



SARVAJANIK EDUCATION SOCIETY

SIR P. T. SARVAJANIK COLLEGE OF SCIENCE, SURAT

NAAC accredited 'A' Grade

Website : ptscience.ac.in

Jawaharlal Nehru Marg, Athwalines, SURAT- 395 001



Academic Year : 2022-23

*Lead us from
Darkness to Light*

PROSPECTUS



Prin. Dr. Pruthul R. Desai

SARVAJANIK EDUCATION SOCIETY

SIR P. T. SARVAJANIK COLLEGE OF SCIENCE, SURAT

Office Bearers of the Governing Body

Shri Rajnikant Marfatia	: President
Dr. Kirit Nagindas Dumasia	: Vice President -I
Padma Shri Yazdi Naushit Karanjia	: Vice President -II
Shri Rajesh Surendrabhai Desai	: Chairman
Shri Bharat Vajechand Shah	: Vice Chairman -I
Shri Ashish Indravadan Vakil	: Vice Chairman -II
Dr. Babaraju Kikubhai Bhatt	: Secretary

Local Administrative Committee

Dr. U. R. Naik (Chairman)

Dr. K. R. Desai	Dr. P. R. Desai
Shri K. P. Desai	Dr. Ms. K. C. Desai
Dr. M. P. Jagiwala	Dr. A. G. Mehta
Shri C. Y. Bhatt	Dr. S. P. Kapadia
Shri K. M. Patel	Shri Ghanshyam Lukhi
Shri Manish Kapadiya	

PROSPECTUS

2022-23

SARVAJANIK EDUCATION SOCIETY
SIR P. T. SARVAJANIK COLLEGE OF SCIENCE, SURAT
NAAC Accredited “A” Grade (“Colleges with
Potential for Excellence”) Jawaharlal Nehru
Marg, Athwalines, SURAT- 395 001
Phone No. : (0261) 2240028
Website: ptscience.ac.in

SIR P. T. SARVAJANIK COLLEGE OF SCIENCE, SURAT PROSPECTUS

Vision and Mission of the College

Vision: *To promote experimental scientific pursuit and to provide conducive environment for students to develop aptitude and to sharpen skills of the students to meet the challenges of rapidly changing world and to instill a spirit of camaraderie amongst the students and to sensitize them regarding their role and duty towards Nation building.*

Mission: *To make the Education of Core Science subjects “Sarvajanik” in true sense to create scientific thrust and to make the students explore new horizons of science through research.*

About Sarvajanik Education Society:

Sarvajanik Education Society (SES) was established in 1912 with the noble aim of providing quality education in the South Gujarat region. Since its modest beginning when SES started a school in Surat, it has blossomed into a vibrant society which now manages 46 academic institutes imparting quality education and they range from pre-school to research centers.

About the College:

Taking cognizance of the growing demand and urgent need in the South Gujarat region, SES decided to start Science Faculty in the M. T. B. College in 1935. Later on in 1960, the college got an independent existence of its own and was named as “Sarvajanik College of Science”. In the year 1967, it was renamed as “Sir P. T. Sarvajanik College of Science”.

The college has won “The Best College Award” from the Government of Gujarat in the past. Recently, the college was bestowed upon as an “Outstanding Institute of Education Award” for 2012-13 sponsored by “The Golden Jubilee Trust” from South Gujarat Chamber of Commerce & Industry (SGCCI), Surat.

The NAAC (**National Assessment and Accreditation Council**) is an autonomous body established by the University Grants Commission (UGC) of India to assess and accredit Institutions of higher education in the country. The college has gone through the process during 2014-15 and has been granted “A” grade with CGPA 3.03 by the NAAC. Ours is the *first* science college in the entire South Gujarat region to have been accredited with “A” grade by NAAC. Apart from this, our college has been awarded by UGC with a very prestigious CPE (Colleges with Potential for Excellence) grant.

The **GSIRF (Gujarat State Institutional Rating Framework)** in an autonomous body under KCG, Department of Education, Government of Gujarat. The college was rated “5 star” for two consistent years, viz, in February 2020 and June 2021 by GSIRF.

Study at Sir P. T. Sarvajani College of Science is an enriching experience. Students get the best opportunities in the college with well-equipped laboratories and spacious, high-walled classrooms equipped with multi-media facilities. A computer laboratory with internet access is also available for the students. The college is flanked by well-maintained, lush green lawns, flowering and non-flowering trees and shrubs. There is a huge playground for playing cricket, football, basket ball etc. outdoor games. The college has two separate pavilions for boys and girls for indoor games. The college encourages students for various co-curricular and extra-curricular activities to compete at various levels. The college provides an excellent platform for the students to display and develop their talents.

The heart of any educational institute is its library. The college has a fully computerized central library. It houses more than 16,500 books and subscribes more than 30 journals/periodicals. *Library subscribes to INFLIBNET-N List, which can be accessed by the students from anywhere at any time. This facility is a boon to the faculty and research students for their research work.* A separate and highly spacious reading room is also available for those who want to read in a calm and peaceful atmosphere.

The college provides hostel facility for boys. The girls can avail of hostel facility provided by our sister Institute, viz, M. T. B. Arts College, if rooms are available.

Academics:

The college is UGC recognized and affiliated to Veer Narmad South Gujarat University, Surat. The college offers B. Sc. (under-graduate) course in Chemistry, Physics, Mathematics, Botany and Zoology. There are three divisions in each year at the undergraduate level, each division has maximum intake of 150 students. Out of the three divisions at the first year B. Sc., one division is for English medium students while the remaining two are for the Gujarati Medium students. From second year onwards, the medium of instruction becomes English for all the classes. The admission is given on the basis of merit, prepared according to the rules and regulations of the Government of Gujarat and VNSGU, Surat.

The college has M. Sc. (Post-Graduate) centres of VNSGU, Surat in Chemistry (Organic Chemistry), Physics (Nuclear Physics) and Botany subjects. Admission to M. Sc. classes is given through a centralized admission process carried out by the University.

The college regularly arranges seminars, workshops, short-term courses etc. for the students so that they can get additional knowledge and are made aware of different topics which may even be beyond the scope of their syllabi. The college had organized a Five-day residential type “Inspire Science Camp” which was sponsored by DST, New Delhi. In this camp, more than 100 students of standard 11 (Science stream) from the schools of the South Gujarat

region participated. The purpose of the camp was to motivate the students to do research in the fields of basic sciences.

In the recent past, the Department of Chemistry had organized a GUJCOST sponsored state level seminar while the Department of Physics had organized a UGC sponsored state level workshop to keep the students up to date with the cutting age research. Moreover, the college organized two “Refresher Courses in Statistical Physics”, one in 2017 and the other in 2019, which were sponsored by the Science Academies of our country.

The Department of Physics regularly arranges a two-week Bridge Course for the undergraduate students of all the colleges of the South Gujarat region during the summer vacation with the aim of strengthening their basic and fundamental concepts of Physics. Looking at the success of the course, it was decided that such courses should be conducted in other subjects also. So, Bridge courses were initiated in the subject of Chemistry and Zoology also in the year 2014. The college is aiming to continue the same even in the future.

The college also invites eminent persons/teachers/scientists/research scholars from premier research and educational institutes from all over India to deliver talks on various subjects. The students get opportunity to interact with such scholars and simultaneously they get chance to know about different types of research work that is going on in different subjects in these institutes.

Various clubs are functional in our college. Mathematics Club was established in the college in 2013 which is running quite successfully since its inception. Following this footstep, Physics Club, Chemistry Club, Eco Club and Cycle Club have been established in 2014. Students voluntarily enroll in these Clubs and involve themselves in the activities of the Clubs to keep the Clubs flourishing throughout the year with the support and guidance of the faculty.

The college has an excellent research environment. There are research laboratories in the college and students are registered for Ph. D. degree under the supervision of the college faculties. A Major research project, funded by ISRO, has been completed by our faculty member recently and one more is in pipeline. Some faculties of the college have applied for Major and Minor Research projects to various funding agencies like UGC, GUJCOST etc. and they are expected to be sanctioned.

Rules regarding the admission in the college:

- 1) New academic year will commence from 15/06/2022.
- 2) Before filling the application form, the candidate should go through the instructions carefully.
- 3) If any of the information given in the application form is found to be incomplete or wrong, the application form shall be cancelled and the deposit amount shall be forfeited.

- 4) The eligibility criteria for the admission to the B. Sc. SEM- I are:
 - a) The candidate should have passed higher secondary examination with either A group or B group or AB group from a recognized board or
 - b) The candidate should have passed Three-year Diploma after 10th standard.
- 5) Separate merit list will be prepared for the students of SC, ST, SEBC and open category in both the groups.
- 6) Seats are reserved for SC, ST, SEBC and Physically Handicapped candidates as per the rules of Government of Gujarat. Seats are also reserved for the son/daughter of Ex-servicemen as per government rules. Seats are reserved under sports quota also.*
- 7) Those candidates who have passed their higher secondary examination from a recognized board other than Gujarat Secondary and Higher Secondary Education Board (GSHSEB), Gandhinagar shall have to obtain “Provisional Eligibility Certificate” from VNSGU, Surat and attach it with the application form at the time of submission of the form. The number of seats for such candidates is reserved as per the rules of the VNSGU, Surat.
- 7) The candidates who are seeking admission in B. Sc. SEM-I to B. Sc. SEM-VI shall have to compulsorily select any one of the activities from NCC, NSS, PT or Saptdhara as a “Foundation Elective” subject.
- 9) As per the rule number 144 of the University, any candidate who has passed an examination from a UGC recognized University with some subjects shall not be eligible to appear for the same examination with the same subjects again in this University.
- 10) Those candidates who have studied in some other institute prior to this and seeking admission in this College in this academic year for their next semester shall have to bring transfer certificate and NOC from their respective institutes.
- 11) All fees and deposits must be paid online.
- 12) The sole right of admission in the college rests with the Head of the Institute.

Note: *If all the seats are not filled by the candidates mentioned in the rule, the vacant seats will be filled by the candidates of the open category.

ADMISSION PROCESS

For B. Sc. SEM-I

The college has introduced Choice Based Credit System (CBCS) in all the classes. The candidates seeking admission in this college will have following choices of groups at B. Sc. SEM- I out of which one has to select any one:

1) **For A group students**, i.e., those who had opted Physics (P), Chemistry (C) and Mathematics (M) at the HSC level, the possible groups are :

- a) **CPM**,
- b) **CMS** and
- c) **PMS**

where **S** stands for Statistics.

2) **For B group students**, i.e., those who had opted Physics (P), Chemistry (C) and Biology (B) at the HSC level, the possible groups are :

- a) **CPB** and
- b) **CPZ**

where **B** stands for Botany and **Z** stands for Zoology.

3) **For AB group students**, i.e., those who had opted Physics (P), Chemistry (C), Mathematics (M) and Biology (B) at the HSC level, the possible groups are :

- a) **CPM**,
- b) **CMS**,
- c) **PMS**,
- d) **CPB** and
- e) **CPZ**

One has to give preferential order of one's choice out of these groups. The choice of the subject in the subsequent semesters will be based on this group only. So, one has to be careful while giving choice of the groups at B. Sc. SEM-I. Groups once opted for shall not be changed in any case. The number of seats in the college in each group is decided depending on the availability of the staff and other facilities.

The three subjects selected at B. Sc. SEM-I will be called Core-1, Core-2 and Discipline-centric Elective. Apart from this, the candidate will have Generic Elective (which is

Environmental Studies), Foundation compulsory (which is English) and foundation Elective (which is NCC, NSS, PT or Saptadhara) as compulsory subjects.

The merit list will be prepared after the application forms are received and the detailed time table of the admission schedule will be displayed on the notice board of the college and on our website, ptscience.ac.in. One should regularly visit our website for such details.

The students will have to bring the following documents while confirming admission in the college:

1. Original mark sheets of each trial at the HSC level with self-attested photo copy of each of them
2. Original caste certificate of SC/ST/SEBC candidates
3. Original creamy layer certificate for SEBC candidates
4. Original school leaving certificate
5. Original attempt certificate at the HSC level

The students will have to submit the following documents while confirming admission in the college:

1. Self-attested photo copies of the mark sheets of each trial at the HSC level
2. Self-attested photo copy of the school leaving certificate
3. Self-attested photo copy of the attempt certificate at the HSC level
4. Self-attested photo copy of the caste certificate for SC/ST/SEBC candidates if applicable
5. For SEBC candidates, self-attested photo-copy of the creamy layer certificate
6. Provisional eligibility certificate for the candidates from the boards other than GSHSEB, Gandhinagar

Admission will not be given in any case without any of these original documents. If one fails to remain present along with these documents on the date and time one is allotted for the admission, he/she will lose the right to claim admission in the college.

For B. Sc. SEM-III

For the admission in B. Sc. SEM III, preference will be given to the candidates of our college. If the seats remain vacant after the admission to the students of this college is over, that can be filled by those from other colleges if there are any.

In SEM-III, the student will have to select a group offered by the college which comprises of two of the main subjects which he/she had at the first year. The same group will be continued in SEM-IV also. The choice of the group is given in the following table.

Sr. No.	Group at B. Sc. SEM-I	Choice of Group at B.Sc. SEM-III
1	CPM	CP, PM, CM
2	CMS	CM, MS
3	PMS	PM, MS
4	CPB	CP, CB
5	CPZ	CP, CZ

- The main subjects selected by the candidate will be called Core-1 and Core-2. The other subjects will be Generic Elective, Foundation Compulsory (which is English) and Foundation Elective (which is any one of NCC, NSS or PT).
- A merit list will be prepared and admission will be given only based on the merit and availability of the seats in a particular group.
- The Generic Elective courses offered for various groups are as follows:

Sr. No.	Group at B. Sc. SEM-III & IV	Generic Elective at B. Sc. SEM-III	Generic Elective at B. Sc. SEM-IV
1	CP	Industrial Chemicals/ Non-renewable Energy	Industrial Chemicals/ Renewable Energy
2	CM	Industrial Chemicals/ Mathematical Methods	Industrial Chemicals/ Mathematical Methods
3	PM	Non-renewable Energy/ Mathematical Methods	Renewable Energy/ Mathematical Modelling
4	MS	Mathematical Methods	Mathematical Modelling
5	CB	Industrial Chemicals/ Biodiversity	Industrial Chemicals/ Nutrition & Dietetics
6	CZ	Industrial Chemicals/ Marine Science	Industrial Chemicals/ Marine Science

The necessary documents to be submitted along with the application form:

Self-attested Photo copies of mark sheet of each trial at the B. Sc. SEM-I and SEM- II.

For B. Sc. SEM-V

The students of our college will be given preference for the admission at the B. Sc. SEM-V. The students of other colleges may be admitted at the B. Sc. SEM-V level only if seats are empty.

In SEM-V, the student will have to select any one of the two Core subjects that he/she had opted for at B. Sc. SEM III and SEM-IV. The same subject will be continued in SEM-VI as the core subject.

Apart from this, he/she will have English (H. L.) as a compulsory subject and a corresponding Generic Elective subject depending upon his/her core subject which is given in the following table.

Sr. No.	Core subject at B. Sc. SEM-V and SEM-VI	Generic Elective at B. Sc. SEM-V	Generic Elective at B. Sc. SEM-VI
1	Physics	Modern Digital and Analog Communication System – I/ Astrophysics – I/ Measurements and Instruments – I	Modern Digital and Analog Communication System – II/ Astrophysics – II/ Measurements and Instruments – II
2	Chemistry	Petrochemicals	Petrochemicals
3	Mathematics	Operation Research – I	Operation Research – II
4	Botany	Horticulture	Gardening
5	Zoology	Fisheries	Fisheries

The necessary documents to be submitted along with the application form :

Self-attested photo copies of the mark sheets of each trial at the B. Sc. SEM- I, SEM-II, SEM-III and SEM-IV.

The college fees for B. Sc.:

Sr. No.	Semester	For Boys	For Girls
1	I	Rs. 3785	Rs. 3185
2	II	Rs. 3235	Rs. 2635
3	III	Rs. 3235	Rs. 2635
4	IV	Rs. 3235	Rs. 2635
5	V	Rs. 3235	Rs. 2635
6	VI	Rs. 3235	Rs. 2635

* The fee structure is subject to change as per VNSGU, Surat directives from time to time.

For M. Sc. SEM-I

The College offers Post-Graduate courses in Organic Chemistry, Nuclear Physics and Botany. The admission to these courses will be carried out by VNSGU, Surat based on centralized admission system.

If a candidate is selected for admission in M. Sc. SEM I, he/she will have to fill up the college form and submit it in the college office along with attested photo-copies of the necessary mark sheets and others.

The college fees for M. Sc.:

Sr. No.	Semester	Subject	For Boys		For Girls	
			Granted	Higher payment	Granted	Higher payment
1	I	Organic Chemistry & Botany	Rs. 7250	Rs. 19750	Rs. 4790	Rs. 17290
		Nuclear Physics	Rs. 7250	Rs. 22250	Rs. 4790	Rs. 19790
2	II	Organic Chemistry & Botany	Rs. 6800	Rs. 19300	Rs. 4340	Rs. 16840
		Nuclear Physics	Rs. 6800	Rs. 19300	Rs. 4340	Rs. 19340
3	III	Organic Chemistry & Botany	Rs. 6591	Rs. 19091	Rs. 4091	Rs. 16591
		Nuclear Physics	Rs. 6591	Rs. 21591	Rs. 4091	Rs. 19091
4	IV	Organic Chemistry & Botany	Rs. 6591	Rs. 19091	Rs. 4091	Rs. 16591
		Nuclear Physics	Rs. 6591	Rs. 21591	Rs. 4091	Rs. 19091

* The fee structure is subject to change as per VNSGU, Surat directives from time to time.

Other Information

Hostel facility:

- There are separate boy's and girl's hostels in the college campus itself.
- The preference will be given to those who are coming from far off places for the admission in the hostel.
- There are reserved seats for backward class candidates in the hostel as per government rules.
- The students staying in the hostel will have to abide by the rules of the hostel and they are also supposed to strictly follow the instructions given to them by the rector from time to time.
- For getting admission in the hostel, the candidate will have to bring a recommendation letter from his/her Principal.
- The candidate will have to submit the necessary documents that are demanded at the time of admission.
- For details, contact college office during office hours.

Student's council:

- It is formed to promote extra-curricular activities, to develop leadership among the students, to encourage sentiments of national integration and international brotherhood and to inculcate principles of non-violence, truth and tolerance.
- All the students of the college automatically become the member of the Student's council.
- The HOI is president of Student's council by virtue of his post and the faculty members become honorary members of Student's council.
- The formation of Student's council is as per the constitution of VNSGU, Surat.
- The Class Representatives (CR) and General Secretary (GS) are elected in a democratic way.
- Various committees are formed as per the provisions of the council and they remain active during the year.
- All the decisions of the council as well as those of different committees shall be subjected to the approval of the President of the Student's council.

Scholarships and Free Studentships:

Endowed Scholarships and Free studentships available to the students of Sir P. T. Sarvajanic College of Science, SURAT are listed below.

➤ Scholarships:

Sr. No.	Name of the Scholarships	Eligibility Criterion
1	Kanchanlal Bhaidas Marfatia – Gold medal	For College first student in T. Y. B. Sc.
2	Urmi Prabha Dixit Free-ship	Poor and needy students
3	Dr. Kusumben C. Desai Education Trust	Highest marks in all Principal Subjects in T. Y. B. Sc. and M. Sc.
4	Dr. C. M. Desai Prize	Highest marks in T. Y. B. Sc. Chemistry & with rotation in subjects Physics, Zoology, Mathematics and Botany
5	Dr. J. U. Thakar Prize	Highest marks in all Principal Subjects in T. Y. B. Sc. & M. Sc. (Botany)
6	Lt. Principal N. M. Shah Mathematics merit Prize	Highest marks in T. Y. B. Sc.(Mathematics)
7	Lt. Smt. K. R. Rawal Scholarship	Highest marks in T. Y. B. Sc. (Mathematics)
8	Prof. R. U. Denial Prize	Highest marks in T. Y. B. Sc. (Physics)
9	Prof. R. M. Desai Memorial Physics Prize	Highest marks in T. Y. B. Sc. (Physics)
10	Shri. I. Joshi & I. D. Joshi Prize	Highest marks in T. Y. B. Sc. (English)
11	Dr. D. V. Parikh Scholarship	Highest marks in F. Y. B. Sc., S. Y. B. Sc., T. Y. B. Sc. (In Chemistry, Physics, Botany, Zoology, Mathematics and English)

Instructions for Students and Parents/guardian:

1. The students have to be polite and well-mannered. They should respect all the staff of the college.
2. The students should not use bad or abusive language in the college premises or elsewhere.
3. The students have to be honest in their work and dealings. In addition, they should be truthful in their speech and should have sporty behavior.
4. The students should actively participate in various extracurricular activities like culture, sports etc.
5. The students have to attend the theory classes and laboratory regularly. Apart from this, they have to participate in the activities under NCC, NSS and PT programs.
6. To be eligible in appearing in the University examination, one has to fulfil the minimum criteria specified by the University.
7. If a student is not able to attend the college due to illness, then he/she has to inform it to the college in time. He/she has to submit the medical certificate from a registered doctor.
8. The student is not supposed to create chaos in the college campus by any means; neither he/she should spoil the atmosphere of the college. Otherwise, he/she will be liable for punitive actions.
9. The student should not damage the college building, furniture or any part of it, otherwise strict disciplinary action will be taken against him/her.
10. The student has to wear the identity card provided by the college whenever on campus. Without it, he/she will not be permitted to enter into and move around in the college.
11. The student has to keep a photo-copy of the latest fee receipt of the college with him/her.
12. The use of mobile phones is prohibited in the classrooms.
13. The student is not expected to take private tuition from any of the college teachers. Violation of this rule will be considered as a serious offence and the student will be liable for suspension from the College.
14. The students have to regularly visit college website and notice boards, both general as well as departmental, and remain informed of the different instructions displayed there.
15. Use of apron is must in the chemistry laboratories.
16. The amount of the deposit will be refunded only if the original fee receipt is shown along with the identity card.
17. The parents/guardians have to keep check on their son/daughter/ward on their own.
18. He/she has to abide by the rules of the college.

TEACHING STAFF

Prin. Dr. Pruthul R. Desai

DEPARTMENT OF CHEMISTRY

▫ Dr. M. B. Mahida (HOD)

▫ Dr. S. A. Joshi

▫ Dr. Ms. H. D. Desai

▫ Dr. K. C. Desai

▫ Dr. H. B. Gajjar

▫ Dr. S. P. Vora

▫ Dr. M. H. Chaudhari

▫ Dr. B. M. Patel

▫ Dr. K. C. Parmar

▫ Dr. N. R. Kamdar

DEPARTMENT OF PHYSICS

Mr. S. A. Sutar (HOD)

▫ Mr. V. H. Thakkar

▫ Dr. Ms. N. D. Patel

▫ Dr. D. B. Shah

▫ Mr. K. J. Mahajan

▫ Mr. B. J. Lad

DEPARTMENT OF MATHEMATICS

▫ Dr. K. J. Chauhan (HOD)

▫ Dr. J. M. Desai

DEPARTMENT OF BOTANY

▫ Dr. Ms. A. V. Varshney (HOD)

▫ Dr. Ms. J. D. Chaudhari

DEPARTMENT OF ZOOLOGY

▫ Dr. Ms. J. M. Patel (HOD)

▫ Dr. N. R. Solanki

ENGLISH

▫ Ms. P. S. Singaraju

PHYSICAL EDUCATION

▫ Mr. T. C. Gamit

LIBRARIAN

▫ Ms. N. J. Rajyaguru

