ADMISSIONS PROSPECTUS

2026

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

PRASANTHI NILAYAM

सत्यं वद धर्मं चर

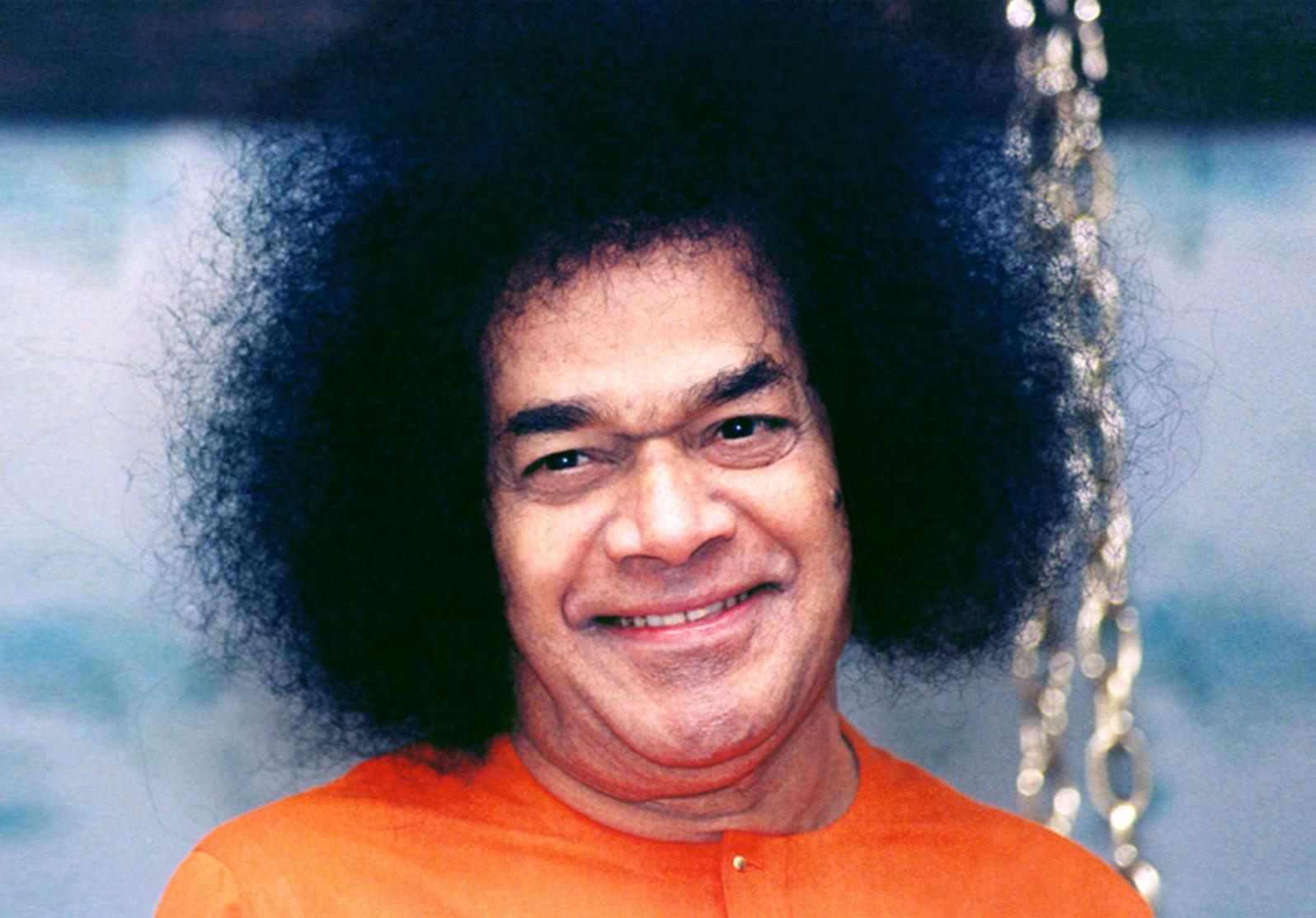# UNDERGRADUATE

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 2026 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.S. | M.Tech. | Ph.D.

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

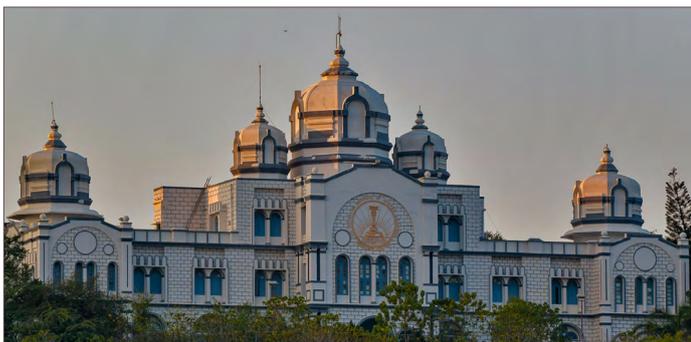**Brindavan Campus**
B.B.A. | B.Com. | M.B.A. | Ph.D.

Nandigiri Campus
B.A. | B.S. | Ph.D.

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 13:1
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.

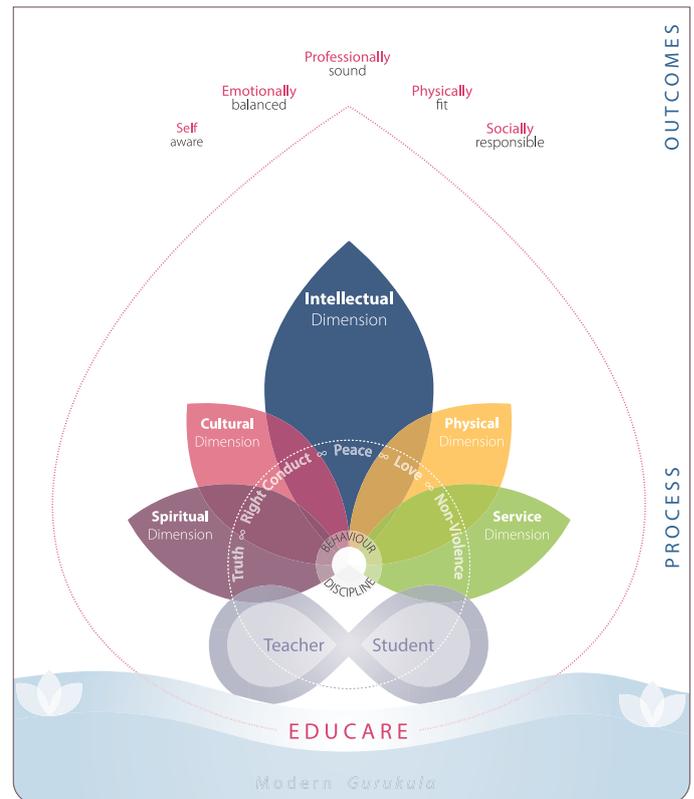# Sri Sathya Sai Values-based Integral Education

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.

SSSIHL in numbers

Academic Year **2024-25**

admissions

2025 entry

657 total admissions

32% acceptance rates
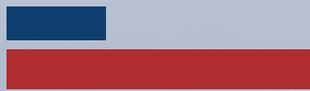
657 / 2386
accepted / eligible applicants

student diversity

23 / 28

Applicants from various states
of India admitted to SSSIHL

students

1636

580   1056

by Programme

Programme	Count
Research	131
Postgraduate	175
Professional	246
Undergraduate	1084

131

doctoral
research scholars

8% of student body

by Campus

Campus	Count
Nandigiri	139
Brindavan	349
Prasanthi Nilayam	568
Anantapur	580
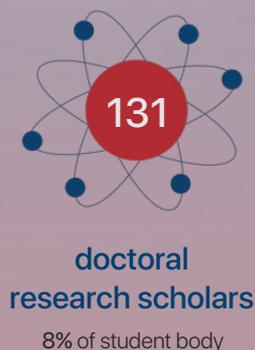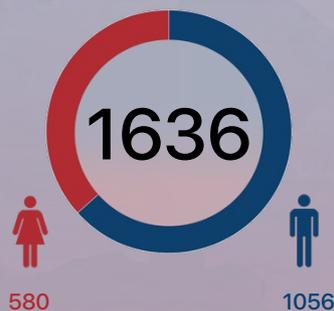
SSSIHL in numbers

Academic Year **2024-25**

students

per student per year

₹ **2.51** lakh

expenditure

₹ **6.7** crore

equipment & infrastructure
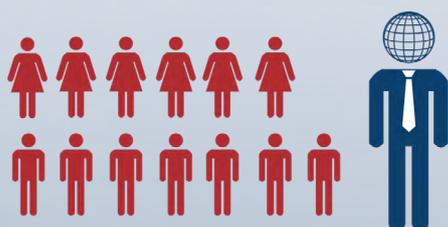
13:1

student-teacher
ratio

2:1

student-computer
ratio

use of computers is always 1:1

students

93%
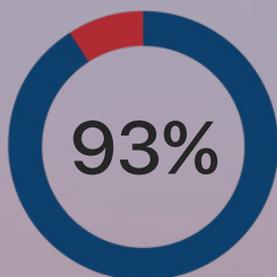
examinations
pass rate

UNDERGRADUATE

national examinations

A high number of final year SSSIHL
postgraduate students qualified

GATE, CSIR, JRF, NET, LS, JEST, CTET, UPSC IAI,
ACET, CB3, CM2, CP3, CP2, CS1, DS1 and MAS

95%

examinations
pass rate

**POSTGRADUATE
PROFESSIONAL**

SSSIHL in numbers

Academic Year **2024-25**

research

₹ **4.03** crores

funded research

14

Ph.D. awardees

1   13

162

research publications
in peer-reviewed journals

224

conference presentations

182% increase from the Academic Year 2023/24

staff

Asst. & Deputy Directors	3
Professors	10
Associate Professors	38
Asst. Professors	83

Faculty
full-time

194

total staff
full-time

129	48	12	5

129 Faculty (full-time)
48 Administrative
12 Technical
5 Library

79%

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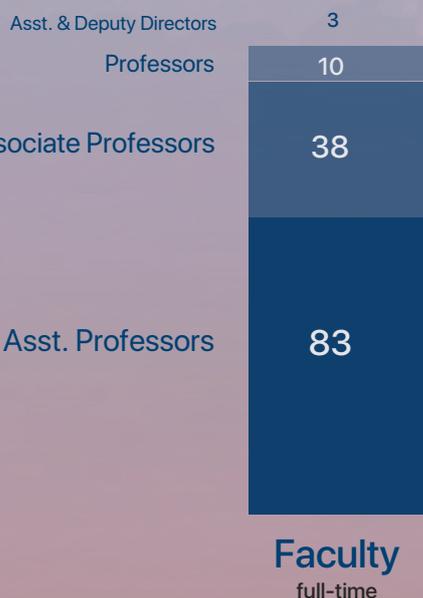
in addition, 20 faculty
are pursuing their Ph.D.

other faculty

Adjunct
Visiting
Guest Lecturers
Part-time

148

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.

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

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.
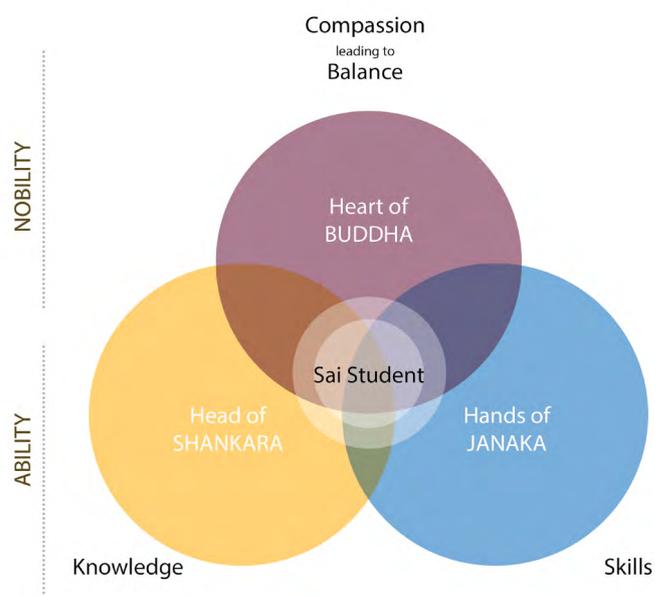
Harmony of Head-Heart-Hand

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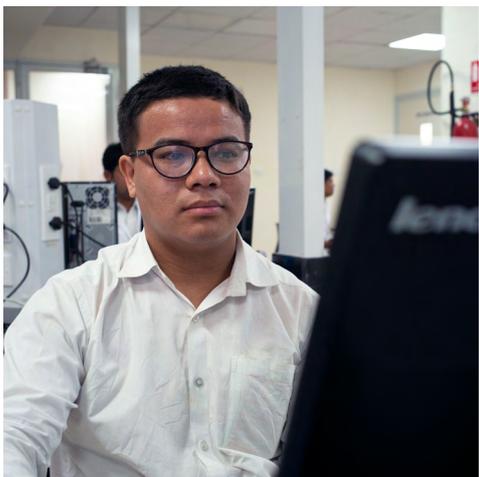
The end of Education is
Character

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.

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:

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

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.

1 July 2026
Academic year 2026-27 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!

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 2026.

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)

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 & Artificial Intelligence**
- **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**

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.Com.** (Hons.) / (Hons. with Research)
- **B.S.** (Hons.) / (Hons. with Research) in **Mathematics**
- **B.S.** (Hons.) / (Hons. with Research) in **Computer Science & Artificial Intelligence**
- **B.S.** (Hons.) / (Hons. with Research) in **Mathematical Sciences & Computing**
- **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**

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, Anti Ragging Awareness, India: Then and Now, Choosing the Right Water: Lessons on What We Consume, Sports Meets Lessons from Swami, Prevention of Non-Communicable Diseases and Experiences with Bhagawan.

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: Love all Serve all, Integrity, Sacrifice, Lessons Learnt from SSSIHL, How to always stay connected to God, Purpose of Student Life, Power of Sai Literature, Swami - The writer of our destiny and Seeking Answers.

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 2026-27**:

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 2026 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 offers a comprehensive four-year undergraduate programme in English Language and Literature.

The programme aims to enhance students' proficiency across a range of subject areas. The curriculum covers a wide range of courses in Literary Studies, Literary Criticism and Theory, Language Studies, and English Language Teaching, with a research specialization offered 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

Entry & Exit options as per NEP 2020 Policy.

MINOR SUBJECTS

Additionally, students are required to take 32 credits in minor subjects, with regard to which the Department offers the following two options:

Option 1: Open Minors (32 credits)

In 4 years (8 Semesters), students are required to take 32 credits from any subjects from the following domains:

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

If 16 of the 32 credits are from a specific subject 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:

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

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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.A. in Literary and Cultural Studies programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.A. (Hons.) with CGPA of 7.5 or more or B.A. (Hons. with Research) in English Language & Literature

Ph.D. programme
For students who complete a 4-year B.A. (Hons. with Research) in English Language & Literature (including the Ph.D. programme in English Studies)

M.B.A. programme
For students who complete a 3-year B.A. or 4-year B.A. (Hons.) / (Hons. with Research) in English Language & Literature

COURSES

YEAR 1

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

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

YEAR 2

Semester 3
- English Language Skills III
- Cyber Security
- British Literature II: 1660 – 1798
- Indian Writing in English
- Minor 1
- Minor 2 (Option 2)
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- British Literature III: 1798 – 1900
- ELT – Theories, Methods, and Testing
- Communicative Competence for Employability
- Minor 1
- Minor 2 (Option 2)
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- British Literature IV: 1900 – Present Age
- Literary Theory and Criticism I
- Advanced Linguistics
- **Elective**: Indian Aesthetics or Indian Classical Literature
- English for Script Writing
- Minor subjects (Option 1)
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- American Literature
- Eco-critical Studies
- Literary Theory and Criticism II
- Project Work (students who exit after Year 3)
- World Classics in Translation (students in Year 4)
- English for Ad Copy Writing and Media Reviews
- Minor subjects (Option 1)
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7
- Elective: Interdisciplinary Studies I: Literature and History & Literature and Philosophy **or** Interdisciplinary Studies II: Literature and Psychology & Literature and Science
- 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
- Awareness Course VII

B.A. (Hons.) Courses:
- Elective: Children's Literature or Gothic Literature
- English for Media Writing

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 understanding government policymaking, business operations, and the significant transformations in economic systems in our rapidly changing, interconnected world.

Economists use mathematical and experimental approaches in both the public and private sectors to analyse real-world issues quantitatively.

To this end, the Department of Economics offers two undergraduate programmes: the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.). To explore these differences, visit the Courses page 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 on an interdisciplinary approach to finance, economics and data analytics.

This programme provides students with a solid understanding of economic principles and theories, as well as the tools and techniques necessary for analysing and understanding 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 skills in assessing economic data and making 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), and an Internship.

SPECIALIZATIONS

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

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:

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

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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.A. (Hons.) with CGPA of 7.5 or more or B.A. (Hons. with Research) in Economics. Programme choices: **Applied Economics** or **Financial Economics** or **Financial Analytics**.

Ph.D. programme
For students who complete a 4-year B.A. (Hons. with Research) in Economics

M.B.A. programme
For students who complete a 3-year B.A. or 4-year B.A. (Hons.) / (Hons. with Research) in Economics

COURSES

YEAR 1

Semester 1
- Economics: Introductory Microeconomics
- SEC: Excel Essentials
- Awareness Course I: Sai Education for Transformation (Based on Bhagawan Baba's Life and Teachings)

  Minor Options
  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: Data Visualization Using Power BI
- 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
- SEC: SQL for Financial and Economic Data Management
- 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: Financial Accounting
- SEC: Financial Analytics and Economic Modelling Using Python
- 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
- Introductory Econometrics
- International Economics
- Elective I
- SEC: Excel Applications to Micro and Macro Economics
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Public Finance
- Intermediate Macroeconomics
- Econometrics
- Indian Economic Thought
- Elective II
- SEC: R for Econometric Analysis
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.A. (Hons.) Courses:
- Monetary Theory and Policy
- Time Series Modelling
- Research Methodology
- Elective III
- SEC: Applied Python for Advanced Economic Modelling
- Internship
- Awareness Course VII: Education for Life

B.A. (Hons. with Research) Courses:
- Monetary Theory and Policy
- Time Series Modelling
- Research Methodology
- Elective III
- SEC: Applied Python for Advanced Economic Modelling
- Internship
- Research: Project Review
- Awareness Course VII: Education for Life

Semester 8

B.A. (Hons.) Courses:
- Development Economics
- Elective IV
- Research: Minor Research Project
- Awareness Course VIII: God, Society and Man

B.A. (Hons. with Research) Courses:
- Research: Major Research Project
- 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
- Economics of Education and Health
- Environmental Economics
- Game Theory
- Industrial Economics
- International Economics and Finance
- Labour Economics
- Public Economics
- Public Policy

Financial Economics (Stream – FE)
- Behavioural Economics and Finance
- Corporate Finance
- Data Analytics
- Economics of Insurance
- Emerging Market Economies
- Financial Econometrics
- Financial Economics
- Financial Risk Management
- Financial Services
- International Economics and Finance
- Rural Finance
- Security Analysis and Portfolio Management

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

For Men

OVERVIEW

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

This programme ignites students' academic pursuits 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 to advance academically through professional management degrees after completing their degree.

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

At the end of Years 2 and 3, students must complete internships during their summer vacations.

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

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.

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.

B.B.A. (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 research during the fourth year.

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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.B.A. (Hons.) with CGPA of 7.5 or more or B.B.A. (Hons. with Research) in Economics. Programme choices: **Applied Economics** or **Financial Economics** or **Financial Analytics**.

Ph.D. programme
For students who complete a 4-year B.B.A. (Hons. with Research)

M.B.A. programme
For students who complete a 3-year B.B.A. or 4-year B.B.A. (Hons.) / (Hons. with Research)

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

For Women & Men

OVERVIEW

The B.Com. (Hons.) programme at SSSIHL combines technical and foundational knowledge in finance, accounting, taxation, law, economics, management and insurance with analytical skills. It prepares students for professional certifications such as CA, ACCA, CIMA, CS and CFA, and emphasises the use of current technological tools for data analysis.

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

In most curriculum courses, students will learn to use 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 ability to identify and resolve complex issues. These objectives are designed to equip students for advanced education and careers and to 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 continuous 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.Com. (Hons.) with CGPA of 7.5 or more or B.Com. (Hons. with Research). Programme choices: **Applied Economics** or **Financial Economics** or **Financial Analytics**.

Ph.D. programme
For students who complete a 4-year B.Com. (Hons. with Research)

M.B.A. programme
For students who complete a 3-year B.Com. or 4-year B.Com. (Hons.) / (Hons. with Research)

COURSES

YEAR 1

Semester 1
- Business Economics
- Financial Accounting
- Values-Oriented Management
- Professional Communication Foundations
- 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
- Math for Financial and Logical Decisions
- Advanced Professional Communication
- Spreadsheets Fluency
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Macro Economics
- Elective 1
- Financial Management – I
- Elements of Costing
- Financial Markets, Institutions and Services
- Math for Financial and Logical Decisions – Spreadsheets
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Indirect Taxes
- Financial Management – II
- Elective 2
- Elective 3
- Principles of Marketing
- Business Statistics with Excel and Power BI
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Income Tax
- Elective 4
- Elective 5
- People Management Skills
- Commerce Workshop – I: Book Review & Presentation Skills
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Business Laws
- Elective 6
- Elective 7
- Sales and Negotiation Skills
- Enterprise Resource Planning (ERP) – Tally, SAP, etc.
- Commerce Workshop – IV: Skills for Success
- Comprehensive Viva-Voce
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.Com. (Hons.) Courses:
- Project Management
- Elective 8
- Elective 9
- Basics of Design Thinking
- Software Skills – Financial Modelling
- Awareness Course VII: Education for Life

B.Com. (Hons. with Research) Courses:
- Project Management
- Elective 8
- Elective 9
- Basics of Design Thinking
- Research Methodology
- Software Skills – Financial Modelling
- Awareness Course VII: Education for Life

Semester 8

B.Com. (Hons.) Courses:
- Internship / Apprenticeship / Shadow
- Elective 10
- Leadership and Team Development
- Awareness Course VII: Education for Life

B.Com. (Hons. with Research) Courses:
- Internship / Apprenticeship / Shadow / Research
- Elective 10
- Leadership and Team Development
- Awareness Course VII: Education for Life

ELECTIVES

Students can choose from a broad range of electives (given below) in areas such as Accounts and Costing, Finance, Banking and Insurance, International Business, and Marketing.

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

- Financial Reporting – Ind-AS
- Financial Reporting – AS
- Advanced Accountancy
- Cost Accounting – Methods and Strategies
- Auditing and Assurance
- Performance Management
- Indian Accounting Standards (IFRS)
- Advanced Cost Management
- Banking Law, Theory and Practice
- Insurance: Principles, Contracts and Covers
- Insurance: Regulation, Functions and Covers
- Risk Management
- Investments Analysis
- Advanced Financial Management
- Consumer Behaviour
- Digital Marketing
- Retail Management
- Financial Services Marketing
- Marketing Analytics with R Programming
- International Business
- Management of International Business
- Foreign Trade Procedures
- E-Commerce
- Entrepreneurship Development
- Business Data Analytics
- Supply Chain & Procurement
- Sustainable Development

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

For Women & Men

OVERVIEW

Mathematics provides a language and tools for understanding both the physical world around us and the abstract world within us. It encompasses a broad spectrum of fields and applications, many of which students will study 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, and numerical analysis, 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 alongside Mathematics courses. The curriculum often incorporates real-world applications, enabling students to apply mathematical concepts to industry-specific challenges.

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

Overall, the B.S. in Mathematics programme equips students with the knowledge and skills 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, 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 (Semesters 5-8), 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

MINOR

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

- Data Science
- Computer 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Mathematics

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Mathematics

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Mathematics

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
- 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
- Differential Geometry
- Research Methodology
- 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:

Analysis and Applications

- Number Theory
- Topology
- Theory of Ordinary
- Differential Equations
- 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

Mathematical Biology

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

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

For Women & Men

OVERVIEW

Artificial Intellegence

As Artificial Intelligence (AI) permeates multiple spheres of innovation, Sri Sathya Sai Institute of Higher Learning takes responsibility for shaping future citizens with AI skills alongside a solid foundation in Computer Science. This niche multidisciplinary programme in Computer Science and Artificial Intelligence, offered by the Department of Mathematics and Computer Science, seamlessly integrates the AI skills required into a foundational Computer Science undergraduate programme.

Artificial Intelligence is an allied discipline alongside Mathematics, Statistics and Computer Science in this programme. The Mathematics and Statistics disciplines build a solid foundation in Calculus, Linear Algebra, Optimization, Probability and Statistics in R, leading up to data science courses such as Data Mining and Machine Learning. With this strong mathematical and statistical foundation and data science skills, the programme then offers Deep Learning and Natural Language Processing, with an Introduction to Large Language Models. While these courses are competitive enough to be part of an AI programme, the programme takes the student a notch higher by offering specializations in Human-Centric AI (courses such as Generative AI, Responsible AI, Agentic AI), Quantum Computing (courses such as Quantum Information Theory, Quantum Machine Learning) or Cyber Security (courses such as Cryptography, Network Security).

All GATE DA (Data Science & Artificial Intelligence) courses are covered.

Computer Science

The Computer Science component of this programme deepens one's understanding of programming logic, computer systems and networks. For example, programming skills are introduced with Problem Solving in the first semester, followed by Introduction to Data Structures in the second semester, and progress to Object-oriented programming concepts, Software Engineering, culminating in a project. The programme builds proficiency in programming languages such as C, C++, Python, and Java, as well as in web programming. Students gain knowledge of computer systems through foundational courses such as Computer Organization & Design and Operating Systems. Courses such as Computer Networks, Database Management Systems, SQL and Cloud Computing strengthen skills in networks, cloud operations and databases.

All GATE CS (Computer Science and Information Technology) courses are covered, including Formal Languages and Compiler Design.

PROGRAMME STRUCTURE

This programme provides niche skills in Artificial Intelligence with a solid foundation in Computing and Technology. It focuses on linking theory and practice and applies fundamental principles across a wide range of applications. In the eighth semester, students with research capabilities can pursue a research project, and students with analytical capabilities can pursue a software development / data science project. This gives students tremendous confidence in their ability to join research in AI / CS, software development, AI engineering, data engineering and data science organisations. In essence, the programme offers sufficient depth and breadth across multiple disciplines, leading to the development of very mature professionals in Computer Science, Artificial Intelligence and Data Science.

Over and above all the disciplines, the programme offers multiple Awareness courses, such as Unity of Religions, and the study of classics like the Ramakatha Rasavahini and Bhagavatha Vahini, which channel students' minds in the right direction. In its entirety, this programme attempts to implement the journey of Knowledge, Skill, Balance and Insight as ordained by our Founder Chancellor, Bhagawan Sri Sathya Sai Baba.

B.S. (Hons.) in Computer Science & AI

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

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

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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. in Artificial Intelligence programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

M.Tech. in Computer Science programme
For Men students who complete a 4-year B.S. (Hons.) or B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

COURSES

YEAR 1

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

Semester 2
- Probability and Statistics
- Introduction to Data Structures
- Practical: Software Lab in C – Part II
- Practical: Software Lab in Python – II
- Multidisciplinary Course (Indian Constitution)
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Discrete Mathematics for Computer Science
- Statistics for Data Science in R
- Computer Organization and Design
- Cybersecurity
- Practical: Software Lab in Data Visualization
- Multidisciplinary Course (Soft Skills)
- 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 SQL
- Practical: Software Lab in Web Programming
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

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

Semester 6
- Software Engineering
- Design and Analysis of Algorithms
- Cloud Computing
- Deep Learning
- Specialization Elective – I
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Formal Languages
- Natural Language Processing and Introduction to Large Language Models
- Research Methodology
- Specialization Elective – II
- Specialization Elective – III
- Project Work
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Formal Languages
- Natural Language Processing and Introduction to Large Language Models
- Research Methodology
- Specialization Elective – II
- Specialization Elective – III
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Compiler Design
- Specialization Elective – IV
- Project Work
- Open Elective (Big Data Analytics / Linux System Programming)
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Compiler Design
- Specialization Elective – IV
- Research Project
- Awareness Course VII: Education for Life

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 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 provides students with a thorough grasp of fundamental mathematical, computer science, and statistical concepts. It is designed to prepare students for roles as robust computational experts and designers of machine learning algorithms.

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 a range of specialisations and may also opt for internships. The curriculum often incorporates real-world applications, enabling 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 enable them to integrate academic knowledge. Additionally, they will have opportunities for industry collaboration and internships, allowing 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 further study at M.Tech. and Ph.D. levels. Additionally, they will be equipped to take national eligibility tests such as CSIR-NET, JEST and NBHM, demonstrating 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (1-year) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Mathematical Sciences and Computing

M.Tech. in Computer Science programme
For Men students who complete a 4-year B.S. (Hons.) or B.S. (Hons. with Research) in Mathematical Sciences and Computing

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Mathematical Sciences and Computing

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

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
- 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 Physics

For Women & Men

OVERVIEW

Physics is the cornerstone of the natural sciences, underpinning many other disciplines, including chemistry, biology, and astronomy. It spans 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 resonant sound of a sitar, physics delves into the intricate workings of our world. Its discoveries have paved the way for groundbreaking technological innovations and continue to play a pivotal role in advancing various scientific fields.

Physics also contributes significantly to the development of 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 provide 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 programmes 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. The eight-semester programme 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.

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 two streams (see the list of Courses):

- Photonics
- Functional Materials Science

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 equips graduate students with analytical, problem-solving, and quantitative skills that are valuable across sectors, including research and development, academic and educational 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Physics

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Physics

M.Tech. in Optoelectronics & Communications programme
For Men students who complete a 4-year B.S. (Hons.) or B.S. (Hons. with Research) in Physics

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Computer Science and Artificial Intelligence

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 Techniques in Physics
- Computational Physics Laboratory – I
- Interdisciplinary Minor
- Multidisciplinary Course
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Mathematical Physics – II
- Optics
- Optics Laboratory
- Thermal Physics
- Computational Physics Laboratory – II
- Interdisciplinary Minor
- Multidisciplinary Course – Indian Knowledge Systems
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

YEAR 3

Semester 5
- Mathematical Physics – III
- Classical Mechanics – I
- Operational Amplifiers and Applications
- Operational Amplifiers and Applications Laboratory: Hardware and Circuit Simulation Lab
- Modern Physics
- Experimental Methods in Physics – I
- Minor
- Awareness Course V: Eternal Values for the Changing World

Semester 6
- Quantum Mechanics – I
- Solid State Physics – I
- Nuclear and Particle Physics
- Statistical Mechanics
- Experimental Methods in Physics – II
- Minor
- Internship
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Classical Mechanics – II
- Classical Electrodynamics
- Quantum Mechanics – II
- Elective – I
- Specialization Laboratory
- Research Methodology
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Classical Mechanics – II
- Classical Electrodynamics
- Quantum Mechanics – II
- Elective – I
- Specialization Laboratory
- Research Methodology
- Major Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Solid State Physics – II
- Spectroscopy
- Microprocessors
- Microprocessors Laboratory
- Elective – II
- Open Elective
- Minor project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Solid State Physics – II
- Spectroscopy
- Elective – II
- Major project
- Awareness Course VIII: God, Society and Man

SPECIALIZATION ELECTIVES

Stream 1: Photonics
- Select Topics in Photonics
- Introduction to Fiber Optics and Optical Communications
- Principles of Laser Physics
- Specialization Laboratory – Photonics

Stream 2: Functional Materials Science
- Fundamentals of Materials Science
- Introduction to Nanomaterials and Applications
- Crystal Growth and Thin Films
- Materials Processing and Characterization Lab

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

For Women & Men

OVERVIEW

Chemistry is a broad field within the natural sciences, focused on matter at the atomic and molecular levels. It examines the properties of substances, the transformations they undergo, and the natural laws that govern these processes. Often called the central science, it intersects with fields such as physics, biology, environmental science, and materials science. Chemists play a crucial role in technological progress, healthcare improvements, and the enhancement of 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 provides a firm scientific grounding in the methods and techniques used in academic research and advanced industrial processes. 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:

- Organic, Medicinal Chemistry and Drug Design
- Chemistry of Materials for Sustainability
- Analytical Chemistry and Instrumentation Techniques

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 a single domain, the student earns a minor in that domain.

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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (1-year) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Chemistry. Programme choices: Chemistry of Advanced Materials or Organic, Medicinal Chemistry and Drug Design or Analytical Chemistry and Instrumental Techniques.

Ph.D. programme
For students who complete 4-year B.S. (Hons. with Research) in Chemistry

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Chemistry

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
- Synthetic Organic Chemistry
- Laboratory Course in Synthetic Organic Chemistry
- Skills in Scientific communication
- Minor Course
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Characterization Techniques for Organic Compounds
- Analytical Chemistry
- Laboratory Course in Analytical Chemistry
- Electrochemistry
- Laboratory Course in Electrochemistry
- Introduction to Quantum Chemistry
- Chemistry of Biological Molecules
- Minor Course
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

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

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

Semester 8

B.S. (Hons.) Courses:
- Elective – I
- Elective – II
- Laboratory course based on specialisation
- Project
- Awareness Course VIII: God, Society and Man

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

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

For Women & Men

OVERVIEW

This dynamic multidisciplinary programme takes students on a transformative journey into the understanding of life—from molecular mechanisms within cells to the complex ecosystems sustaining our planet. By integrating the foundational biological sciences with cutting-edge biotechnology, the programme prepares students to become innovators shaping the future of healthcare, agriculture, environmental conservation, and human wellbeing.

Students begin with essential foundations in cell biology, microbiology, biodiversity, and chemistry, while developing programming skills from the first semester—a critical competency in modern biosciences. As they progress, students explore the molecular mechanisms that govern life, physiological systems, and genetics. The programme transitions to applied biosciences, with extensive hands-on laboratory experience that develops authentic research skills and practical competencies highly valued by employers and graduate schools.

Students receive close mentorship from faculty members who are active researchers, gaining firsthand insights into groundbreaking discoveries. Through research projects and industry internships, students contribute to real scientific inquiries, developing capabilities that distinguish exceptional scientists.

Graduates are exceptionally well placed for doctoral research at prestigious universities, careers in the pharmaceutical industry, innovation in agricultural biotechnology, advances in personalised medicine, or solutions to environmental challenges. The programme develops scientific expertise alongside critical thinking, problem-solving skills, and ethical awareness—ensuring students excel in graduate admissions and secure positions in this rapidly growing field with strong career prospects and meaningful work.

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 research 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
- Studied Biology in 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Biosciences and Biotechnology

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Biosciences and Biotechnology

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Biosciences and Biotechnology

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)
- Skill enhancement course: Basic Programming in Python
- 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
- Skill enhancement course: Programming, data structures and algorithms using Python
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Biosciences: Molecular Biology (Theory and Practical)
- Biosciences: Ecology (Theory and Practical)
- Chemistry: Principles 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)
- Plant Physiology (Theory and Practical)
- Molecular Cell Biology (Theory and Practical)
- Gene Regulation and Expression (Theory and Practical)
- Genetics and Evolution (Theory)
- Awareness Course V: Ethos and Values for the Changing World

Semester 6
- Bioinformatics (Theory)
- Biochemistry-2 (Theory)
- Genetic Engineering (theory)
- Bioanalytical Techniques (Theory)
- Practical Course on Bioinformatics and Metabolism (Practical)
- Practical Course on Genetic Engineering (Practical)
- Mini Project
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

B.S. (Hons.) Courses:
- Immunology (Theory)
- Elective – 1
- Elective – 2
- Elective – 3
- Elective – 4
- Massive Open Online Course (MOOC)
- Practical Course (Project-based training)
- Project Work
- Awareness Course VII: Education for Life

B.S. (Hons. with Research) Courses:
- Immunology (Theory)
- Elective – 1
- Elective – 2
- Research methodology
- Seminar
- Research Project
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Bioanalytical Techniques II
- Elective – 5
- Elective – 6
- Seminar
- Project Work
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Bioanalytical Techniques II
- Elective – 3
- Massive Open Online Course (MOOC)
- 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

This elite interdisciplinary programme combines the analytical power of Artificial Intelligence with the intricate complexity of Computational Biology. By integrating data science, mathematical modelling, and simulation, the programme empowers students to decode biological systems and drive innovation across healthcare, pharmaceuticals, and environmental conservation. This transformative journey is designed for those ready to apply advanced algorithms to the most pressing challenges in the living world.

The academic journey begins with a rigorous foundation in the dual languages of modern science: Mathematics and Programming. From year one, students master calculus alongside Python and the fundamentals of microbiology and cell biology, ensuring proficiency in both the laboratory and the digital environment. As the curriculum progresses, it integrates Statistics and Linear Algebra with biochemistry and genetics, introducing the core principles of AI to bridge the gap between biological observation and computational prediction.

In the later stages, the focus shifts towards high-level application and specialization. Students explore the frontiers of Bioinformatics, Machine Learning, and Molecular Biology, learning to navigate the large datasets that define modern "Multi-Omics" research. A defining feature is the year-long interdisciplinary research project, conducted under joint supervision from the Departments of Biosciences and Computer Science. Through these projects and industry-led electives, students develop real-world solutions for genomic diversity, molecular medicine, and public health epidemiology.

Graduates emerge as versatile innovators, exceptionally well prepared for doctoral research at prestigious institutions or high-impact roles in Bio-Data Science and AI research. By bridging the gap between life sciences and computational intelligence, this programme develops the expertise, critical thinking, and vision required to shape the future of global wellbeing.

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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (1-year) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Artificial Intelligence and Computational Biology

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Artificial Intelligence and Computational Biology

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Artificial Intelligence and Computational Biology

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 – 1
- Computer Science: Cybersecurity
- 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 – 2
- 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 – 3
- Specialization Elective – 4
- Specialization Elective – 5
- 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 – 3
- Research Methodology
- Massive Open Online Course (MOOC)
- Research Project / Interim Review
- Awareness Course VII: Education for Life

Semester 8

B.S. (Hons.) Courses:
- Mathematics: Mathematical Modelling
- Specialization Elective – 6
- 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 spanning 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 programme comprising two core specialisations – Nutrition and Food Technology. Nutrition examines the physiological and metabolic effects of nutrients on human health, while Food Technology addresses food composition, processing and safety to ensure effective nutrient delivery and promote health and well-being. The programme encompasses core domains, including food science, nutritional science, dietetics, food processing, preservation and food safety.

Professionals in Nutrition and Dietetics play a critical role in promoting individual and public health by bridging the gap between food and its impact on the human body. They are responsible for positively influencing human health and disease prevention, and for translating scientific evidence into dietary interventions that improve quality of life at both the individual and population levels.

Food technology specialists use their expertise in food processing, innovation, and preservation to create safe, wholesome food products that leverage new technologies. Focused exposure to fruit and vegetable, dairy, and grain science technologies builds a strong foundation in handling and value addition for diverse food commodities, preparing students for careers in the food sector and for entrepreneurial ventures.

This comprehensive programme spans a broad range of fields. The degree offers numerous career opportunities and meets the growing demand for specialised knowledge. The curriculum emphasises a deep understanding of theoretical concepts and practical skills across subjects, both of which are vital for success in the healthcare sector and industry.

The programme provides comprehensive academic training in nutrition and dietetics, food components, food processing, and food product design and development, along with allied disciplines such as physiology, microbiology, biochemistry and quality assurance. The broad, integrated curriculum offers students a strong blend of scientific knowledge and technical skills, preparing them for diverse career opportunities in clinical and public health nutrition, healthcare services and the food industry.

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

SPECIALIZATIONS

From Year 2 (Semester 3), students must pursue a specialisation in either one of the following two major areas and select electives from the designated course list:

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

The minor courses will be taken in Years 2 and 3 (Semesters 3-5) for B.S. in Food and Nutritional Sciences (12 credits) students, and in Years 2, 3, and 4 (Semesters 3-8) for B.S. (Hons.) in Food and Nutritional Sciences (16 credits) students.

The student is then 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Food and Nutritional Sciences. Programme choices: **Nutrition & Dietetics** or **Food Technology** – based on the specialization chosen at the undergraduate level

Ph.D. programme
For students who complete 4-year B.S. (Hons. with Research) in Food and Nutritional Sciences

M.B.A. programme
For students who complete a 3-year B.Sc. or 4-year B.S. (Hons.) / B.S. (Hons. with Research) in Food and Nutritional Sciences

COURSES

YEAR 1

Semester 1
- Introductory Food Science
- Introductory Food Science (Practical)
- Fundamentals of Nutrition
- Fundamentals of Nutrition (Practical)
- General Microbiology
- General Microbiology (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)
- Human Physiology
- Human Physiology (Practical)
- Food Chemistry
- Food Chemistry (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)
- Nutrition Through Life Cycle
- Nutrition Through Life Cycle (Practical)
- Minor Course
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Specialization **A** – **Nutrition and Dietetics**
- Social Psychology in Health Promotion

Specialization **B** – **Food Technology**
- Unit Operations in Food Processing – I

Semester 4
- Indian Traditional Foods and Cuisines
- Indian Traditional Foods and Cuisines (Practical)
- Minor Course
- Awareness Course IV: Study of Classics II – Bhagavatha Vahini

Specialization **A** – **Nutrition and Dietetics**
- Biochemistry
- Human Nutrition
- Community Nutrition
- Techniques in Nutritional Assessment (Practical)

Specialization **B** – **Food Technology**
- Physical Sciences of Foods
- Unit Operations in Food Processing -II
- Institutional Food Service Management
- Institutional Food Service Management (Practical)

YEAR 3

Semester 5
- Functional Foods and Nutraceuticals
- Food Product Development and Sensory Evaluation
- Food Product Development and Sensory Evaluation (Practical)
- Minor Course
- Awareness Course V: Ethos and Values for the Changing World

Specialization **A** – **Nutrition and Dietetics**
- Dietetics – I
- Dietetics – I (Practical)
- Sports Nutrition
- Sports Nutrition (Practical)

Specialization **B** – **Food Technology**
- Technology of Cereals, Pulses and Oilseeds
- Technology of Cereals, Pulses and Oilseeds (Practical)
- Food Safety and Quality Assurance
- Food Safety and Quality Assurance (Practical)

Semester 6
- Group I Specialization Elective
- Internship
- Minor Course
- Awareness Course VI: Life and its Quest

Specialization **A** – **Nutrition and Dietetics**
- Dietetics – II
- Dietetics – II (Practical)
- Nutrition in Critical Care
- Nutrition in Critical Care (Practical)
- Nutrition and Dietetic Counselling
- Nutrition and Dietetic Counselling/ Wellness Nutrition (Practical)

Specialization **B** – **Food Technology**
- Fruit and Vegetable Technology
- Technologies of Plant-Based Products (Practical)
- Food Packaging Technology
- Food Packaging Technology (Practical)
- Baking Technology
- Techniques in Baking and Confectionery

YEAR 4

Semester 7

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

Specialization A – **Nutrition and Dietetics**
- Public Health Nutrition and Epidemiology
- Public Health Nutrition and Epidemiology (Practical)
- Management and Administration in Dietetic Services

Specialization B – **Food Technology**
- Dairy Technology
- Dairy Technology (Practical)
- Management and Economics in Food Industry

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

Specialization A – **Nutrition and Dietetics**
- Public Health Nutrition and Epidemiology
- Public Health Nutrition and Epidemiology (Practical)
- Management and Administration in Dietetic Services

Specialization B – **Food Technology**
- Dairy Technology
- Dairy Technology (Practical)
- Management and Economics in Food Industry

Semester 8

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

Specialization A – **Nutrition and Dietetics**
- Emerging Concepts in Nutrition and Dietetics
- Clinical Nutrition and Training (Practical)

Specialization B – **Food Technology**
- Emerging Food Processing Technologies

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) Nutrition and Dietetics
- Maternal Nutrition
- Pediatric Nutrition
- Geriatric Nutrition
- Space Nutrition
- Nutritional Psychology
- Nutrition in Weight Management

B) Food Technology
- Food Labelling
- Food Laws and Regulations
- Extrusion Technology
- Process control in the Food Industry

Group 2

A) Nutrition and Dietetics
- Ayurvedic Nutrition and Dietetics
- Food Intolerance and Allergies
- Functional Foods and Molecular Nutrition
- Nutrition in Metabolic and Degenerative Diseases
- Health Promotion through Nutrition Communication

B) Food Technology
- Entrepreneurship and Marketing
- Technology of Plantation Products
- Food Additives and Preservatives
- Flavour Technology
- Snack Food Technology
- Food Valorisation and Waste Management
- Food Plant Sanitation

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

The programme offers a comprehensive education that integrates finance, economics, and data analytics, preparing students for a dynamic, 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), an 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 research 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

FURTHER ACADEMIC OPTIONS AT SSSIHL

Note: Programmes are subject to change at any time without prior notice

Following their 4-year undergraduate degree, successful graduates have the following options if they choose to continue their studies at SSSIHL:

M.S. programme (**1-year**) – 2027 onwards
For students who complete a 4-year B.S. (Hons.) with CGPA of 7.5 or more or B.S. (Hons. with Research) in Finance, Economics, and Data Analytics. Programme choices: **Applied Economics** or **Financial Economics** or **Financial Analytics**.

Ph.D. programme
For students who complete a 4-year B.S. (Hons. with Research) in Finance, Economics, and Data Analytics

M.B.A. programme
For students who complete a 3-year B.S. or 4-year B.S. (Hons.) / (Hons. with Research) in Finance, Economics, and Data Analytics

COURSES

YEAR 1

Semester 1
- Introductory Microeconomics
- Differential Calculus
- Introductory Statistics
- SEC: Excel Essentials
- 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
- SEC: Data Visualization using Power BI
- Awareness Course II: Unity of Religions

YEAR 2

Semester 3
- Introduction to Finance
- Basic Linear Algebra
- Statistical Inference
- SEC: SQL for Financial and Economic Data Management
- Awareness Course III: Study of Classics I – Ramakatha Rasavahini

Semester 4
- Econometrics
- Financial Accounting
- Differential Equations
- Optimisation Techniques
- SEC: Financial Analytics and Economic Modelling Using Python
- 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
- Awareness Course VI: Life and its Quest

YEAR 4

Semester 7

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

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

Semester 8

B.S. (Hons.) Courses:
- Security Analysis and Portfolio Management
- Elective IV
- Research: Minor Research Project
- Awareness Course VIII: God, Society and Man

B.S. (Hons. with Research) Courses:
- Research: Major 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
- Equity Research
- Financial Accounting & Reporting Analytics
- Financial Derivatives
- Financial Econometrics
- Financial Services
- Fixed Income Securities
- International Economics and Finance
- International Finance

* Lab-based Courses

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