35. Underwriting and Actuarial Applications

OTHER FUNCTIONAL AREAS :

1. Business Ethics
2. Corporate Governance
3. Customer Relationship Management
4. Data Mining Applications
5. Diagnostics
6. E-Commerce
7. Entrepreneur Development
8. Frontiers of Corporate Management Thought
9. Knowledge Management
10. Managing in the Information Age
11. Managing Innovation
12. Marketing Financial Services
13. Marketing Research
14. Reengineering
15. Relationship Marketing
16. Services Marketing
17. Total Quality Management

M.Tech.(Applied Optics)

SEMESTER-I

- MTO 1101: Digital Communication and Information System
- MTO 1102: Nonlinear Optics
- MTO 1103: Elective I (Core)
- MTO 1104: Elective II (Open)
- MTO 1105: Non Linear Optics Lab
- MTO 1106: Software Lab-I
- MTO 1107: Comprehensive Viva Voce
- AWR-1100N: Awareness Course - 1 (Non-Credit)

SEMESTER-II

- MTO 1201: Fiber Optics & Optical Communication Systems

- MTO 1202: Optical Electronics
- MTO 1203: Elective III (core)
- MTO 1204: Elective IV (open)
- MTO 1205: Fiber Optics Lab
- MTO 1206: Software Lab-II
- MTO 1207: Comprehensive Viva Voce
- AWR-1200N: Awareness Course - II (Non-Credit)

SEMESTER-III

- MTO 1301 Elective V (core)
- MTO 1302 Elective VI (Open)
- AWR-1300N: Awareness Course - III (Non-Credit)

SEMESTER-IV

- CS1401: Project Work
- CS1402: Project Viva Voce
- AWR-1400N: Awareness Course - IV (Non-Credit)

List of Core and Open Electives

Core Electives:

1. Photonic Switching and Networking
2. Guided Wave Optical Component and Devices
3. Optoelectronic Instrumentation
4. Integrated Optics
5. Statistical and Quantum Optics
6. Broadband Communication and Information Systems
7. Fourier Optics and Optical Engineering

Open Electives:

1. Microwave Engineering and Antenna Theory:
2. Introduction to Internet Engineering
3. Network Security and Management
4. Digital Image Processing
5. Telecom Networking
6. Digital Signal Processing
7. Optical Computing
8. Wireless Communications
9. Telecommunication Technologies Geospatial Information Systems

M.Tech.(Computer Science)

SEMESTER-I

- CS1101: Theory Of Computation
- CS1102: Design and of Algorithms
- CS1103: Modern Operating Systems



CS1104: Software Engineering
CS1105: Elective I
CS1106: Software Lab I
CS1107: Software Lab II
CS1108: Seminar and Viva Voce
CS1109: Colloquium
AWR-1100N: Awareness Course - I (Non-Credit)

SEMESTER-II

CS1201: Distributed Systems
CS1202: Parallel Processing
CS1203: Elective II
CS1204: Elective III
CS1205: Elective IV
CS1206: Software Lab III
CS1207: Software Lab IV
CS1208: Seminar and Viva Voce
CS1209: Colloquium
AWR-1200N: Awareness Course - II (Non-Credit)

SEMESTER-III

CS1301: Elective V
CS1302: Elective VI
CS1303: Comprehensive Viva-Voce
AWR-1300N: Awareness Course - III (Non-Credit)

SEMESTER-IV

CS1401: Project Work
CS1402: Project Viva Voce
AWR-1400N: Awareness Course - IV (Non-Credit)

List of Electives

STREAM-I: ARTIFICIAL INTELLIGENCE

AI 1: Advanced Artificial Intelligence
AI 2: Automated Reasoning
AI 3: Genetic Algorithms
AI 4: Knowledge Engineering and Expert Systems
AI 5: Natural Language Processing
AI 6: Neural Networks
AI 7: Agent Based Intelligent Systems
AI 8: DNA Computing
AI 9: Soft Computing
AI10: Independent Component Analysis

STREAM II: COMMUNICATION AND NETWORKING

CN 1: Telecom Networking
CN 2: Network Security and Management
CN 3: Wireless and Mobile Networks
CN 4: Advanced Computer Networks

STREAM III: DATABASE SYSTEMS

DB 1: Database Technology
DB 2: Topics in Data Base Management Systems
DB 3: Data Mining and Data Warehousing

STREAM IV: SOFTWARE SYSTEMS

SS 1: Object Oriented System Design
SS 2: Multimedia Systems
SS 3: Digital Image Processing
SS 4: Compiler Design
SS 5: Signal Processing
SS 6: Speech Processing
SS 7: Complexity Of Algorithms
SS 8: High Performance Computing
SS 9: User Interface Design
SS 10: Medical Image Processing
SS 11: Web Technology
SS 12: Multi core Computing
SS 13: High Performance Embedded Computing
SS 14: Computer vision
SS 15: Advanced Topics in Image Processing
SS 16: Kernel Methods for Pattern Analysis
SS 17: Video Processing
SS18: Advanced Algorithms
SS19: Pattern Recognition
SS20: Signals and Linear Systems
SS21: Cryptography
SS22: Embedded Computing

STREAM V: HARDWARE

HW 1: ASIC Design
HW 2: Optical Computing
HW 3: Microprocessor Systems
HW 4: Advanced Computer Architecture
HW 5: Real Time Computing
HW 6: Interface Technologies
HW 7: Modeling and Simulation of Digital Systems
HW 8: VLSI Systems



Education is like insipid water. Educare is like sugar. Merely adding sugar to water does not make it sweet. It is only on stirring, does the sugar mix with water making it sweet. The heart is the tumbler, Divinity is the sugar and secular education is tasteless water. With intelligence as the spoon and enquiry as the process of stirring we experience the all pervasive Divinity.



Spiritual education is not a distinct and separate discipline; it is part and parcel of all types and levels of education. In fact, it is the very foundation on which a lasting edifice can be built. Secular and spiritual education are like the two halves in the seeds of pulses; the germ that sprouts is in between; it is fed by both.



The educational system that brings both teacher and student together, has two aspects – first, the provision of skills and information so that man can live in health and happiness and the second, the understanding of one's inner urges and their sublimation in order to attain lasting peace, equanimity and bliss. The two aspects are not opposed; they are bound irrevocably together. Both teachers and students have to recognize this truth.



Students who are educated in Sri Sathya Sai Institute of Higher Learning should take an oath that they would enter Society and spread Bharathiya Culture among the people. Indian Culture is the very backbone of our life. If you cannot spread this culture, your studies have no meaning.



Real education must be judged by the concern for others which it promotes. Students should grow to be the guardians of the people. As the prospective protectors of the people, their future leaders and administrators, they should prepare themselves for national service. On the shoulders of students today rests the task of making India great.



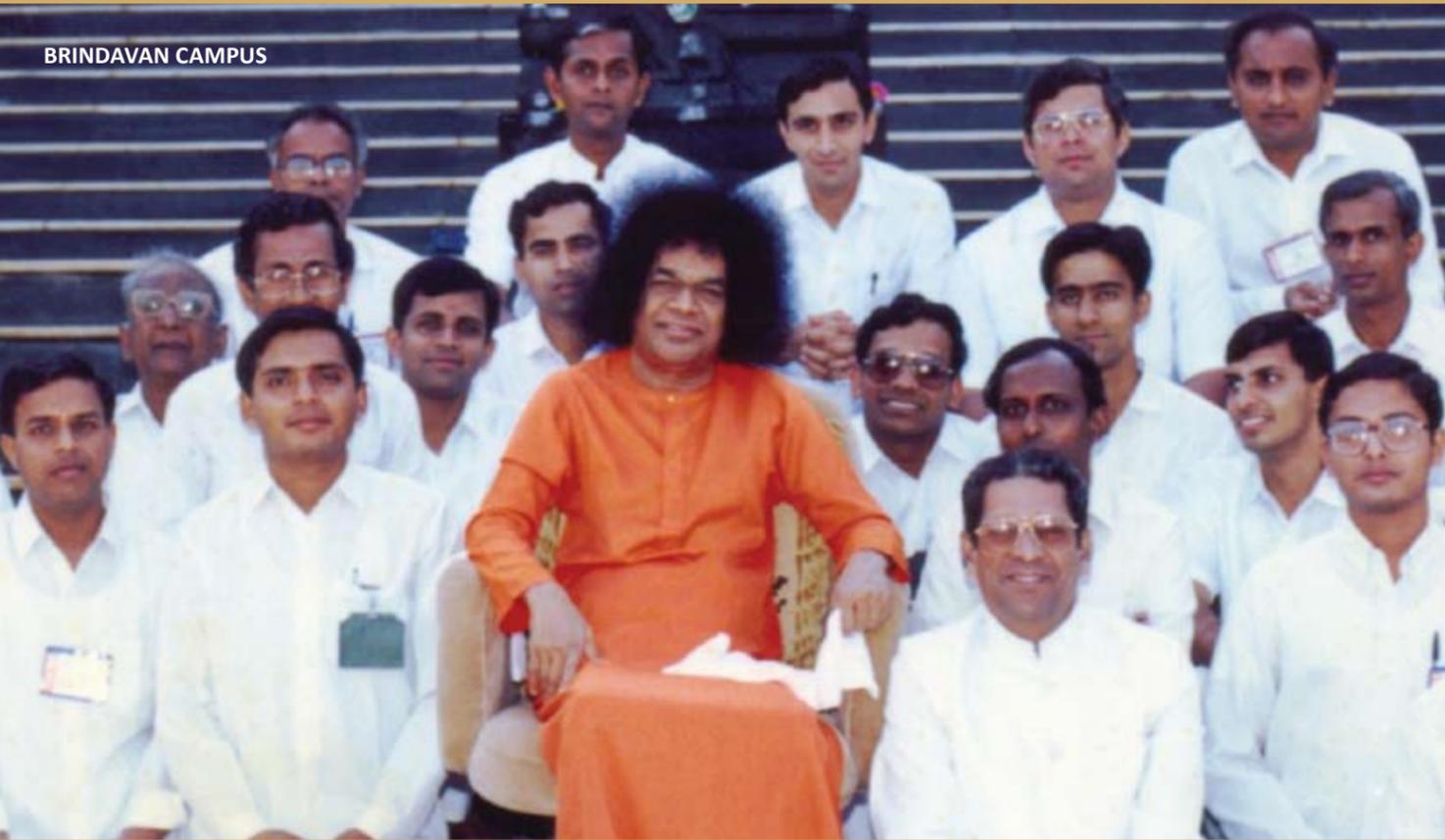
Education must enthuse youth to understand the precious heritage of Indian culture and spirituality, and to evoke the higher powers they possess. Though there are perennial sources and springs of strengths of strength within them, they behave like weaklings and ignoramuses. Patience, tolerance, tranquility and calmness have to be implanted in the heart.

- SRI SATHYA SAI

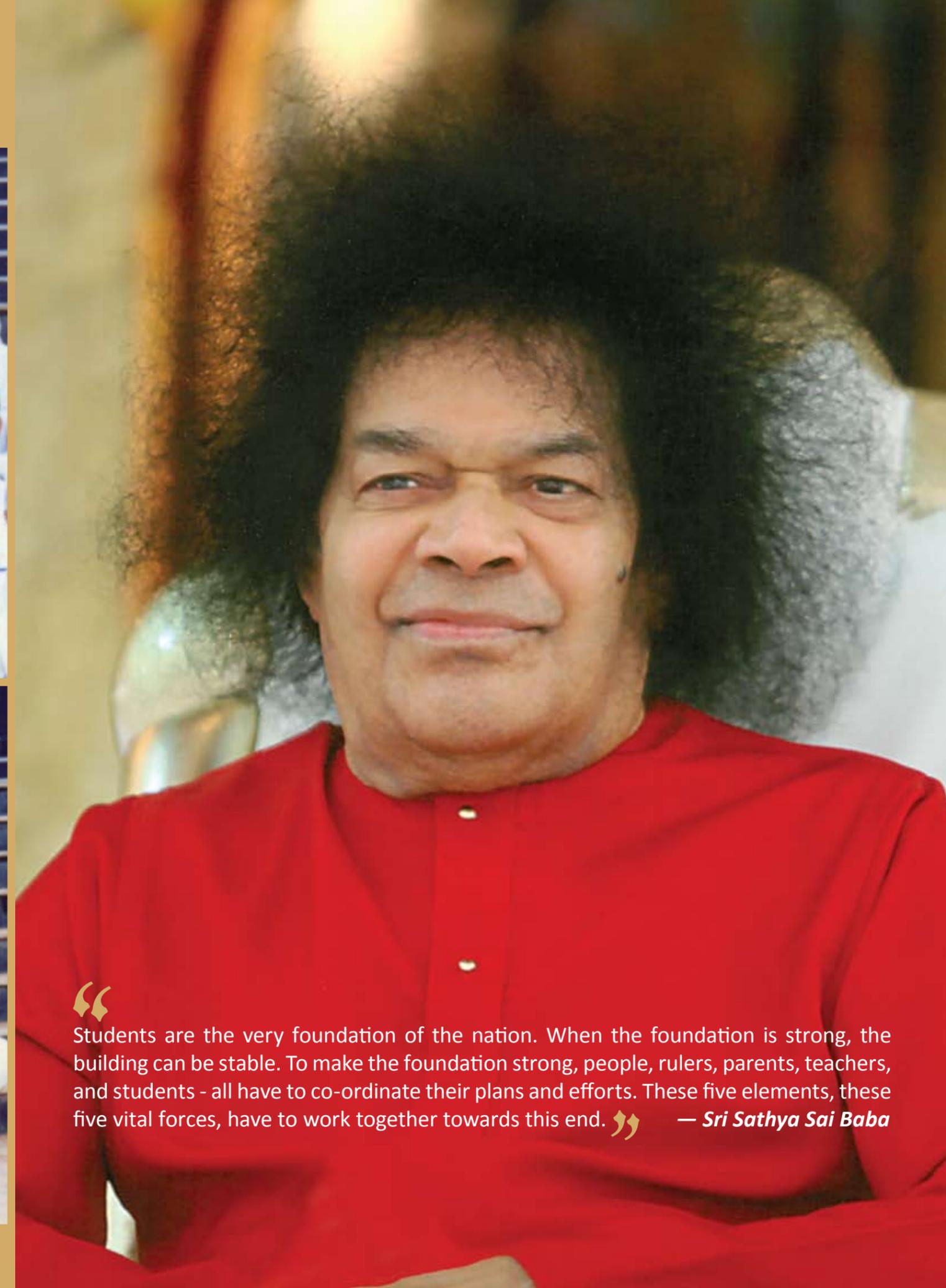


FACULTY MEMBERS WITH REVERED CHANCELLOR

BRINDAVAN CAMPUS



PRASANTHINILAYAM CAMPUS



“

Students are the very foundation of the nation. When the foundation is strong, the building can be stable. To make the foundation strong, people, rulers, parents, teachers, and students - all have to co-ordinate their plans and efforts. These five elements, these five vital forces, have to work together towards this end. ”

— Sri Sathya Sai Baba

