ADMISSIONS PROSPECTUS 2025

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

PRASANTHI NILAYAM

सत्यं वद धर्मं चर

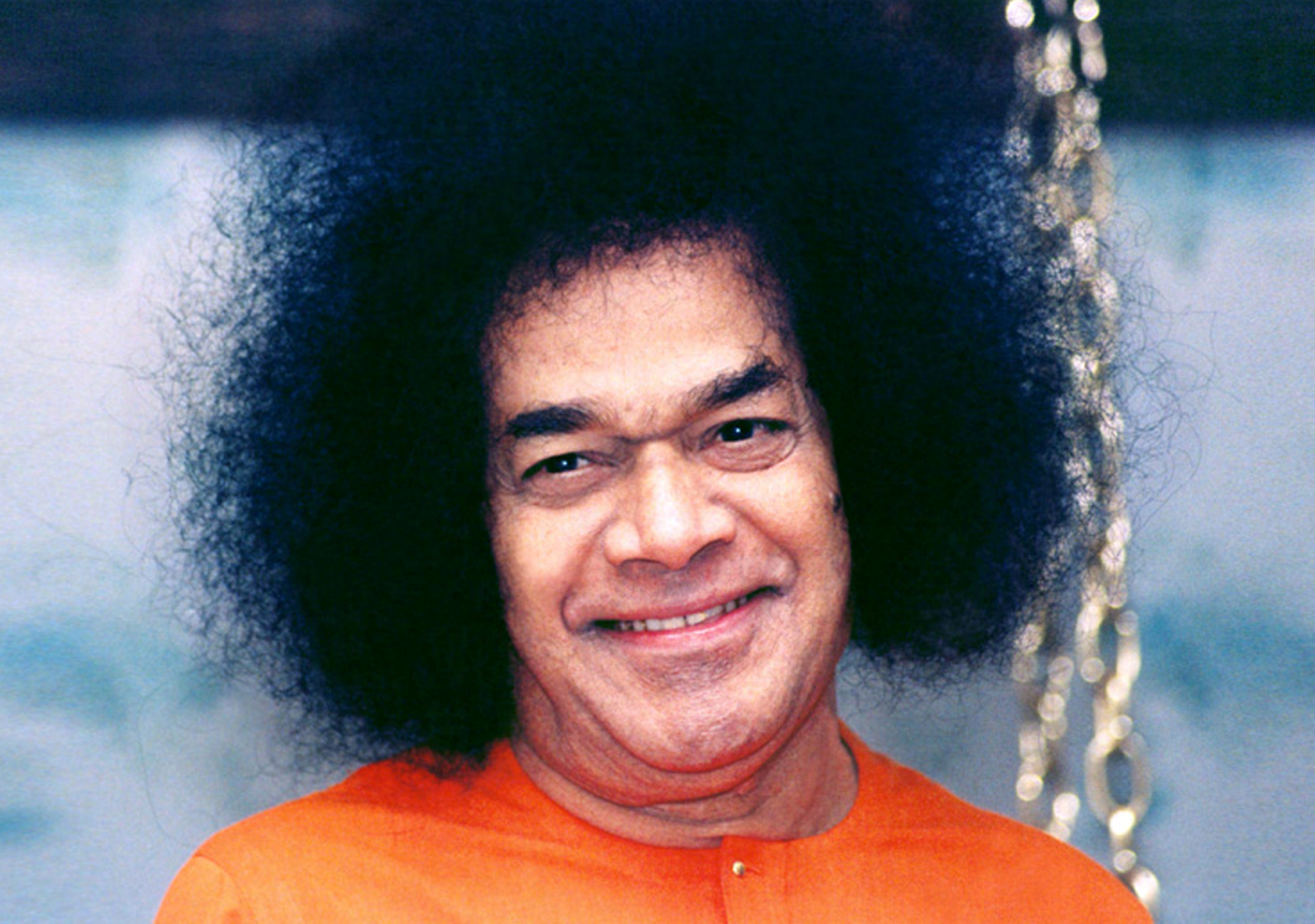# UNDERGRADUATE

SSSIHL
The Underlying Philosophy

The Sai educational institutions have been established not merely to enable students to earn a living but to make them acquire good traits, lead ideal lives, and give them ethical, moral and spiritual strength. I have established them with a view to inculcate love and teach good qualities to students. They will learn here humility, discipline and faith.

I have established these institutions to impart spiritual education as a main component and worldly education as a secondary one. Education should enable one to cultivate good qualities, character and devotion. The teaching of the university curricula is only the means employed for the end, namely, spiritual uplift, self-discovery and social service through love and detachment.

This will be a Gurukula – a place where teachers and taught will grow together in love and wisdom - and like the ancient system of education, it will develop in its students a broad outlook and promote virtues and morals, which serve to foster noble ideals in society.

This Institute will be a temple of learning where youth are shaped into self-reliant, contented and enterprising heroes of action and self-sacrifice, for the purpose of serving humanity.

SRI SATHYA SAI BABA
Revered Founder Chancellor, SSSIHL

from the admissions office

Welcome to Sri Sathya Sai Institute of Higher Learning (SSSIHL).

This prospectus is for students interested in applying for **undergraduate study at SSSIHL**. The first few pages will give you an introduction to the institute and why SSSIHL is so unique. It will give you information on the application process, programme descriptions and detailed information on each undergraduate programme available for 2025 admissions.

Detailed information about the Institute and the admissions process can also be found on our website, sssihl.edu.in/admissions. Please visit this page to get full details on the Programmes for Admissions, Dates & Deadlines, download admissions-related documents, view the comprehensive admissions Application Guide, and of course, apply online.

Good luck and Sai Ram!

Admissions Office
Office of the Registrar, SSSIHL

Contents

A modern Gurukula

THE BEST OF BOTH WORLDS

Sri Sathya Sai Institute of Higher Learning (Deemed to be University), Prasanthi Nilayam, Andhra Pradesh, India, has been a visible manifestation of Bhagawan Sri Sathya Sai Baba's vision of education for human transformation for over 50 years.

Bhagawan Baba designed Sri Sathya Sai Values-based Integral Education to ensure deep inner transformation of students, teachers and staff during their time at SSSIHL. Ethics and values are integrated as the undercurrent of every subject taught at the Institute.

As a result, combined with academic and research excellence, the Institute provides its students with a holistic framework of interpersonal development.

In addition to their studies, the compulsory residential character at SSSIHL trains the mind, body and spirit of the student in an environment similar to the ancient Indian 'gurukula' system of education, in the most modern context.

Teachers and students live and grow together in an atmosphere of mutual trust and unity. This helps students develop a wholesome and balanced personality, where academic competence is intertwined with value systems.

This concept is unique at the university level of education.

The university provides **quality education totally free of cost to all students** for all programmes of study.

OUR CAMPUSES

The Institute hosts students from across the country at its four campuses located in Andhra Pradesh and Karnataka, India:

For Women:
o Anantapur Campus at Anantapur, Andhra Pradesh

For Men:
o Prasanthi Nilayam Campus at Puttaparthi, Andhra Pradesh
o Brindavan Campus at Kadugudi, Bangalore, Karnataka
o Nandigiri Campus at Chikkaballapur, Karnataka

All SSSIHL campuses are located in areas surrounded by mountains, greenery and nature, which helps create an ambience for integral education that the Institute curricula imparts.

Visit our **Campuses** page to learn more.
You can also see the **Facilities** students have access to.

Prasanthi Nilayam Campus
B.A. | B.P.A. | B.S. | M.A. | M.Sc. | M.Tech. | Ph.D.

Anantapur Campus
B.A. | B.Com. | B.Ed. | B.S. | M.A. | M.Sc. | M.B.A. | Ph.D.

Brindavan Campus
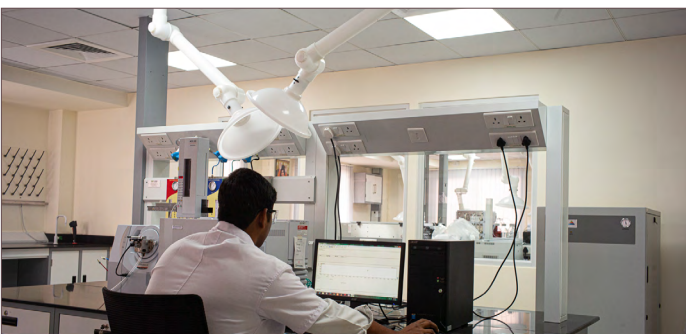B.B.A. | B.Com. | B.S. | M.B.A. | Ph.D.

Nandigiri Campus
B.A. | B.S. | M.Sc.

SSSIHL offers Undergraduate, Postgraduate, Professional and Research programmes.
The four-year Undergraduate programmes are in line with NEP 2020, leading to a Hons. with Research degree

Distinctive Features

SSSIHL IS UNIQUE

Admissions

o Free, high-quality education for all students

o Merit-based open admissions policy for all, irrespective of income, religion or region

Residential Character

o Compulsory residential character where all students, doctoral research scholars and select teaching faculty reside together in the hostel. This enables the translation of lessons learned into practical skills through experiential learning

o Spiritual ambience in an environment of discipline and love

o Cultivation of the spirit of self-reliance, brotherhood and sacrifice through mentoring and personal example

Infrastructure

o Campuses set in spacious and peaceful surroundings

o Well-equipped, modern science laboratories and a cutting-edge Research Instruments Facility

o Automated Library using an Integrated Library Management System (ILMS) with a digitisation facility accessed through the online Public Access Catalogue (OPAC) within the campus premises

o Libraries across campuses with over 1,90,000 volumes

o Connected to the National Knowledge Network (NKN)

o Wi-Fi enabled campuses with 10 Gigabit Ethernet connectivity

o Computer and Multimedia learning centres

o International Centre for Sports at the Prasanthi Nilayam Campus and multiple sports facilities at other campuses

Academics & Research

o 4-year undergraduate curriculum aligned to NEP 2020, extending to Postgraduate studies

o Student-teacher ratio 10:1

o Research collaborations with premier Indian and International Institutions and Industry

o Interdisciplinary / multidisciplinary research for societal benefit

o Awareness Programmes and Moral Classes reinforcing human values

Integral Education

o Life lessons learned through the message of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba

o Integrating human values with secular knowledge

o Inculcating the spirit of self-reliance and service to society

o Synthesis of science and spirituality for societal benefit

The concept of integral education that SSSIHL imparts is pursued by all teachers, staff, and students.

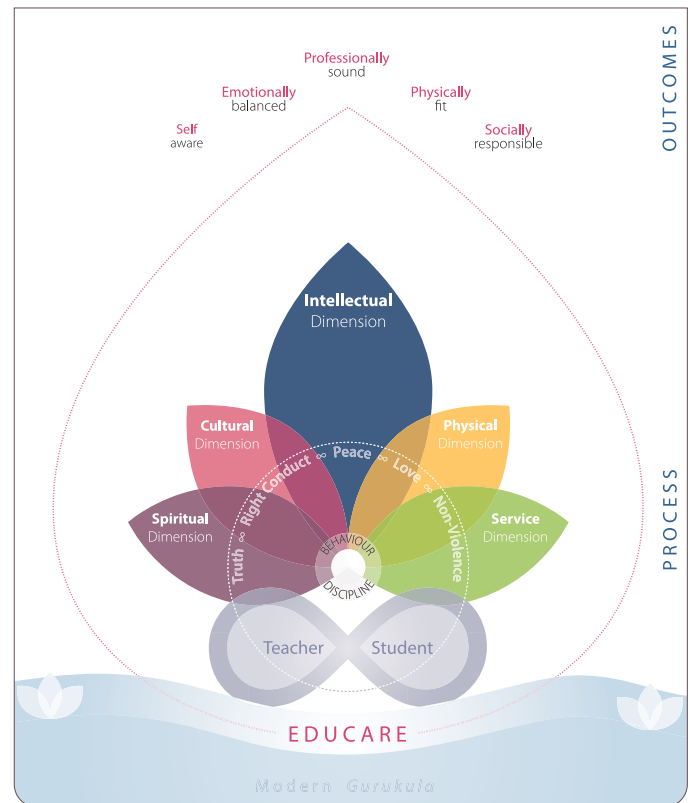# Sri Sathya Sai Values-based Integral Education

THE PROCESS

Sri Sathya Sai Values-based Integral Education is a modern, rational, scientific education system rooted in Indian ethos. It takes the best of both ancient and contemporary learning techniques.

As depicted in the diagram, the base is the concept of a modern Gurukula that sustains all relationships and activities at SSSIHL. It is responsible for creating and sustaining the congenial environment necessary for the teacher–student interaction to grow and develop.

Adherence to discipline and appropriate behaviour are the two important aspects that encompass all interactions. The 5 human values of Truth, Right Conduct, Peace, Love and Non-violence form the undercurrent of the integral education's dimensions.

These dimensions are Intellectual, Physical, Cultural, Devotional and Service. The key activities for each dimension form the basis of most of a student's time at SSSIHL.

Bhagawan Baba purposefully designed the system of Integral Education so that students spend their time on academics (intellectual capacities) and developing other qualities. This concept is very unique at the university level. See the Integral Education Activities for further details.

Sri Sathya Sai Values-based Integral Education

THE OUTCOME

The outcomes of the system of Values-based Integral Education at SSSIHL are threefold. It prepares all graduates to be:

o Professionally sound
o Emotionally balanced
o Physically fit
o Socially responsible and
o Self aware

It helps develop a strong character and positive qualities in students and nurtures virtues like adaptability, tolerance and sacrifice, shaping them into noble and responsible citizens.

LEARN MORE

Visit the About Us section of our website to learn more about the uniqueness of SSSIHL.

THE DAILY ROUTINE

This is a crucial component of this process.

Each student's day starts at 5:00 a.m., with a couple of hours spent in prayer, exercise and other vocational pursuits (such as practice sessions for music, band, traditional Indian music, etc.).

Classes commence at 9.00 a.m. and end at around 4:00 p.m.

Students then move to the Sports Field / Mandir / Prayer Hall for participation in sports and games / congregational chanting (Veda), multifaith prayers / devotional singing / bhajans, and other spiritual activities. These also include talks by eminent speakers on a variety of spiritual topics.

Post dinner, students continue to concentrate on their studies. before lights out at around 10 p.m.

I have established these institutions to impart spiritual education as a main component and worldly education as a secondary one. Education should enable one to cultivate good qualities, character and devotion. The teaching of the university curricula is only the means employed for the end, namely, spiritual uplift, self-discovery and social service through love and detachment.

Sri Sathya Sai Baba
Revered Founder Chancellor, SSSIHL

SPIRITUAL dimension

major activities

Multifaith Prayers /
Devotional Singing / Bhajans

Vedic chants and stotrams

Meditation & Silent sitting

Multifaith Awareness sessions

Suprabhatam (prayer at dawn)

Assembly (college prayer)

Brahmarpanam (food prayer)

Kshama Prarthana (night prayer)

Enables a student to connect to her/his inner Self, resulting in a calm, focused & intuitive mind.

This inner connection opens the heart and brings forth the feeling of love, compassion and empathy for fellow human beings.

CULTURAL dimension

major activities

Celebration of Festivals

Brass Band

Nadaswaram & Panchavadyam

Annual Sports & Cultural Meet

Performing Arts: Music programmes, Drama & Dance

Fine Arts: Rangoli, Cardmaking, Photography, Altar making

Public Speaking

Debates and Elocution

Creates avenues for individual artistic expression of a student's creative potential through various art forms and helps develop an appreciation of the different facets of culture.

PHYSICAL
dimension

major activities

Games

Sports

Annual Sports & Cultural Meet

Jogging

Exercises

Yogasnas

A healthy body results in a healthy mind. This dimension trains a student to overcome her/his physical limitations and strive for excellence

SERVICE
dimension

major activities

Self-reliance Departments: Electricals, Plumbing (water supply), Audiovisual, General store, Dispensary, Dietary services, Hostel mess, Arts & Crafts, costumes & props, etc.

Community living

Social work

Voluntary work

Grama Seva (Village Service)

Community engagement

Prasadam distribution

Enables a student to experience the deep inner satisfaction of giving joy to others through selfless service.

INTELLECTUAL dimension

major activities

Academic Studies

Research

Workshops & conferences

Colloquiums & symposiums

Talks and discussions during assembly

Awareness class

Moral class (Thursdays)

Prayer Talks

Annual Summer Course in Indian Culture & Spirituality

Promotes the acquisition of both secular and spiritual knowledge.

Apart from academics and research, the activities in this dimension include Awareness Courses, Moral Classes and Prayer Talks.

Ayyagari Sathya Sai Srikar
I M.Sc. Mathematics, SSSIHL

GATE 2024: All India Rank 1
Data Science and Artificial Intelligence
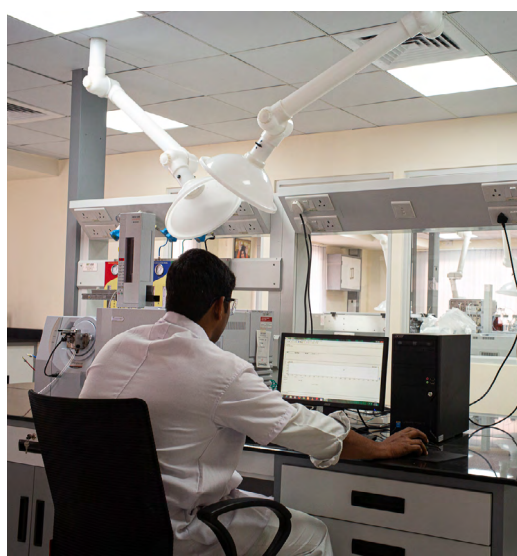
SSSIHL in numbers

admissions

3 years average | **2022-24**
per year

697 total admissions

32% acceptance rates

697 / 2183
accepted / eligible applicants

student diversity

23 / 28

Applicants from various states
of India admitted to SSSIHL

students

academic year 2023/24

by Programme

diploma	5
research	117
postgraduate	198
professional	223
undergraduate	917

1460

523 — 937

117

doctoral
research scholars
8% of student body

by Campus

193	Nandigiri
284	Brindavan
460	Prasanthi Nilayam
523	Anantapur
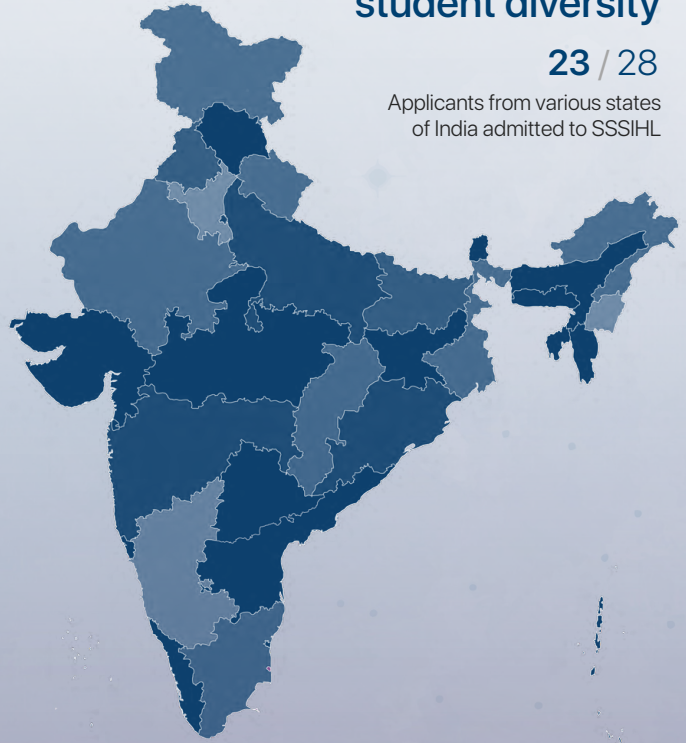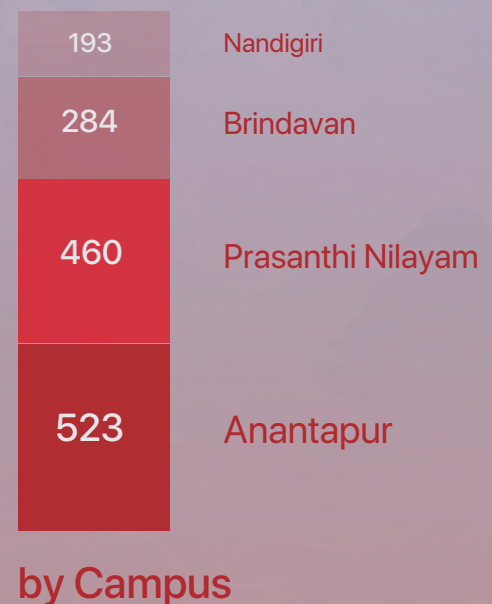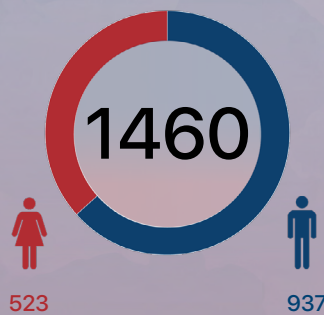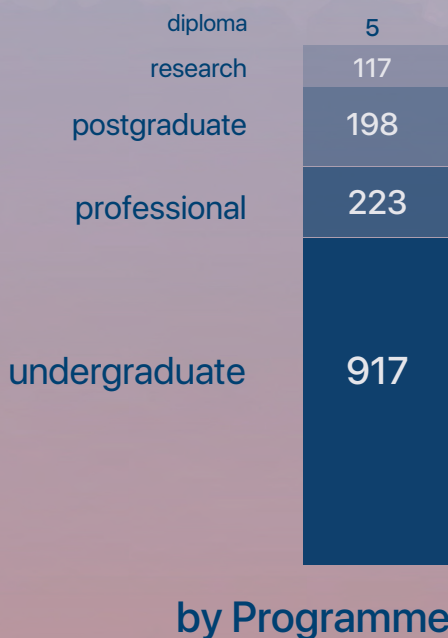
SSSIHL in numbers

students
academic year 2023/24

10:1
student-teacher ratio

per student per year

₹ 2.30 lakh

expenditure

₹ 6.25 crore
equipment & infrastructure
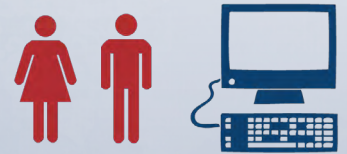
2:1
student-computer ratio

use of computers is always 1:1

students
academic year 2023/24
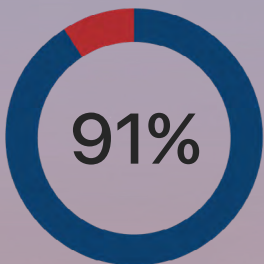
91%
examinations pass rate

UNDERGRADUATE
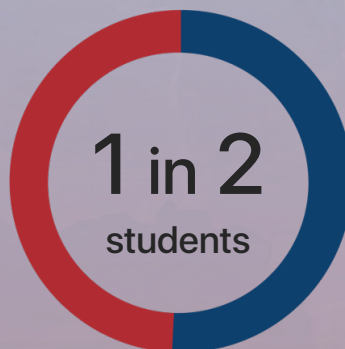
1 in 2 students

75/153

national examinations

number of final year SSSIHL postgraduate students that qualified

GATE, CSIR, JRF, NET, LS, JEST, CTET, UPSC IAI, ACET, CB3, CM2, CP3, CP2, CS1, DS1 and MAS
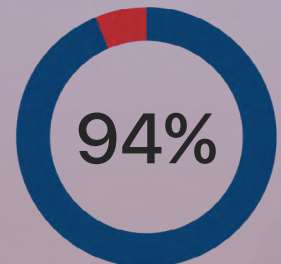
94%
examinations pass rate

POSTGRADUATE PROFESSIONAL

SSSIHL in numbers

research
academic year 2023/24

₹ **3.68** crores

research & teaching grants

13

Ph.D. awardees

2   11
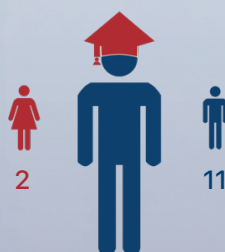
161

research publications
in peer-reviewed journals
45% increase from the Academic Year 2022/23

101
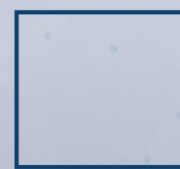
conference presentations
23% increase from the Academic Year 2022/23

staff
academic year 2023/24

Asst. & Deputy Directors   3
Professors   10
Associate Professors   38
Asst. Professors   83
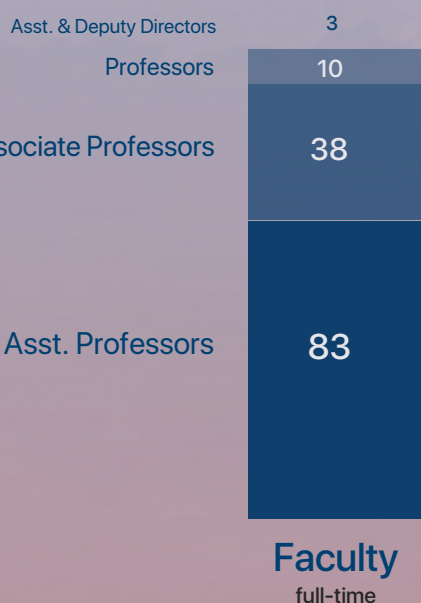
Faculty
full-time

202

total staff
full-time

134	50	13	5

134 Faculty (full-time)
50 Administrative
13 Technical
5 Library

71 %

P h D

in addition, **20 faculty** are pursuing their Ph.D.

other faculty

Adjunct
Visiting
Guest Lecturers
Honorary

184

Hostel Life

Genesis

The philosophy of hostel life is based on the approach of community living: each one lives for the other and all live together for a common higher cause.

Students from different states of India, and varied economic and cultural backgrounds live in dormitory-styled accommodation with 10-14 students staying together in a room. the aesthetically pleasing hostel buildings also create a noble ambience for students to live in.

As a result, the hostel is a miniature model of the world outside with people of different habits, temperaments, lifestyles, language and outlook staying together and working. This develops the qualities of understanding, adjustment, sharing and caring amongst the students. It nurtures virtues like adaptability, tolerance and sacrifice; developing students into noble and responsible citizens.

The ambience is suffused with both discipline and loving care. All doctoral research scholars reside with the students in the hostel. The relationship between the students and teachers is very cordial and warm, and the teachers pay personal attention to the problems of each and every student. The teachers are chosen with extreme care to play an important role in this process. Many of them are alumni of the Institute, dedicated and well versed in integral education. They serve as facilitators and are available at all times for mentoring the students on personal and academic matters.

Personal cleanliness, punctuality and regularity, general behaviour, personal etiquette and room cleanliness are the major components of the discipline that is followed at SSSIHL hostels.

Self Reliance Departments

A major portion of the functioning of the hostel is taken care of by the students and resident staff members. The guiding principles of the hostel are a simple life coupled with self reliance. Students do their work with least dependence on external agencies. To inculcate the dignity of labour and respect for work, most functions and departments of the hostel are run by students under the able guidance of resident faculty.

The self reliance departments include:

o Electrical
o Plumbing (water supply)
o Audiovisual
o General store
o Dispensary
o Dietary services
o Hostel Mess
o Arts & Crafts
o Costumes & props

These self reliance activities enable students to become self-confident and independent. They also contribute to developing leadership and entrepreneurial skills. To maintain continuity and effective succession planning, senior students train the junior students in all aspects of respective self reliance departments before graduating.

The ideal Sai student

The Revered Founder Chancellor, Sri Sathya Sai Baba said, "Knowledge, when skilled, leads to balance which in turn provides insights about the application of knowledge for the benefit of society." He, therefore desired (as shown in the diagram below) that students graduating from this university should possess:

o The Head of Shankara that symbolizes knowledge leading to wisdom
o The Hands of Janaka that symbolizes knowledge translated to skills for societal benefit
o The Heart of Buddha that symbolizes compassion to balance the head with the hands

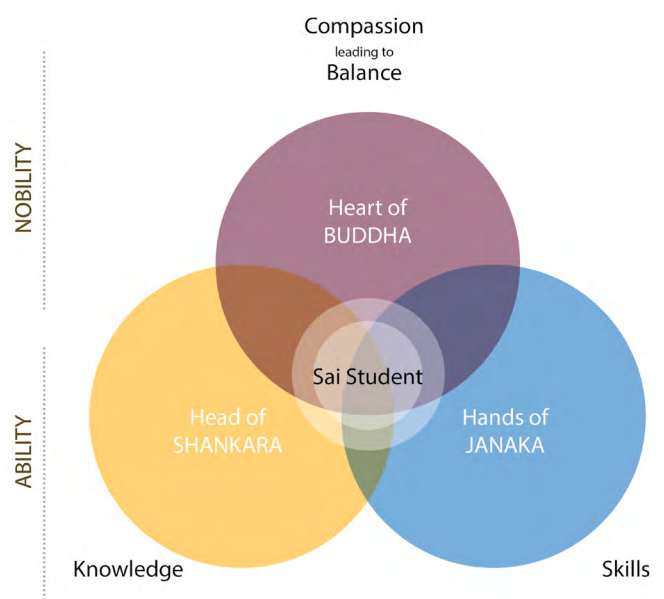Harmony of Head-Heart-Hand

SSSIHL Anantapur Campus Brass Band students with Smt. Droupadi Murmu, Hon'ble President of India
SSSIHL XLII Convocation, 22 Nov 2023, Prasanthi Nilayam

The end of Education is Character

SRI SATHYA SAI BABA

Application Process

SSSIHL is unique

As detailed in the Introduction pages above, SSSIHL is unique in several ways.

Firstly, aligned with the vision of Bhagawan Sri Sathya Sai Baba, education at SSSIHL is provided FREE to all students for all programmes of study.

This commitment aims to eliminate financial barriers and promote access to quality education for all deserving candidates, fostering an inclusive learning environment.

SSSIHL does not levy any of the following fees:

- Tuition fees
- Admissions fees
- Infrastructure & Development fees
- Library fees
- Examination fees
- Basic amenities fees
- Sports fees
- Medical fees*

*students have access to free medical treatment at Sri Sathya Sai General and Sri Sathya Sai Super Speciality Hospitals located at Prasanthi Nilayam and Whitefield, Bangalore.

Hostel fees: Boarding and lodging charges will be communicated to selected candidates.

Secondly, owing to the unique system of education, we have the following notice that applies to all applicants (at all levels of study):

NOTICE TO ALL APPLICANTS

Given the unique modern Gurukula system of Values-based Integral Education at SSSIHL, it is mandatory that all students study and reside at gender-specific campuses during their entire period of study.

Programmes for Admissions

As a first step, carefully review in detail the descriptions of the programmes you are interested in. These can be found from page 18 onwards in this prospectus.

At the undergraduate level, there are several options for applications - in Humanities, Social Sciences, Management & Commerce and Sciences.

Each programme includes an overview, eligibility requirements (for that particular programme) and a comprehensive list of courses in each year (per semester of study).

Eligibility

The requirements for admissions vary from programme to programme. See the individual Programme pages for detailed information.

Candidates who do not meet all the admissions criteria listed for the programme they apply to will not be eligible for admissions.

Sri Sathya Sai Institute of Higher Learning (Deemed to be University) has a merit-based Admissions Policy open for all.

NOTE: Relaxation of admissions norms for special categories is applicable as per the Govt. of India guidelines.

Application Guide

Note: Applications for admissions to all SSSIHL programmes are ONLINE ONLY.

After you have decided on what programme to apply for, head over to the Application Guide. This page will give you step-by-step guidance on how to successfully apply for a programme at SSSIHL.

Once you submit your online application, you will not be able to change it.

Therefore, it is very important you go through the Application Guide and read the important information it provides on various aspects of the application such as Registration for Online applications, what documents to upload, and what happens at each stage of your application process.

Dates & Deadlines

Next, to make sure you don't miss out on a chance to apply to SSSIHL, kindly visit the Dates & Deadlines page of the Admissions section of the website.

Documents Checklist

Before you fill in your application form, in order to save time, make sure you keep these key documents ready in a digital format before you register and apply online.

All documents uploads must be clear, legible and attested (where required). Failure to meet these requirements may result in your application being rejected.

The documents you must upload are:

1. **One passport-sized photograph**
   Latest photograph of the applicant in the prescribed format mentioned in the application form

2. **Statement of Marks**
   Self-attested (by the applicant) photocopies of the Statement of Marks for X Std. issued by your Higher Secondary School Board

   Self-attested (by the applicant) photocopies of the Statement of Marks for XII Std. (XI Std. if XII Standard exam results are not published) issued by the authority

   Note: Selected candidates are required to bring in their original, attested mark sheets for XII Std. for verification at the time of joining SSSIHL.

3. **Application fee payment receipt**
   A copy of the application fee payment receipt.

4. **Photo identification proof**
   A clear copy of any Government approved Photo ID, such as your Aadhaar card.

5. **For special categories as per Govt. of India**
   A self-attested copy of the relevant certificate issued by the statutory authorities (state / central)

Apply Online

Once you are ready with the above, visit the Apply Online page.

Registration
The first step is to register online with a valid email address (email ID). This is done on the Apply Online page. Kindly refer to Step 1 of the Application Guide for full details.

Filling and submission of your Application Form
You can then begin filling in the admissions application form online. Kindly refer to Step 5 of the Application Guide for full details.

Note: All your information is transmitted through a secure server and is kept fully confidential. Your application information and accompanying credentials are reviewed only by authorized representatives of the Institute.

Admission Interviews

Next, you must wait to hear from the Institute in regards to the outcome of your application. Applicants who meet the eligibility criteria for the programme they applied for will then proceed to the next step of their application.

The list of candidates selected for the round of interviews will be published on the Admissions Lists page of the website.

Note: All notifications to applicants from SSSIHL during the entire admissions application process will be sent to your registered **email address**.

There is no admissions test for all Undergraduate programmes. Applications will be shortlisted based on merit. The shortlisted candidates will be asked to attend an online interview.

Applicants for the B.P.A. in Music programme will be required to take a Music Aptitude and Competency test.

If you do not meet the eligibility criteria for the programme you applied for, you will be notified accordingly via email.

Results: Provisional List of Selected Candidates

Once you have attended the interview, the Institute will publish the list of selected candidates on the Admissions Lists page.

This page will be regularly updated as and when the Admissions team scrutinizes and processes applications at each stage of the admissions process.

Join SSSIHL!

Congratulations! You have got an opportunity to study at Sri Sathya Sai Institute of Higher Learning.

List of Documents to be submitted upon admission to SSSIHL

All newly admitted candidates must submit the following to the Director of the Campus on the opening day of the academic year:

o Original Marks Certificate of X and XII Standard.
o Transfer certificate
o Conduct certificate
o Health Record
o Special category certificate (if applicable)

1 July 2025
Academic year 2025/26 commences

How do I contact the admissions Office if I need further help?

The Admissions pages of the website are designed to make sure that candidates have all the information that they require to successfully apply to SSSIHL.

If you still need further assistance please contact us either by email or telephone.

By Email:
For admissions related queries, please email us on admissions@sssihl.edu.in.

We will answer all email enquiries within two working days of receipt of your email.

By Telephone:
To contact the admissions office for Admissions related queries, please telephone:

+91 9441 911 391 or
+91 83310 34774 or
+91 8555 287239 (landline)

The above numbers are for admissions related queries for the Institute (SSSIHL) only.

Lines are open between 9:30 a.m. and 4:30 p.m., Monday to Saturday.

Outside of these hours, please email us admissions@sssihl.edu.in.

You are wished the very best.
Sai Ram!

Student Support

For information related to admission of international students, admissions policies, code of conduct, anti-ragging and grievance redressal mechanisms, etc., please visit the Student Support page of our website.

Programmes for Admissions

There are **separate programmes** available for **Women** and **Men** applicants, as the Institute hosts separate campuses for women and men students.

Given below are the **Undergraduate Programmes** open for admissions in 2025.

National Education Policy (NEP)

SSSIHL has adopted the National Education Policy (NEP) 2020 implementation across all departments and faculties.
This creates a lot of opportunity for students to seamlessly progress from undergraduate to postgraduate studies.

Undergraduate Programmes (4 years)

MEN candidates

- **B.A.** (Hons.) / (Hons. with Research) in **English Language & Literature**
- **B.A.** (Hons.) / (Hons. with Research) in **Economics**
- **B.B.A.** (Hons.)
- **B.P.A.** (Hons.) in **Music**
- **B.Com.** (Hons.) / (Hons. with Research)
- **B.S.** (Hons.) / (Hons. with Research) in **Mathematics**
- **B.S.** (Hons.) / (Hons. with Research) in **Computer Science**
- **B.S.** (Hons.) / (Hons. with Research) in **Mathematical Sciences & Computing**
- **B.S.** (Hons.) / (Hons. with Research) in **Actuarial Data Science**
- **B.S.** (Hons.) / (Hons. with Research) in **Physics**
- **B.S.** (Hons.) / (Hons. with Research) in **Chemistry**
- **B.S.** (Hons.) / (Hons. with Research) in **Biosciences & Biotechnology**
- **B.S.** (Hons.) / (Hons. with Research) in **Artificial Intelligence & Computational Biology**
- **B.S.** (Hons.) / (Hons. with Research) in **Finance, Economics & Data Analytics**

WOMEN candidates

- **B.A.** (Hons.) / (Hons. with Research) in **English Language & Literature**
- **B.A.** (Hons.) / (Hons. with Research) in **Economics**
- **B.Com.** (Hons.) / (Hons. with Research)
- **B.S.** (Hons.) / (Hons. with Research) in **Mathematics**
- **B.S.** (Hons.) / (Hons. with Research) in **Computer Science**
- **B.S.** (Hons.) / (Hons. with Research) in **Physics**
- **B.S.** (Hons.) / (Hons. with Research) in **Chemistry**
- **B.S.** (Hons.) / (Hons. with Research) in **Biosciences & Biotechnology**
- **B.S.** (Hons.) / (Hons. with Research) in **Food & Nutritional Sciences**

Common Courses for all Programmes

360 degrees learning

The unique aspect of all degree programmes at SSSIHL is that the curriculum encompasses a wide variety of types of courses: Discipline Specific and Interdisciplinary Elective Courses, Ability Enhancement courses, Multidisciplinary courses, Major Discipline Specific Core courses, Interdisciplinary Minor courses, Skill Enhancement courses, Values-based courses and Research work & projects.

These are incorporated in the programme descriptions given in this prospectus.

In addition, students spend many hours of their courses on non-classroom study: seminars, conferences, tutorials, practical and laboratory work, internships, field trips and engaging with their communities.

Public Speaking

Students are also encouraged to come forward and speak in front of the SSSIHL community on topics ranging from science to metaphysics, thus giving them an appropriate platform to develop their public speaking skills and to refine their thought process.

THURSDAY MORAL CLASSES

At each campus, Thursday mornings begin with an hour of inspiring and ennobling talks by speakers focusing on their personal spiritual experiences, messages from sacred scriptures and other elevated and socially relevant themes. It is also used to highlight students' talents in music, dramatics, elocution, debates, quizzes, etc.

Sample Topics: Why are Values Important?, Sai Student, Moral values from the Ramayana, Divine Directions, Role and Importance of Guru, Debate on How Government Should Regulate Social Media, Yoga & Holistic Human Health, Significance of Festivals of India (all religions) and several sessions on Experiences and teachings of our Revered Founder Chancellor.

PRAYER TALKS

Every morning before classes commence at the college, all students and teachers gather for the morning assembly. Multifaith prayers / devotional singing / bhajans and a few minutes of silent sitting are sometimes followed by a talk by students, faculty members or invited guests on topics related to morals and values.

Sample Topics: Power of Thoughts, Trust in God's Timings and Have Faith in His Decisions, Self-Love – A Path to your Inner Self, Choice of Freedom, Certainty in Uncertainty.

AWARENESS COURSE

Each semester, students take an Awareness Course. These mandatory, credited courses are common to all programmes of study and are designed to cultivate a broad view of the human condition in students.

These mandatory courses are designed to cultivate a broad view of the human condition in students. The course content helps trigger self-reflection and enquiry and sensitises students to the concerns of society, and gets them to think about practical solutions to these problems.

Awareness Courses for **Undergraduate Programmes** in the **Academic Year 2025/26**:

YEAR 1
Semester 1: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)
Semester 2: Unity of Religions

YEAR 2
Semester 3: Study of Classics I – Ramakatha Rasavahini
Semester 4: Study of Classics II – Bhagavatha Vahini

YEAR 3
Semester 5: Ethos and Values for the Changing World
Semester 6: Life and its Quest

YEAR 4
Semester 7: Education for Life
Semester 8: God, Society and Man

Programme Descriptions

The following pages will highlight the information for each individual undergraduate programme of study at SSSIHL for 2025 entry.

This includes: the length of the programme, whether it is applicable for women candidates or men or both, the eligibility criteria and a programme overview, and a full list of courses of study for each year (and semester).

NOTICE

Based on the changing requirements of the UGC, employability, industry, entrepreneurship, skill development and research, SSSIHL may revise or update any aspects of a programme without written notice.

B.A. (Hons.) / (Hons. with Research) in English Language and Literature

For Women & Men

OVERVIEW

The Department provides a comprehensive four-year undergraduate programme in English Language and Literature.

The programme aims to enhance students' proficiency in various subject areas. The curriculum covers English Literature, Literary Theory, Language Studies, and English Language Teaching, with specialization in the fourth year. It incorporates project work, internships, and dissertations, aligning with contemporary trends in interdisciplinary research in English Language and Literature.

Students have a broad range of options that they can pursue:

B.A. (Hons.) in English Language and Literature

For students who complete a 4-year (8-semester) programme of study.

B.A. (Hons. With Research) in English Language and Literature

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and pursue research in any one of the following specialized areas during the fourth year:

- Linguistics & Stylistics
- Literature & Literary Theory
- English Language Teaching
- English for Professional Purposes

Students who complete the 4-year B.A. (Hons. with Research) programme are eligible to directly pursue a Ph.D. programme in English Studies.

Entry & Exit options as per NEP 2020 Policy.

MINOR SUBJECTS

Additionally, students are required to take 16 credits in minor subjects, with regard to which the Department offers the following two options:

Option 1: Open Minors (16 credits)

In Year 2 and 3 (Semesters 3-6), students are required to take 16 credits from any subjects from the following domains:

- Humanities
- Social Sciences & Languages
- Sciences
- Commerce & Management

If all 16 credits are from specific subjects within any one domain, the student is awarded a minor degree in that subject.

Option 2: Double Minor (32 credits)

In Year 1 and 2 (Semesters 1-4), students are required to take 32 credits; 16 credits each in any two subjects from the following:

- History
- Political Science
- Economics
- Sanskrit
- Telugu
- Hindi
- Philosophy (Women's campus only)
- Psychology (Women's campus only)
- Music (Men's campus only)

The student then gets awarded a double minor degree in those two subjects.

ELIGIBILITY

○ 10+2 years of schooling from a recognized board (CBSE or equivalent)

○ Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

○ Consistent academic performance of 60% aggregate marks in X and/or XII Standard

○ Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- English Language Skills I
- Second Language
- Environmental Studies
- Introduction to Literary Studies
- British Literature I: 1340-1660
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)
- Minor subjects (Option 2)

Semester 2
- English Language Skills II
- Second Language
- Indian Constitution
- English for Professional Purposes I (Option 1)
- English for Technical and Content Writing (Option 2)
- Basic Linguistics
- Digital Fluency (Option 1)
- Awareness Course II: Unity of Religions
- Minor subjects (Option 2)

YEAR 2

Semester 3
- English Language Skills III
- Multidisciplinary Mandatory Course
- British Literature II: 1660 – 1798
- Indian Writing in English
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini
- Minor subjects (Options 1 or 2)

Semester 4
- British Literature III: 1798 – 1900
- ELT – Theories, Methods, and Testing
- English for Professional Purposes II (Option 1)
- Cyber Security
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini
- Minor subjects (Options 1 or 2)

YEAR 3

Semester 5
- British Literature IV: 1900 – Present Age
- Literary Theory and Criticism I
- Advanced Linguistics
- Elective: Indian Aesthetics or Indian Classical Literature
- Communicative Competence for Employability (Option 1)
- English for Script Writing (Option 2)

- Awareness Course V: Ethos and Values for the Changing World
- Minor subjects (Option 1)

Semester 6
- English Language Skills II
- Second Language
- Indian Constitution
- English for Professional Purposes I (Option 1)
- English for Technical and Content Writing (Option 2)
- Basic Linguistics
- Digital Fluency (Option 1)
- Awareness Course II: Unity of Religions
- Minor subjects (Option 2)

YEAR 4

Semester 7
- English for Media Writing
- Postcolonial Literatures
- ELE – Pedagogy of English
- Awareness Course VII: Education for Life
- Elective: Research Methods and Methodologies for English Language Studies **or** Research Methods and Methodologies for English Literature

B.A. (Hons.) Courses:
- Elective: Children's Literature **or** Gothic Literature
- Elective: Interdisciplinary Studies I: Literature and History & Literature and Philosophy **or** Interdisciplinary Studies II: Literature and Psychology & Literature and Science

B.A. (Hons. with Research) Courses:
- Specialization Paper I
- Specialization Paper II
- Dissertation

Semester 8
- Literature and Spirituality
- Women's Writing
- Awareness Course VIII: God, Society and Man

B.A. (Hons.) Courses:
- Elective: Trauma and Memory Studies or Disability Studies
- Elective: Life Writing or Folklore Studies
- Project Work

B.A. (Hons. with Research) Courses:
- Dissertation

B.A. (Hons.) / (Hons. with Research) in Economics

For Women & Men

OVERVIEW

Economics examines the decision-making processes of consumers, firms, and governments, which collectively influence resource allocation. Pursuing an undergraduate degree in economics is crucial for grasping government policy creation, business operations, and the significant transformations in economic systems occurring in our rapidly changing and interconnected world.

Economists employ mathematical and experimental approaches in both public and private sectors to quantitatively analyze real-world issues.

To this end, the Department of Economics offers two undergraduate programs: the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.). To explore these differences, visit the **Courses page** of the B.S. programme) for the B.S. (Hons.) / (Hons. with Research) in Finance, Economics and Data Analytics.

The B.A. programme offers students greater flexibility within the Humanities, while the B.S. programme focuses more on interdisciplinary approach of finance, economics and data analytics.

This programme provide students with a solid understanding of economic principles and theories, as well as the tools and techniques necessary for analyzing and comprehending modern economies. Students will enhance their critical thinking abilities and learn to apply economic concepts in real-world scenarios.

The programme will also equip students with a thorough grasp of micro- and macroeconomic theories and their applications. Ultimately, it will enhance students' analytical and quantitative abilities to assess economic data and make well-informed decisions.

The courses are comprehensive and varied. In addition to the discipline-specific core and elective courses, students will benefit from Ability Enhancement Courses (AEC), Multidisciplinary Courses (MDC), Skill Enhancement Courses (SEC), Value Added Courses (VAC), Internship and Industrial Visits.

In Years 3 and 4, students will choose electives to specialise in either one of the two streams: **Applied Economics** or **Financial Economics**.

MINOR SUBJECTS

Additionally, students are required to take a minimum of 16 credits in minor subjects.

Double Minor (32 credits)

In Year 1 and 2 (Semesters 1-4), students are required to take 32 credits; 16 credits each in any two subjects from the following:

- History
- Political Science
- English
- Sanskrit
- Telugu
- Hindi
- Philosophy (Women's campus only)
- Psychology (Women's campus only)
- Music (Men's campus only)

The student then gets awarded a double minor degree in those two subjects.

B.A. (Hons.) in Economics

For students who complete a 4-year (8-semester) programme of study.

B.A. (Hons. With Research) in Economics

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

○ 10+2 years of schooling from a recognized board (CBSE or equivalent)

○ Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

○ Consistent academic performance of 60% aggregate marks in X and/or XII Standard

○ Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1

- Economics: Introductory Microeconomics
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Minor Options
Economics: Introductory Microeconomics
History: Ancient India
Political Science: Elements of Political Science
English: Introduction to Literary Studies
Philosophy: Western Logic – Formal & Symbolic
Psychology: General Psychology
Music: Theory and Practical 1

Semester 2

- Economics: Introductory Macroeconomics
- SEC: Digital Fluency
- Awareness Course II: Unity of Religions

Minor Options
History: Medieval India
Political Science: Elements of Government
English: Basic Linguistics
Philosophy: Ethics – Normative & Applied
Psychology: Personality theories and assessment
Music: Theory and Practical 2

YEAR 2

Semester 3

- Economics: Mathematics for Economics
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Minor Options
History: Modern India (1760-1950 AD)
Political Science: Modern Governments I
English: Literatures in English
Philosophy: Indian Philosophy – From Vedic Wisdom to Classical Schools (Darshanas)
Psychology: Social Psychology
Music: Theory and Practical 3

Semester 4

- Economics: Statistics for Economics
- Economics: Cyber Security
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

Minor Options
History: Ancient Societies of Egypt, Mesopotamia and China
Political Science: Modern Governments II
English: ELT – Theories, Methods and Testing or English for Professional Purposes
Philosophy: Western Philosophy – Greek to Modern
Psychology: Abnormal Psychology
Music: Theory and Practical 4

YEAR 3

Semester 5

- Indian Economy: Structure and Development
- Intermediate Microeconomics
- Basic Econometrics
- International Economics
- Computer Applications in Economic Analysis I
- Elective I
- Awareness Course V: Ethos and Values for the Changing World

Semester 6

- Public Finance
- Intermediate Macroeconomics
- Econometrics
- Development Economics
- Computer Applications in Economic Analysis II
- Elective - II
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.A. (Hons.) Courses:

- Ethics, Economy and Society
- Time Series Modelling
- Research Methodology
- Computer Applications in Economic Analysis III
- Elective - III
- Awareness Course VII: Education for Life

B.A. (Hons. with Research) Courses:

- Ethics, Economy and Society
- Time Series Modelling
- Research Methodology
- Computer Applications in Economic Analysis – III
- Elective – III
- Research: Project Review
- Awareness Course VII: Education for Life

Semester 8

B.A. (Hons.) Courses:

- Money and Banking
- Energy Economics and Policy
- Computer Applications in Economic Analysis IV
- Elective - IV
- Awareness Course VIII: God, Society and Man

B.A. (Hons. with Research) Courses:

- Research: Project
- Computer Applications in Economic Analysis – IV
- Awareness Course VIII: God, Society and Man

ELECTIVES

Students must choose their electives from **either one of the two** streams offered:

Applied Economics (Stream – AE)

- Agricultural Economics
- Applied Econometrics
- Behavioural Economics and Finance
- Demography
- Economic Institutions, Systems and Theories
- Economics of Education and Health
- Economics of Insurance
- Industrial Economics
- International Economics and Finance
- International Trade
- Labour Economics
- Public Policy

Financial Economics (Stream – FE)

- Behavioural Economics and Finance
- Data Analytics
- Economics of Insurance
- Emerging Market Economies
- Financial Econometrics
- Financial Economics
- Financial Services
- Forecasting Methods for Economics and Finance
- International Economics and Finance
- International Finance
- Rural Finance
- Underwriting and Actuarial Applications

B.B.A. (Hons.)

For Men

OVERVIEW

The B.B.A. (Hons.) programme offers a strong conceptual grasp of multiple facets of business management, encompassing areas such as general management, finance and accounting, marketing, human resource management, operations management and business analytics.

This programme ignites students' entrepreneurial spirit through its two streams: entrepreneurship and digital analytics. It also fosters decision-making skills using contemporary business analytics tools.

It equips students to pursue independent business ventures or advance academically through professional management degrees.

It prepares students to become business leaders with strong critical thinking, analytical skills, and effective communication abilities. This foundation enables them to positively contribute to society as managers and leaders of organizations grounded in moral and ethical principles.

At the end of Years 2 and 3, students have to undergo internships during their summer vacations.

A 12-credit research exercise is pursued in the eighth semester to enhance research capabilities in students.

SPECIALIZATIONS

In Year 2 (Semesters 4 and 5), students can opt for a minor in either Entrepreneurship or Digital and Analytics. In Year 3 (Semester 6), they can pursue either a Massive Open Online Course (MOOC) or a Minor in Marketing Analytics in Digital and Analytics or Design Thinking in Entrepreneurship.

The student then gets awarded a double minor degree in those two subjects.

ELECTIVES

In addition to a Minor, students can choose electives from a pool of marketing or finance subjects in Years 3 and 4 (Semesters 5-7) to hone their specialization skills.

B.B.A. (Hons.)

For students who complete a 4-year (8-semester) programme of study.

All India Council for Technical Education (AICTE) approved programme.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Candidates who have successfully completed a two-year Industrial Training Institute (ITI) course are eligible to apply
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Accounting Fundamentals
- Values Oriented Management
- Communication Skills for Professionals
- Practical: Digital Fluency
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Organizational Behavior
- Managerial Economics
- Fundamentals of Statistics
- Practical: Accounting Package
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Financial Management
- Human Resources Management
- Minor: E-Commerce in Digital and Analytics or Entrepreneurship Development
- Practical: Database Management System Tools
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Marketing Principles
- Company Law and Corporate Accounting
- Minor: Management Information Systems in Digital and Analytics or Business Environment in Entrepreneurship
- Rural Development
- Practical: Tools for Visual Analytics
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Principles of Income Tax
- Production and Operations management
- Minor: Decision making through Business Analytics
- Elective I: Marketing or Finance Pool
- Cyber security
- Practical: Financial Modelling using Excel
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Commercial Law
- Costing for Management
- Massive Open Online Course (MOOC) or Minor in Marketing Analytics in Digital and Analytics or Minor in Design Thinking in Entrepreneurship
- Elective II: Marketing or Finance Pool
- Management Accounting
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7
- Strategic Management
- Indian Economy
- Massive Open Online Course (MOOC) or Minor in Business Modelling in Digital and Analytics or Minor in HR Analytics in Entrepreneurship
- Elective III: Marketing or Finance Pool
- Research Methodology
- Practical: Content Management System
- Awareness Course VII: Education for Life

Semester 8
- Sustainable Development
- Research Project
- Minor: Leadership and Decision-making skills for Business
- Awareness Course VIII: God, Society and Man

ELECTIVES

Marketing Pool
- Consumer Behaviour
- Brand Management
- Retail Management
- Digital Marketing

Finance Pool
- Financial Markets and Institutions
- Financial Services
- International Finance
- Investment Analysis and Portfolio Management
- Accounting for Financial Services

B.P.A. (Hons.) in Music

For Men

OVERVIEW

The Bachelor of Performing Arts (B.P.A.) in Music aims to understand and nurture the cultural heritage of Indian traditional music. The program offers a comprehensive approach towards the development of a student by enabling him to improve upon his innate potential.

This full-time residential program is available in two streams of Indian music: **Carnatic (South Indian)** and **Hindustani (North Indian)** systems. It covers five disciplines: Carnatic Vocal, Carnatic Instrumental Veena, Carnatic Instrumental Mridangam, Hindustani Vocal, and Hindustani Instrumental Tabla.

MINOR SUBJECTS

In Years 2 and 3 (Semesters 3 to 6), students can earn 16 credits in one of the following subjects:

- History
- Political Science
- Economics
- English
- Sanskrit
- Telugu
- Hindi

The student is then awarded a minor degree in that subject.

The programme enables graduates to pursue higher education in music and take up teaching jobs in schools and institutions. The practical courses of the programme impart performing skills and prepare the student for All India Radio grade auditions.

> **B.P.A. (Hons.) in Music**
>
> For students who complete a 4-year (8-semester) programme of study.

Entry & Exit options as per NEP 2020 Policy.

FACILITIES

In addition to educational resources on music, the department has a comprehensive library containing numerous books on music and Sai spiritual literature.

The multimedia segment offers audio and visuals of performances and demonstrations by artists of Carnatic and Hindustani music. The department also provides music instruments for students to use in classroom teaching and practice sessions.

VISITING ARTISTES

Renowned artistes from different parts of the country and overseas come to Prasanthi Nilayam. They frequently engage with the department students and conduct lecture demonstration and performances.

Some of the renowned artistes who have visited are:

- Sri Umayalpuram Sivaraman (Mridangam vidwan)
- Sri Komanduri Sheshadri (Violin vidwan)
- Sri Hariharan (renowned Ghazal singer)
- Sri Naiveli Santana Gopalan (Carnatic vocal vidwan)
- Sri Suresh Wadkar (North Indian classical & light music)
- Smt Anuradha Krishnamurthy (Carnatic vocal vidwan)
- Padmashri Palanivel (Thavil vidwan)
- Prof. Yella Venkateswara Rao (Mridangam vidwan)
- Pandit Jayateerth Mevundi (Hindustani vocalist)
- Sri Santosh G Kulkarni (Tabla artist & lead instructor)
- Dr. Dwaram V J Lakshmi (Carnatic classical vocalist)
- Mridanga Sudhakara K Sadguru Charan (Mridangam)

Visiting Faculty: Padma Shri Sumitra Guha (Hindustani Classical vocalist)

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent) with Music as one of the subjects

  or a Diploma certificate in Music

  or a minimum of two years' music training in the concerned subject, for which a letter/certificate has to be produced from the teacher during the Music Aptitude Test

- Either passed or appeared for Final exams at XII Standard before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

- Consistent academic performance of 60% aggregate marks in X and/or XII Standard

- Age: Preferably below 19 years as of 30th June in the year of admission

The selection of the candidate for the programme is solely subject to his performance in the Music Aptitude test.

Note: Exceptionally talented Candidates with a family background in professional or academic music may be considered. The candidate must produce documentary evidence, and selection will be based on whether the candidate is deemed fit for the subject chosen.

Students must select one major and one minor subject from the options listed below. The first two years include both Major and Minor subjects, while the third and fourth years focus solely on the Major subject. Students will select Minor subjects according to their aptitude.

MAJOR Subject	MINOR Subject
Carnatic Vocal	Carnatic Instrumental Veena **or** Carnatic Instrumental Mridangam
Carnatic Instrumental Veena	Carnatic Vocal **or** Carnatic Instrumental Mridangam
Carnatic Instrumental Mridangam	Carnatic Vocal **or** Carnatic Instrumental Veena.
Hindustani Vocal	Hindustani Instrumental Tabla **or** Carnatic Instrumental Mridangam
Hindustani Instrumental Tabla	Hindustani Vocal **or** Carnatic Vocal

COURSES

YEAR 1

Semester 1
- Theory – I
- Practical – I
- Minor: Theory – I
- Minor: Practical – I
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Theory – II
- Practical – II
- Minor: Theory – II
- Minor: Practical – II
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Theory – III
- Practical – III
- Minor: Theory – III
- Minor: Practical – III
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Theory – IV
- Practical – IV
- Minor: Theory – IV
- Minor: Practical – IV
- Information Technology
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Theory – V
- Practical – VA
- Practical – VB
- Music & Spirituality – I
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Theory – VI
- Practical – VIA
- Practical – VIB
- Music & Spirituality – II
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7
- Theory – VII
- Practical – VIIA
- Practical – VIIB
- Internship
- Awareness Course VII: Education for Life

Semester 8
- Practical – VIIIA
- Practical – VIIIB
- Project Work
- Awareness Course VIII: God, Society and Man

B.Com. (Hons.) / (Hons. with Research)

For Women & Men

OVERVIEW

The B.Com. (Hons.) programme at SSSIHL blends technical and foundational knowledge in finance, accounts, taxation, law, economics, management and insurance with analytical skills. It paves the way for professional certifications like CA, CS, ACCA, CIMA, and CFA and also emphasizes the use of current technological tools in data analysis.

The programme offers students various electives to pursue subjects in their chosen areas of interest.

In most curriculum courses, students will learn to utilize advanced technological tools for accounting, data analysis, computation, visualization and presentation.

The programme aims to develop vital skills such as critical thinking, effective communication, teamwork, leadership, and the capacity to identify and resolve complex issues. These objectives are specifically crafted to equip students for advanced education and careers and foster their roles as responsible citizens who make positive contributions to society.

Furthermore, the curriculum fosters ethical and moral values, equipping students for careers in business, industry, and finance, with an emphasis on continual skill development and socially responsible project design.

B.Com. (Hons.)

For students who complete a 4-year (8-semester) programme of study.

B.Com. (Hons. With Research)

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Business Economics
- Financial Accounting
- Principles of Management or any Interdisciplinary Course or Massive Open Online Course (MOOC)
- Computerised Accounting
- Effective Communication
- Introduction to Quantitative Techniques (Selective)
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Corporate Law
- Corporate Accounting
- Macro Economics – Theory and Policy or any Interdisciplinary Course or Massive Open Online Course (MOOC)
- Business Communication – Digital Skills
- Spreadsheets Foundation
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Math for Financial and Logical Decisions
- Financial Reporting
- International Business
- People Management or any Interdisciplinary Course or Massive Open Online Course (MOOC)
- Spreadsheets Excellence – Advanced Excel
- Commerce Workshop – I: Review of Management Literature & Presentation skills
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Financial Services, Marketing and Institutions
- Elements and Methods of Costing
- Elective I
- Principles of Marketing or any Interdisciplinary Course or Massive Open Online Course (MOOC)
- Business Statistics
- Software Skills (Python / SQL / Oracle) or Massive Open Online Course (MOOC)

- Commerce Workshop – II: Team Building and Communication Skills
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Income Tax
- Financial Management
- E-Commerce **or** any Interdisciplinary Course or Massive Open Online Course (MOOC)
- Elective II
- Elective III
- Commerce Workshop – III: Selling Skills
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Business Laws
- Elective IV
- Elective V
- Entrepreneurship Development **or** any Interdisciplinary Course **or** Massive Open Online Course (MOOC)
- Consumer Affairs and Customer Care
- Commerce Workshop – IV: Skills for Success
- Comprehensive Viva-Voce
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.Com. (Hons.) Courses:
- Project Management
- Elective VI
- Elective VII
- Basics of Design Thinking or any Interdisciplinary Course **or** Massive Open Online Course (MOOC)
- Software skills – Financial Modelling **or** Massive Open Online Course (MOOC)
- Awareness Course VII: Education for Life

B.Com. (Hons. with Research) Courses:
- Project Management
- Elective VI
- Elective VII
- Basics of Design Thinking **or** any Interdisciplinary Course **or** Massive Open Online Course (MOOC)
- Software skills – Financial Modelling **or** Massive Open Online Course (MOOC)
- Research Methodology
- Awareness Course VII: Education for Life

Semester 8

B.Com. (Hons.) Courses:
- Elective VIII
- Leadership and Team Development **or** any Interdisciplinary Course **or** Massive Open Online Course (MOOC)
- Internship **or** Apprenticeship
- Awareness Course VIII: God, Society and Man

B.Com. (Hons. with Research) Courses:
- Elective VIII
- Leadership and Team Development **or** any Interdisciplinary Course **or** Massive Open Online Course (MOOC)
- Research project
- Awareness Course VIII: God, Society and Man

ELECTIVES

Students can choose their electives from a broad range of subjects.

Note: Students of B.Com. (Hons. with Research) will also choose electives in their area of research in the last two semesters.

- Advanced Accountancy
- Foreign Trade Procedures
- Banking Theory and Practice
- Strategic Cost Management and Decision Making
- Retail Management
- Insurance: Principles, Contracts and Covers
- Auditing
- Digital Marketing
- Risk Management
- Cost Control and Performance Evaluation
- Management of International Business
- Insurance: Regulation, Functions and Covers
- Investments Analysis
- Consumer Behaviour
- Business Data Analytics
- Indirect Taxes
- Supply Chain & Procurement
- Sustainable Development
- Indian Accounting Standards (IND-AS)
- Advanced Financial Management
- Advanced Cost Management
- Financial Services Marketing
- Marketing Analytics with R Programming

B.S. (Hons.) / (Hons. with Research) in **Mathematics**

For Women & Men

OVERVIEW

Mathematics provides a language and tools for understanding the physical world around us and the abstract world within us. It represents a broad spectrum of fields and applications, many of which students will learn during the bachelor's programme at SSSIHL.

The programme is designed to provide students with a solid foundation in mathematical theory and practical problem-solving skills, covering a wide range of topics. These include calculus, linear algebra, abstract algebra, complex analysis, numerical analysis, etc., as well as software laboratory courses in Python programming, C programming, and data structures in C.

The programme emphasizes analytical thinking and logical reasoning. It guides students into advanced areas such as abstract algebra and real analysis, fostering a deeper understanding of mathematical structures.

In the first year (Semesters 1 and 2), students are offered courses in Physics and Chemistry in addition to Mathematics courses. The curriculum often incorporates real-world applications, allowing students to apply mathematical concepts to industry-specific challenges.

In Year 4, students who have achieved a CGPA of 7.5 or higher at the end of the 6th semester are eligible to pursue a research project in their chosen area of specialization. This research endeavour provides students with the opportunity to delve deeper into a specific topic within their field of study, fostering the development of critical research skills essential for academic and professional growth.

Overall, the B.S. in Mathematics programme equips students with the knowledge and skills needed to appreciate the elegance of mathematics and tackle complex challenges in both theoretical and applied contexts.

It provides graduates with an excellent foundation for a career in government or industry (e.g., teaching, Finance and Management, Actuarial Sciences, IT, Data Analysis, etc.) and a particularly strong foundation for advanced study in science, engineering, and finance.

Depending on their performance, students can also continue their studies at SSSIHL and pursue the M.Sc. in Mathematics. They can also take national eligibility tests such as CSIR-NET, JEST, NBHM, etc.

SPECIALIZATIONS

In Years 3 and 4, students will choose three electives (see the list of Courses) to pursue a specialization in either one of the following streams:

- Applied Mathematics
- Artificial Intelligence
- Industrial Mathematics
- Theoretical Computer Science
- Mathematical Biology
- Actuarial Science

MINOR

Additionally, students can pursue a minor degree in one of the following subjects:

- Data Science
- Computer Science
- Actuarial Science
- Physics
- Chemistry

These will be undertaken in Years 2 and 3 (Semesters 3 to 6) and will carry a total of 16 credits.

The student then gets awarded a minor degree in that subject.

B.S. (Hons.) in Mathematics

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Mathematics

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent) with Mathematics, Physics and Chemistry as core subjects.
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Mathematics: Differential Calculus
- Physics: Analog and Digital Electronics
- Chemistry: Principles of Structure and Bonding
- Practical: Python Programming – I
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Mathematics: Integral Calculus
- Physics: Introductory Mechanics
- Chemistry: Equilibria in Chemistry
- Practical: Python Programming – II
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Real Analysis – I
- Linear Algebra – I
- Practical: Skill Enhancement Course
- Minor Course
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Real Analysis – II
- Algebraic Structures – I
- Ordinary Differential Equations
- Practical: Skill Enhancement Course
- Minor Course
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Complex Analysis
- Metric Spaces
- Optimization Techniques
- Specialization Elective – I
- Practical: Skill Enhancement Course
- Minor Course
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Methods of Differential Equations
- Numerical Analysis
- Linear Algebra – II
- Specialization Elective – II
- Mini Project / Summer Internship
- Minor Course
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Algebraic Structures – II
- Specialization Elective – III
- Elective – IV
- Research Methodology
- Elective – V
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Algebraic Structures – II
- Specialization Elective – III
- Research Methodology
- Elective – IV
- Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Mathematical Modelling
- Elective – VI
- Elective – VII
- Elective – VIII
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Mathematical Modelling
- Elective – VI
- Project
- Awareness Course VIII: God, Society and Man

SPECIALIZATION ELECTIVES

In Year 4, students must choose **all three specialization electives from any one** of the following streams:

Applied Mathematics

- Number Theory
- Topology
- Theory of Ordinary
- Differential Equations
- Differential Geometry
- Mathematics for Image Processing
- Advanced Real Analysis
- Theory of Partial Differential Equations
- Functional Analysis
- Measure Theory

Artificial Intelligence

- Artificial Intelligence
- Data Mining and Machine Learning
- Deep Learning
- Natural Language Processing

Industrial Mathematics

- Probability and Statistics
- Graph Theory
- Fuzzy Sets
- Operations Research
- Fluid dynamics
- Mathematical Ecology
- Applied Statistics
- Applied Cryptography
- Techniques in Applied Mathematics
- Combinatorics

Theoretical Computer Science

- Discrete Mathematics
- Mathematical Logic for Computer Science
- Mathematics for Image Processing
- Formal Language and Automata Theory
- Theory of Computation
- Compiler Design

Applied Mathematics

- Mathematical Ecology
- Mathematical Epidemiology
- Dynamical Systems
- Advanced Dynamical Systems
- Stochastic Modelling
- Deterministic Optimal Control Theory

Actuarial Science

- Actuarial Mathematics
- Actuarial Applied Statistical Methods
- Business Economics with Actuarial Applications
- Business Accounting and Finance with Actuarial Applications
- Regulation and Financial Reporting with Actuarial Applications

B.S. (Hons.) / (Hons. with Research) in Computer Science

For Women & Men

OVERVIEW

Computer Science at the undergraduate level deepens one's understanding of programming logic, computer systems and networks. It provides a solid foundation in various aspects of computing and technology.

This programme serves as a robust cornerstone for students entering the realm of Computer Science. It encompasses vital facets such as foundational programming skills and computer system concepts. It focuses on creating links between theory and practice and applies the fundamental principles and methods of Computer Science to a wide range of applications.

The course structure embellishes a student with multiple skills necessary to be a specialist in Computer Science, Artificial Intelligence and Data Science by initiating the students in multiple learning streams. For example, the programming skill is initiated with Problem Solving in the first semester, leading to Data Structures and Algorithms in the second semester, and further into Object Oriented programming concepts, Software Engineering culminating in a project work. In another stream of learning, a student understands the foundations in Calculus, leading to Probability and Statistics, further into Linear Algebra, to culminate in Data Mining and Machine Learning.

Notwithstanding the theoretical and practical labs, students with research capabilities can take a research project, and students with analytical capabilities can take a software development project in their final year. This gives students tremendous confidence in their ability to join research, software development, AI, data engineering and data science organizations.

In essence, multiple streams of learning offer enough breadth, and critical depth is offered by diving deep into each stream as the student progresses. This leads to the development of very mature professionals in Computer Science, Artificial Intelligence and Data Science.

The culmination of the four-year programme is an honours degree, symbolizing a deep comprehension of Computer Science and Artificial Intelligence. Students emerge with a well-rounded skill set, having navigated from the foundational principles of computing to advanced AI applications.

SPECIALIZATION IN ARTIFICIAL INTELLIGENCE

In Years 3 and 4 (Semesters 6, 7 and 8), students with Mathematics as a core subject in XII Standard and have an option to pursue an elective in Artificial Intelligence (AI).

Artificial intelligence is the development of computer systems that can perform tasks that can replicate human-like cognitive functions to analyze and interpret data, adapt to changing environments, and improve performance over time human-like intelligence.

In its current state, the specialization in Artificial Intelligence comprises of the following subjects:

- Artificial Intelligence
- Machine Learning Operations
- Deep Learning
- Natural Language Processing

MINOR DEGREE IN DATA SCIENCE

Additionally, students can pursue a Minor degree in Data Science by taking the following subjects:

- Calculus
- Probability and Statistics
- Statistics for Data Science
- Data Analysis and Visualization
- Linear Algebra for Data Science
- Optimization for Machine Learning
- Data Mining and Machine Learning
- Big Data Analysis
- Cloud Computing

In its current form, these subjects are distributed as one per semester, on an average. If opted for the Data Science Minor, the student is also awarded a Minor degree in Data Science.

B.S. (Hons.) in Computer Science

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Computer Science

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent) with Mathematics as a core subject

- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

- Consistent academic performance of 60% aggregate marks in X and/or XII Standard

- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Calculus
- Problem Solving with Computer
- Practical: Software Lab in C – Part I
- Practical: Software Lab in Python – I
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Probability and Statistics
- Data Structures and Algorithms
- Practical: Software Lab in C – Part II
- Practical: Software Lab in Python – II
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Statistics for Data Science
- Computer Organization and Design
- Discrete Mathematics for Computer Science
- Practical: Software Lab in Data Visualization
- Minor Course Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Linear Algebra for Data Science
- Database Management System
- Object Oriented Programming Concepts
- Practical; Software Lab in C++
- Practical: Software Lab in in SQL
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Optimization for Machine Learning
- Data Mining and Machine Learning
- Operating Systems
- Computer Networks
- Practical: Software Lab in Java
- Skill Enhancement Course
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Big Data Analytics
- Elective – I
- Software Engineering
- Design and Analysis of Algorithms
- Practical: Software Lab in Web Programming
- Mini-Project / Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Cloud Computing
- Elective – II
- Elective – III
- Linux System Programming
- Research Methodology
- Project Work
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Cloud Computing
- Elective – II
- Elective – III
- Linux System Programming
- Research Methodology
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Mathematical Modelling
- Elective – IV
- Formal Languages
- Research Methodology
- Project Work
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Elective – IV
- Formal Languages
- Research Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons.) / (Hons. with Research) in **Mathematical Sciences and Computing**

For Men

OVERVIEW

Mathematical Sciences is a broad term encompassing various disciplines within the field of mathematics. It refers to the collective study of mathematical concepts, theories, and applications across different areas. Mathematical Sciences provide a rigorous approach to applied data and computational sciences.

This multidisciplinary programme offers students a thorough grasp of fundamental mathematical, computer science, and statistics concepts. It is designed to prepare students for roles as robust computational experts and machine learning algorithm designers.

In the first two years (Semesters 1-4) of the programme, students focus on building a strong foundation in Mathematics, Computer Science, and Statistics. They undergo comprehensive training in subjects such as Differential and Integral Calculus, Problem Solving with Computers, Probability, and Data Structures, and gain practical programming skills in Python, C, and C++.

In the final three semesters, students will have the option to choose from various specializations and may also opt for internships. The curriculum often incorporates real-world applications, allowing students to apply concepts to industry-specific challenges.

In Year 4, students will embark on a research project supervised collaboratively by faculty from diverse disciplines. This will allow them to integrate academic knowledge. Additionally, they will have opportunities for industry collaboration and internships, which will allow them to apply theoretical concepts in real-world settings and further enrich their learning experience.

On completion, graduates will have diverse career paths, including opportunities in research, employment in government or industry sectors (such as Teaching, Finance, Management, IT, and Data Analysis), or pursuing higher studies like M.Tech. and Ph.D. Additionally, they will be equipped to undertake national eligibility tests such as CSIR-NET, JEST, NBHM, showcasing their readiness for various professional avenues.

SPECIALIZATION

In Years 3 and 4 (Semesters 5-8), in order to earn a

specialization, students have an option to take four electives from any one of the following streams:

- Artificial Intelligence
- Applied Mathematics
- Cyber Security
- Quantum Computing

B.S. (Hons.) in Mathematical Sciences and Computing

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Mathematical Sciences and Computing

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

○ 10+2 years of schooling from a recognized board (CBSE or equivalent) with Mathematics as a core subject

○ Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

○ Consistent academic performance of 60% aggregate marks in X and/or XII Standard

○ Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Mathematics: Differential Calculus
- Computer Science: Problem Solving with Computer
- Statistics: Introduction to Statistics
- Practical: Basic Programming in Python
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Mathematics: Integral Calculus
- Computer Science: Discrete Mathematics
- Statistics: Probability and Distributions
- Practical: Basic Programming in C
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Mathematics: Basic Linear Algebra
- Mathematics: Basic Real Analysis
- Statistics: Statistical Inference
- Computer Science: Data Structures in C
- Practical: Object Oriented Programming in C++ – I
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Mathematics: Numerical Analysis
- Mathematics: Differential Equations
- Computer Science: Design and Analysis of Algorithms
- Computer Science: Database Management Systems and SQL Programming
- Practical: Object Oriented Programming in C++
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Mathematics: Advanced Linear Algebra
- Mathematics & Statistics: Optimization Techniques for Machine Learning
- Mathematics: Metric Spaces
- Computer Science: Computer Architecture and Organization
- Specialization Elective – I
- Skill Enhancement Course
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Mathematics: Algebraic Structures
- Mathematics: Techniques in Applied Mathematics
- Computer Science: Operating Systems
- Computer Science: Computer Networks
- Computer Science: Data Mining and Machine Learning
- Mini-Project / Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Mathematics: Differential Geometry
- Specialization Elective-II
- Specialization Elective – III
- Open Elective – I/Project
- Research Methodology
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Mathematics: Differential Geometry
- Specialization Elective – III
- Research Project
- Research Methodology
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Mathematics: Mathematical Modelling
- Specialization Elective – IV
- Open Elective – II / Project
- Open Elective – III / Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Mathematics: Mathematical Modelling
- Specialization Elective – IV
- Research Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons.) / (Hons. with Research) in Actuarial Data Science

For Men

OVERVIEW

Actuarial Data Science specializes in analyzing risk using multidimensional thinking, going beyond numerical calculations. It leverages data science tools like Artificial Intelligence and Machine Learning Models, integrating mathematics, statistics, human behavior, and business insights.

This approach anticipates real-world outcomes, assessing risks across emerging sectors such as Metaverse, Electric Vehicles, Cybersecurity, Gaming Industry, and Environmental, Social, and Governance (ESG) factors. Actuaries also tackle challenges in Fraud Detection, Cryptocurrency, International Financial Reporting Standards (IFRS), Real Estate Residual Values Insurance, and Enterprise Risk Management, playing a crucial role in societal risk management. They extend their expertise to traditional domains like life, pensions, health, crop, cancer, property damage, and catastrophe insurance, ensuring comprehensive risk mitigation strategies.

> SSSIHL stands out as one of the four global universities honoured with the Casualty Actuarial Society (CAS) University Award in 2022 for pioneering Property & Casualty Insurance (P&C) actuarial education. Founded in 1914, CAS is the world's only actuarial organization focused exclusively on property and casualty risks and serves over 10,000 members worldwide.
>
> Attaining Gold Level recognition and the Society of Actuaries (SOA) Universities & Colleges with Actuarial Programs (UCAP) Advanced Curriculum, SSSIHL is the **only university in India** to achieve all three prestigious distinctions.

This programme is suited for students who love numbers, especially modelling and probability, and are interested in using data science tools and techniques to solve real-world problems. It will prepare them for a career in actuarial science.

The programme is strategically introduced based on relevance to industry demands, integrating practical skills, fostering adaptability and future readiness, promoting ethical and integral education, and maintaining a balance between academia and industry engagement. It includes a comprehensive curriculum encompassing core actuarial and data science courses:

- 9 SOA Exams in the pathway to become an Associate of the Society of Actuaries (ASA)
- 9 CAS Exams in the pathway to become an Associate (ACAS)
- 4 CAS Institute Exams in the pathway to become Certified Specialist in Predictive Analytics (CSPA), and
- 5 Skill development courses to excel in programming and communication

There is a special focus on Actuarial Data Science hands-on projects using R and Python.

B.S. (Hons.) in Actuarial Data Science

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Actuarial Data Science

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Probability & Statistics
- Financial Mathematics
- Business Economics – Micro
- Introduction to R
- Excel Basics for Actuarial Practice

Semester 2
- Fundamentals of Actuarial Mathematics
- Data Concepts and Visualization
- Business Economics – Macro
- Actuarial mathematics using R
- Excel Advanced for Actuarial Practice

YEAR 2

Semester 3
- Advanced Short-Term Actuarial Mathematics – I
- Advanced Long-Term Actuarial Mathematics – I
- Corporate Finance
- Introduction to Python
- Actuarial Communications – I

Semester 4
- Advanced Short-Term Actuarial Mathematics – II
- Advanced Long-Term Actuarial Mathematics – II
- Accounting for Financial Institutions
- Introduction to Machine Learning
- Property and Casualty Insurance Fundamentals
- Actuarial Communications – II

YEAR 3

Semester 5
- Statistics for Risk Modelling – I
- Introduction to Deep Learning
- Modern Actuarial Statistics – Part 1
- Advanced Actuarial Statistics – Part 1
- Predictive Analytics using R – I
- Predictive Analytics using R – II
- Course on Ethics and Professionalism

Semester 6
- Statistics for Risk Modelling – II
- Modern Actuarial Statistics – Part 2
- Advanced Actuarial Statistics – Part 2
- Predictive Modelling using Python
- Advanced Topics in Predictive Analytics
- Mini Project

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Basic Ratemaking
- International Regulation P&C
- Actuarial Practice I
- Actuarial Practice II

B.S. (Hons. with Research) Courses:
- Basic Ratemaking
- International Regulation P&C
- Research Methodology
- Project

Semester 8

B.S. (Hons.) Courses:
- Estimating Claim Liabilities
- Financial Economics
- Financial Reporting
- Mini Project

B.S. (Hons. with Research) Courses:
- Estimating Claim Liabilities
- Project

B.S. (Hons.) / (Hons. with Research) in Physics

For Women & Men

OVERVIEW

Physics is the cornerstone of the natural sciences, serving as the foundation for many other disciplines such as chemistry, biology, and astronomy. It explores the universe from the vastness of galaxies to the minuteness of subatomic particles. Whether examining the laws governing the cosmos, the behaviour of superconductors, or the resonating sound of a sitar, physics delves into the intricate workings of our world. The discoveries it has led to have paved the way for ground-breaking technological innovations and continue to play a pivotal role in advancing various scientific fields.

Physics also contributes significantly to developing key technologies in medical imaging, nanotechnology, and quantum computing. Its role in addressing global challenges—such as energy production, environmental sustainability, climate change, and public health—cannot be overstated, and its impact on society is profound.

UNIQUENESS OF THIS PROGRAMME

The undergraduate programme—B.S. (Hons./ Hons. with Research)—is designed to establish a solid foundation in core physics principles, forming the basis for cutting-edge scientific advancements. The curriculum combines a strong theoretical and experimental approach with hands-on laboratory work, alongside courses in advanced topics and computational physics.

What distinguishes this programme is its unique integration of classical physics education with modern areas of specialization. While many programs focus primarily on theoretical or experimental physics, this curriculum provides students with essential physics knowledge, a glimpse into emerging fields, and the computational skills necessary to tackle real-world problems.

Additionally, students will gain expertise in computational methods, simulations, and programming, ensuring a comprehensive and forward-thinking education at the bachelor's level.

In the first two semesters, students are offered courses in Mathematics and Chemistry in addition to Physics courses. The eight-semester program provides in-depth knowledge of various topics in physics through 18 theory courses and 11 laboratory courses. This allows for better assimilation of theoretical concepts.

SPECIALIZATIONS

In Year 4 (Semesters 7 and 8), B.S. (Hons.) students have the opportunity to tailor their programme by choosing a specialization (via two Electives and a corresponding Laboratory course) in any one of the following three streams (see the list of Courses):

- Photonics
- Functional Materials Science
- Microelectronics

MINOR

In Years 2 and 3 (Semesters 3-6), students can broaden their academic experience by selecting courses from the following fields to earn a minor degree and complement their major in Physics:

- Data Science
- Artificial Intelligence
- Chemistry
- Mathematics
- Economics
- Biosciences

Upon completing all 16 credits in a chosen field, students will be awarded a minor degree in that subject.

Students will also acquire programming and computing skills through the five skill enhancement courses.

CAREER OPTIONS

The programme gives graduate students the necessary analytical, problem-solving and quantitative skills, which are valuable in various sectors, such as research and development, academic and education roles, engineering, data analysis and statistics, technology, environmental science, and more.

B.S. (Hons.) in Physics

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Physics

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Physics: Analog and Digital Electronics
- Physics: Electronics Laboratory
- Skill Enhancement Course: Python Programming – I
- Mathematics: Differential Calculus
- Chemistry: Principles of Structure and Bonding
- Chemistry: Laboratory Course in General Chemistry
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Physics: Introductory Mechanics
- Physics: Mechanics Laboratory
- Skill Enhancement Course: Python Programming – II
- Mathematics: Integral Calculus
- Chemistry: Equilibria in Chemistry
- Chemistry: Laboratory Course in Titrimetry and Equilibria
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Mathematical Physics – I
- Electromagnetism
- Electromagnetism Laboratory
- Computational Physics Laboratory – I
- Interdisciplinary Minor
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Mathematical Physics – II
- Modern Physics
- Modern Physics Laboratory
- Computational Physics Laboratory – II

- Interdisciplinary Minor
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Classical Mechanics
- Modern Optics
- Thermal Physics and Statistical Mechanics
- Physics in Industry – I
- Optics Laboratory
- Experimental Methods in Physics
- Interdisciplinary Minor
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Mathematical Physics – III
- Quantum Mechanics
- Operational Amplifiers and Applications
- Physics in Industry – II
- Computational Quantum Mechanics Laboratory
- Operational Amplifiers and Applications Laboratory: Hardware and Circuit Simulation Lab
- Latex for Scientific Writing
- Interdisciplinary Minor
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Atomic and Molecular Spectroscopy
- Solid State Physics
- Applied Physics Laboratory
- Specialization Elective – I
- Specialization Laboratory
- Research Methodology
- Open Elective
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Atomic and Molecular Spectroscopy
- Solid State Physics
- Applied Physics Laboratory
- Specialization Elective – I
- Specialization Laboratory
- Research Methodology
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Nuclear and Particle Physics
- Specialization Elective – II
- Microprocessors and Microcontrollers
- Microprocessors and Microcontrollers Laboratory
- Mini project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Nuclear and Particle Physics
- Specialization Elective – II
- Research Project
- Awareness Course VIII: God, Society and Man

SPECIALIZATION ELECTIVES

Stream 1: Photonics
- Photonics Technology Essentials – I
- Photonics Technology Essentials – II
- Specialization Laboratory – Photonics

Stream 2: Functional Materials Science
- Concepts in Materials Science
- Functional Materials
- Specialization Laboratory – Functional Materials Science

Stream 3: Microelectronics
- Semiconductor Device Physics
- Microelectronics – CMOS Technology
- Specialization Laboratory – Microelectronics

B.S. (Hons.) / (Hons. with Research) in Chemistry

For Women & Men

OVERVIEW

Chemistry is a broad field of natural science focused on matter at the atomic and molecular levels. It primarily examines the properties of substances, the transformations they experience, and the natural laws governing these processes. Often called the central science, it intersects with various scientific areas like physics, biology, environmental science, and materials science. Chemists play a crucial role in technological progress, healthcare improvements, and enhancing our understanding of the natural world.

The B.S. (Hons.) / (Hons. with Research) in Chemistry programme at SSSIHL equips students with a comprehensive understanding of core chemistry concepts.

The curriculum cultivates a strong scientific grounding in methods and techniques employed in academic research and advanced industrial processes. The theoretical coursework is complemented by meticulously designed laboratory experiments in well-equipped facilities.

During Year 1 (Semesters 1 and 2), in addition to core Chemistry courses, students will pursue four interdisciplinary courses (equivalent to 16 credits) in either of the subjects below:

- Mathematics
- Physics
- Biosciences and Biotechnology

The first three years of study (Semesters 1-6) provide in-depth coverage of various essential aspects of chemistry through courses in Organic, Inorganic, Physical and Analytical Chemistry, laying a strong foundation for further specialization.

SPECIALIZATIONS

In Year 4 (Semesters 7 and 8), B.S. (Hons.) students have the opportunity to tailor their programme by choosing a specialization in any one of the following three areas:

- Applied Chemistry
- Applied Materials
- Drug Discovery and Design

MINOR

Additionally, in Years 2, 3 and 4 (Semesters 3-8), students are required to take Minor courses (16 credits) in any subjects from the following domains:

- Biosciences and Biotechnology
- Food Products and Processing
- Data Science
- Physics
- Mathematics

If all 16 credits are from specific subjects within any one domain, the student is awarded a minor degree in that subject.

CAREER OPTIONS

The programme provides graduates with a strong foundation for pursuing careers in research and development, quality control, environmental science, pharmaceuticals, education, and other industries that highly value analytical and scientific skills.

Additionally, students develop proficiency in computer programming and computational chemistry techniques through five dedicated skill enhancement courses. Furthermore, five ability enhancement courses hone their communication skills, ensuring their success in diverse professional settings.

B.S. (Hons.) in Chemistry

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Chemistry

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

○ 10+2 years of schooling from a recognized board (CBSE or equivalent)

○ Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

○ Consistent academic performance of 60% aggregate marks in X and/or XII Standard

○ Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Chemistry: Principles of Structure and Bonding
- Chemistry: Laboratory Course in General Chemistry
- Computer Science: Python Programming – I / Essential Laboratory Skills in Chemistry
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)
- **Interdisciplinary Minor Courses** *(any two theory courses with lab practical – where applicable)*

  Mathematics: Differential Calculus
  Physics: Analog and Digital Electronics
  Physics: Practical – Electronics Laboratory
  Biosciences: Animal Diversity and Evolution
  Biosciences: Cell Biology
  Biosciences: Practical – Animal Diversity
  Biosciences: Practical – Cell Biology

Semester 2
- Chemistry: Equilibria in Chemistry
- Chemistry: Laboratory Course in Titrimetry and Equilibria
- Computer Science: Python Programming – II / IT skills for Chemists
- Awareness Course II: Unity of Religions
- **Interdisciplinary Minor Courses** *(any two theory courses with lab practical – where applicable)*

  Mathematics: Integral Calculus
  Physics: Introductory Mechanics
  Physics: Practical – Mechanics Laboratory
  Biosciences: Plant Diversity and Evolution
  Biosciences: Microbiology
  Biosciences: Practical – Plant Diversity
  Biosciences: Practical – Microbiology

YEAR 2

Semester 3
- Chemistry of Elements
- Qualitative Inorganic Analysis
- Fundamentals in Organic Chemistry
- Laboratory Course in Basic Techniques in Organic Chemistry
- Computational Techniques in Chemistry – I
- Minor Course
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Coordination Chemistry
- Laboratory Course in Synthesis and Analysis of Coordination Compounds
- Structure and Reactivity in Organic Chemistry
- Laboratory Course in Functional Group Analysis and Structural Aspects
- Chemical Thermodynamics
- Computational Techniques in Chemistry – II
- Minor Course

- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Solid State Chemistry
- Applications of Equilibria, Kinetics and Surface Chemistry
- Laboratory Course in Equilibria, Kinetics and Surface Chemistry
- Basics in Synthetic Organic Chemistry
- Laboratory Course in Synthetic Organic Chemistry
- Minor Course
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Spectrometric Identification of Organic Compounds
- Analytical Chemistry
- Laboratory Course in Analytical Chemistry
- Applied Electrochemistry
- Laboratory Course in Electrochemistry
- Introduction to Quantum Chemistry
- Minor Course
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Specialization Elective – I
- Specialization Elective – II
- General Elective I
- General Elective II
- Research Methodology
- Project
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Specialization Elective – I
- Specialization Elective – II
- General Elective I
- General Elective II
- Research Methodology
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Specialization Elective – III
- General Elective – III
- Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Specialization Elective – III
- Research Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons.) / (Hons. with Research) in Biosciences and Biotechnology

For Women & Men

OVERVIEW

This multidisciplinary programme offers an academic journey that enhances our understanding of life on Earth by examining the complex relationships among living organisms and their environments. It combines foundational biological sciences with the most recent innovations in biotechnology.

The curriculum builds a strong foundation in essentials like cell biology, microbiology, biodiversity, and fundamental chemistry concepts. Students then explore molecular mechanisms governing life, studying biomolecules in development, physiological processes, and genetics. Gradually, the program shifts to applied biosciences, emphasizing hands-on laboratory experience for practical research. This blend of classical and modern biology equips students with a holistic understanding of life sciences, critical thinking, and problem-solving skills for success.

Students benefit from close interactions with faculty members who are active researchers during their study, enhancing their learning experience and gaining insights into current biosciences and biotechnology trends. They can also participate in research projects and internships, further developing their practical skills and preparing them to contribute ethically and responsibly to the rapidly evolving field.

Upon finishing this programme, students will establish a solid foundation in biological sciences along with hands-on lab skills, equipping them for diverse career paths, whether in advanced studies or the biotechnology sector. The programme focuses on fostering their critical thinking, ability to tackle new challenges, and significant contributions to progress in the field.

B.S. (Hons.) in Biosciences and Biotechnology

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Biosciences and Biotechnology

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- The candidate must study Biology at XI and XII Standard
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Biosciences: Cell Biology (Theory and Practical)
- Biosciences: Animal Diversity and Evolution (Theory and Practical)
- Chemistry: Principles of Structure and Bonding
- Chemistry: Laboratory Course in General Chemistry (Practical)
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Biosciences: Microbiology (Theory and Practical)
- Biosciences: Plant Diversity and Evolution (Theory and Practical)
- Chemistry: Equilibria in Chemistry
- Chemistry: Laboratory Course in Titrimetry and Equilibria
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Biosciences: Molecular Biology (Theory and Practical)
- Biosciences: Ecology (Theory and Practical)
- Chemistry: Fundamentals in Organic Chemistry
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Biochemistry (Theory and Practical)
- Developmental Biology (Theory and Practical)
- Biostatistics
- Computational Biostatistics (Practical)
- Angiosperm Taxonomy and Systematics
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Human Physiology (Theory and Practical)
- Bioinformatics (Theory and Practical)
- Molecular Cell Biology (Theory and Practical)
- Instrumentation
- Genetics and Evolution
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Immunology (Theory and Practical)
- Plant Physiology
- Biotechnology (Theory and Practical)
- Elective – 1
- Mini Project
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Gene Regulation and Expression
- Intermediary Metabolism
- Elective – 2
- Elective – 3
- Project Work
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Gene Regulation and Expression
- Intermediary Metabolism
- Elective – 2
- Research Methodology
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Genetic Engineering
- Bioanalytical Techniques
- Elective – 4
- Project Work
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Genetic Engineering
- Bioanalytical Techniques
- Research Project
- Awareness Course VIII: God, Society and Man

ELECTIVES

Students will be offered a wide choice of electives, including:

- Stem Cell and Regenerative Biology
- Genomics, Transcriptomics, Proteomics and Metabolomics
- Plant Tissue Culture
- Plant Genetic Engineering
- Molecular Developmental Biology
- Environmental Biotechnology
- Molecular Evolution and Human Genetics
- Neurobiology
- Pharmacology and Drug Designing
- Industrial Microbiology
- Environmental Microbiology
- Mycology, Pathology and Fungal Biotechnology
- Advanced Bioinformatics

B.S. (Hons.) / (Hons. with Research) in Artificial Intelligence and Computational Biology

For Men

OVERVIEW

We stand on the brink of a revolution where Artificial Intelligence (the creation of computer systems that can execute tasks demanding human-like intelligence) and Computational Biology (the application of data analysis, mathematical modeling, and computational simulations to gain insights into biological systems and connections) will greatly improve our lives across various fields, including Healthcare, Pharmaceuticals, Biotechnology, Data Science, Bioinformatics, AI research and development, Environmental Studies, and Forensics.

This innovative programme is designed to build core competencies in biological, computer and data sciences. It will allow students to seamlessly operate across the frontier areas of Artificial intelligence (AI), Computational Biology and Data Science and apply them to solve biological problems.

In the first year, the students will be trained in Mathematics, Computer Programming and Modern Biology fundamentals. In Year 2, they will be introduced to Statistics and AI. In Year 3, the focus will be on learning the applications of Biotechnology, Bioinformatics, AI and Machine Learning, followed by training on the skills required to undertake research projects.

In Year 4, the research project (under the joint supervision of faculty across disciplines) will give students an opportunity to apply AI, Computational Biology and Data sciences to develop potential solutions to real-world challenges in biomedical sciences.

Graduates of this programme will find various career paths across multiple disciplines. They can also engage in research in areas such as developing biological algorithms, analyzing the structure of biological entities, studying genomic diversity, exploring comparative genomics, engineering genomes, designing molecular medicine, and conducting Multi-Omic* data studies.

*a field of study in biological sciences that ends with -omics, such as genomics, transcriptomics, proteomics or metabolomics.

B.S. (Hons.) in Artificial Intelligence and Computational Biology

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Artificial Intelligence and Computational Biology

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)

- Either passed or appeared for Final exams at XII Standard before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered

- The candidate must take either one of the following subject combinations at XI and XII Standard:

  - Mathematics, Biology, Physics and Chemistry

  - Mathematics, Physics and Chemistry

  - Biology, Physics and Chemistry with an equivalent course (XII Standard / Intermediate) in Mathematics (online / distance mode)

- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Mathematics: Differential Calculus
- Computer Science: Introduction to Algorithms
- Biology: The Dynamic Cell
- Biology: Introduction to Laboratory Science (Practical)
- Computer Science - Basic Programming in Python
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Mathematics: Integral Calculus
- Computer Science: Discrete Mathematics
- Biology: Microbiology
- Biology: Cell and Microbiology (Practical)
- Computer Science: Programming, Data Structures and Algorithms Using Python
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Mathematics: Linear Algebra
- Statistics: Introduction to Statistics
- Biology: Biochemistry
- Biology: Biochemistry (Practical)
- Computer Science: Data visualization with R
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Mathematics: Differential Equations
- Design and Analysis of Algorithms in Mathematical Sciences and Computing
- Biology: Principles of Genetics
- Statistics: Probability Theory and Distributions
- Artificial Intelligence: An Introduction to Artificial Intelligence
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Biology: Molecular Biology
- Biology: Molecular Biology (Practical)
- Statistics: Statistical Inference
- Computational Biology: Bioinformatics and Computational Biology
- Specialization Elective – I
- Computer Science: Cyber security
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Computer Science: Database Management Systems
- Artificial Intelligence: Artificial Intelligence for Computational Biology – I
- Mathematics: Mathematics for Machine Learning
- Biology: Epidemiology and Public Health
- Specialization Elective – II
- Mini Project
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Biology: Multi-OMICS
- Artificial Intelligence: Machine Learning and AI
- Specialization Elective – III
- Specialization Elective – IV
- Specialization Elective – V
- Project / Interim Review
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Biology: Multi-OMICS
- Artificial Intelligence: Machine Learning and AI
- Specialization Elective – III
- Research Methodology
- Massive Open Online Course (MOOC) (e.g. Swayam)
- Research Project / Interim Review
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Mathematics: Mathematical Modelling
- Specialization Elective – VI
- Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Mathematics: Mathematical Modelling
- Research Project
- Awareness Course VIII: God, Society and Man

ELECTIVES

Students will be offered a choice of electives that span the disciplines of Biotechnology, Bioinformatics, Computer Science, Data Science, and Artificial Intelligence. Some of these electives will be Industry-oriented and delivered by experts from the relevant Industry.

RESEARCH PROJECT

Interdisciplinary project with research supervisors from the Department of Biosciences and Mathematics & Computer Sciences.

B.S. (Hons.) / (Hons. with Research) in Food and Nutritional Sciences

For Women

OVERVIEW

Food and Nutritional Sciences is a multidisciplinary field that combines principles from food science and nutrition to understand the relationship between food, health, and well-being. It encompasses various aspects such as food science, nutritional science and assessment, public health nutrition, food processing and preservation, food safety and quality.

Professionals in this field play a critical role in promoting individual and public health by bridging the gap between food and its impact on our bodies. They have the responsibility to make a positive impact of diet on human health and disease prevention.

Food technology specialists use their knowledge of Food processing, innovation, and preservation to create safe, wholesome food items that take advantage of new technical developments.

This comprehensive, multidisciplinary programme encompasses a broad spectrum of fields. The degree presents numerous career opportunities and meets the increasing demand for specialized knowledge. The curriculum emphasizes a profound understanding of theoretical concepts and practical abilities across different subjects, which are vital for success in the industry.

The programme is structured to provide strong academic training in food science, nutrition, dietetics, food processing and preservation, and related disciplines such as physiology, microbiology, biochemistry, and food technology. The diverse scope of subjects provides students with a unique blend of scientific and technical skills designed to meet the needs of careers in the clinical and public health sectors, nutrition, healthcare, and the food industry.

Value and activity-based courses develop essential entrepreneurial skills for students' employability. The programme's internship and research project elements equip students for career prospects in food and nutritional sciences.

SPECIALIZATIONS

Years 3 and 4 (Semesters 6 and 8), students will choose electives (see the list of courses) to pursue a specialization in either one of the following two major areas:

- Applied Nutrition
- Food Technology

Students can then build on this as a career path for further postgraduate or doctoral research.

MINOR

Additionally, students can pursue a minor degree in one of the following subjects:

1) Wellness and Fitness Management

Students pursuing this minor will gain expertise in conducting safe and effective fitness assessments and evaluations, helping to facilitate lifestyle changes through dietary adjustments. Courses such as Applied Physiology and Kinesiology, Exercise Testing and Prescription, and Fitness Assessment are designed to provide a strong academic foundation, preparing for career opportunities in the wellness and fitness fields.

2) Nutrition and Food Studies

3) Food Products and Processing

The minor courses will be taken in Years 2 and 3 (Semesters 4-6) for B.S. in Food and Nutritional Sciences (12 credits) students and Years 2, 3 and 4 (Semesters 4-8) for B.S. (Hons.) in Food and Nutritional Sciences (16 credits) students.

The Minor in Wellness and Fitness Management is open to students from Food and Nutritional Sciences and other streams (Biosciences, Chemistry, Others). The Minors in Nutrition and Food Studies and Food Products and Processing are open to all streams. However, these minors are not available for B.S. (Hons.)/ B.S. (Hons. With Research) in Food and Nutritional Sciences students.

The student then gets awarded a minor degree in that subject.

B.S. (Hons.) in Food and Nutritional Sciences

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Food and Nutritional Sciences

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent)
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Introductory Food Science
- Introductory Food Science (Practical)
- Fundamentals of Nutrition
- Fundamentals of Nutrition (Practical)
- Human Physiology
- Human Physiology (Practical)
- Computer Basics and Applications (Practical)
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Principles of Contemporary Culinary Science and Art
- Culinary Skills, Food Photography and Art (Practical)
- Food Chemistry
- Food Chemistry (Practical)
- General Microbiology
- General Microbiology (Practical)
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Fundamentals of Food Processing and Preservation
- Techniques in Processing and Preservation of Foods (Practical)
- Food Analysis (Practical)
- Biochemistry
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Human Nutrition
- Nutrition in Health
- Nutrition in Health (Practical)
- Institutional Food Management
- Institutional Food Management (Practical)
- Minor Course
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Food Product Development and Sensory Evaluation
- Food Product Development and Sensory Evaluation (Practical)
- Indian Traditional Foods and Cuisines
- Indian Traditional Foods and Cuisines (Practical)
- Community Nutrition
- Community Nutrition (Practical)
- Minor Course
- Awareness Course V: Ethos and Values for the Changing World

Specialization Core – Applied Nutrition
- Dietetics – I
- Dietetics – I (Practical)

Specialization Core – Food Technology
- Technology of Cereals, Pulses and Oilseeds
- Technology of Cereals, Pulses and Oilseeds (Practical)

Semester 6
- Functional Foods and Nutraceuticals
- Baking Technology
- Wellness Nutrition **or** Techniques in Baking and Confectionary
- Internship
- Minor Course
- Awareness Course VI: Life and its Quest

Specialization Core – Applied Nutrition
- Dietetics – II
- Dietetics – II (Practical)
- Sports Nutrition
- Sports Nutrition (Practical)

Specialization Core – Food Technology
- Food Safety and Quality Assurance
- Food Safety and Quality Assurance (Practical)
- Fruit and Vegetable Technology
- Technologies of Plant-Based Products (Practical)
- Group I Specialization Elective

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Food Microbiology
- Food Microbiology (Practical)
- Research Methodology
- Computer Applications in Food and Nutrition Research
- Community Connect
- Minor Course
- Awareness Course VII: Education for Life

Specialization Core – Applied Nutrition
- Public Health Nutrition and Epidemiology
- Public Health Nutrition and Epidemiology (Practical)
- Biostatistics – Massive Open Online Course (MOOC)

Specialization Core – Food Technology
- Dairy Technology
- Dairy Technology (Practical)
- Applied Statistics – Massive Open Online Course (MOOC) (e.g. Swayam)

B.S. (Hons. with Research) Courses:
- Food Microbiology
- Food Microbiology (Practical)
- Research Methodology
- Computer Applications in Food and Nutrition Research
- Research Project
- Research Techniques (Practical)
- Minor Course
- Awareness Course VII: Education for Life

Specialization Core – Applied Nutrition
- Public Health Nutrition and Epidemiology
- Public Health Nutrition and Epidemiology (Practical)
- Biostatistics – Massive Open Online Course (MOOC)

Specialization Core – Food Technology
- Dairy Technology
- Dairy Technology (Practical)
- Applied Statistics – Massive Open Online Course (MOOC)

Semester 8

B.S. (Hons.) Courses:
- Group II Specialization Elective **or** Massive Open Online Courses (MOOCs)
- Group II Specialization Elective (two papers)
- Mini Project / Internship
- Seminar / Workshop
- Minor Course
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Group II Specialization Elective **or** Massive Open Online Courses (MOOCs)
- Research Project
- Seminar / Workshop
- Minor Course
- Awareness Course VIII: God, Society and Man

SPECIALIZATION ELECTIVES

Students must choose their electives from one of the following streams (**A** or **B**) in each Group:

Group 1

A) Applied Nutrition
- Maternal Nutrition
- Paediatric Nutrition
- Geriatric Nutrition
- Space Nutrition
- Nutritional Psychology
- Nutritional in Weight Management

B) Food Technology
- Food Packaging
- Food Labelling
- Food Laws and Regulations
- Extrusion Technology

Group 2

A) Applied Nutrition
- Advances in Women's Nutrition
- Health Promotion through Nutrition Communication
- Ayurvedic Nutrition and Dietetics
- Food Intolerance and Allergies
- Functional Foods and Molecular Nutrition
- Nutrition in Metabolic and Degenerative Diseases
- Medical Nutrition Therapy
- Nutrition in Critical Care
- Nutrition and Dietetic Counselling

B) Food Technology
- Entrepreneurship and Marketing
- Emerging Food Processing Technologies
- Technology of Plantation Products
- Food Additives and Preservatives
- Flavour Technology
- Food Valorisation and Waste Management

B.S. (Hons.) / (Hons. with Research) in **Finance, Economics and Data Analytics**

For Men

OVERVIEW

The B.S. in Finance, Economics, and Data Analytics is an interdisciplinary programme that combines principles from finance, economics, and data analytics. This blend equips students with the skills to analyze financial markets, understand economic trends, and leverage data for decision-making.

Core Objectives

- **Financial Acumen**: Develop a strong foundation in financial theories, investment strategies, and risk management.
- **Economic Insight**: Understand macroeconomic and microeconomic principles and how they influence markets.
- **Data Proficiency**: Learn to collect, analyze, and interpret data using modern analytical tools and methodologies to inform business and economic decisions.

Career Options

- **Finance**: Financial analyst, investment banker, risk manager.
- **Economics**: Economic analyst, policy advisor, market researcher.
- **Data Analytics**: Data scientist, business analyst, quantitative analyst.

Key Skills Gained

- Critical thinking and problem-solving
- Advanced data interpretation and statistical analysis
- Economic forecasting and financial planning
- Proficiency in data-driven decision-making

This programme provides a comprehensive education integrating finance, economics, and data analytics, preparing students for a dynamic and data-centric business environment.

The courses are comprehensive and varied. In addition to the discipline-specific core and elective courses, students will benefit from Ability Enhancement Courses (AEC), Multidisciplinary Courses (MDC), Skill Enhancement Courses (SEC), Value Added Courses (VAC), Internship and Industrial Visits.

B.S. (Hons.) in Finance, Economics and Data Analytics

For students who complete a 4-year (8-semester) programme of study.

B.S. (Hons. with Research) in Finance, Economics and Data Analytics

For students who secure a CGPA of 7.5 or more after the first six semesters (3 years of study) and opt to pursue a research project during the fourth year.

Entry & Exit options as per NEP 2020 Policy.

ELIGIBILITY

- 10+2 years of schooling from a recognized board (CBSE or equivalent) with Mathematics as a core subject
- Either passed or appeared for Final exams at XII level before Admissions. If not appeared for XII Standard exams, X and XI Standard marks will be considered
- Consistent academic performance of 60% aggregate marks in X and/or XII Standard
- Age: Preferably below 19 years as of 30th June in the year of admission

COURSES

YEAR 1

Semester 1
- Introductory Microeconomics
- Differential Calculus
- Introductory Statistics
- Basic Python Programming
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

Semester 2
- Introductory Macroeconomics
- Integral Calculus
- Probability Theory and distributions
- Advanced Python Programming
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Mathematical Economics
- Basic Linear Algebra
- Statistical Inference
- SQL
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Econometrics
- Differential Equations
- Optimisation Techniques
- Cyber Security
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Indian Economy: Structure and Development
- Intermediate Microeconomics
- Financial Economics
- Applied Data Science Techniques*
- Artificial Intelligence and Machine Learning*
- Elective I
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Public Finance
- Intermediate Macroeconomics
- Corporate Finance
- Big Data and Optimization*
- Neural Networks and Deep Learning*
- Elective - II
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Ethics, Economy and Society
- Research Methodology
- Financial Risk Management
- Visual and Textual Data Processing*
- Generative AI and MLOps*
- Computer Applications in Economic Analysis III
- Elective - III
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Ethics, Economy and Society
- Research Methodology
- Financial Risk Management
- Visual and Textual Data Processing*
- Generative AI and MLOps*
- Computer Applications in Economic Analysis III
- Elective - III
- Research: Project Review
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Financial Derivatives
- Fintech: Foundations and Applications
- Elective - IV
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Research: Project
- Awareness Course VIII: God, Society and Man

ELECTIVES

Students will be offered a wide choice of electives, including:

- Behavioural Economics and Finance
- Computational Finance
- Economics of Insurance
- Emerging Market Economies
- Financial Econometrics
- Financial Institutions and Markets
- Financial Reporting and Analysis
- Financial Services
- Forecasting Methods for Economics and Finance
- Innovation and Entrepreneurial Finance
- International Economics and Finance
- International Finance
- Rural Finance
- Underwriting and Actuarial Applications

* Lab-based Courses

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

PRASANTHI NILAYAM

सत्यं वद धर्मं चर

The end of education is character

SRI SATHYA SAI BABA

sssihl.edu.in/admissions