

PROSPECTUS 2017

- B. Sc.
- B. C. A.
- M. Sc. (CA & IT)
(Integrated - Dual Degree Course)

NVPAS



Since 1996



CHARUTAR VIDYAMANDAL'S
**NATUBHAI V. PATEL COLLEGE OF
PURE AND APPLIED SCIENCES**

Recognized by UGC under 2(f) & 12(B) Act,
Re-Accredited 'A' Grade By NAAC



CONTENTS

01. Warm Welcome.....	01
02. From Principal's Desk	02
03. NAAC Certificate.....	03
04. Certificates of UGC Approval	04
05. Chief Minister's Message	04
06. Unique..., NVPAS.....	05
07. The College : Vision, Mission & Learning Outcomes ...	06
08. Core NVPAS.....	07
09. Courses Offered.....	09
10. Career Oriented Courses.....	23
11. Eligibility & Enrollment.....	24
12. Admission Procedure	25
13. Academic Activities.....	26
14. Co-curricular & Extra Curricular Activities.....	27
15. Awards and Academic Excellence.....	29
16. NVPAS Rules and Regulations	30
17. Intellectuals at NVPAS	31
18. Industrial Support for Training & Visits.....	31
19. NVPAS Family.....	32
20. NVPAS Advisory Committee	34
21. Academic Planner.	35

- About ...

Vallabh Vidyanagar

Charutar Vidya Mandal

New Vallabh Vidyanagar

Institutions of Charutar Vidya Mandal



"Our guiding principle is constant change, motivation and upgradation, creating state of-the-art knowledge infrastructure for our students, instilling in them the ability to learn so that they can face any challenge anywhere in the world."

Warm Welcome

Change is the salt of life. Without change human life becomes stagnant and sluggish. However, change is not easy to bring about because the process of change sets into motion, a chain reaction of alteration, modification and improvements sweeping into the broader extensive structure of society, foraying into every single dimension of the life on this earth i.e. social, economic, environmental, scientific, cosmic, political and global. The shift in the status quo that the phenomenon of change invariably entails, brings along a package deal of the enhancement of happiness, growth, comfort, efficiency and a heap of challenges, human and capital resource investment, greater commitment and incessant brainstorming. Change makes it mandatory for every person or institution to bring about modification in the modus operandi or the way of operation. Visionary and futuristic people are quick enough to perceive the shadow of coming events and gird up their loins beforehand to keep abreast of the pace of change. This is precisely what Shri Bhaikaka and Shri Bhikhabhai did when they pioneered Vallabh Vidyanager and Charutar Vidya

Mandal more than half a century ago. The indefatigable efforts made by this farsighted duo were later on kept up by Dr. H. M. Patel as rich cultural and institutional heritage.

Charutar Vidymandal (CVM) is committed to impart value-based quality education that aims at the creation of "Global Citizens". The strand which runs through the different locations of this variegated world is the cord of science and technology a singular domain that does not know the differences of race, space and –isms. **Natubhai V. Patel College of Pure and Applied Science (NVPAS)** was established in 1996 with the noble mission of disseminating scientific and technological knowledge to the curious youth of our nation. With the aid of sound and required infrastructure, knowledgeable and committed teachers and unparalleled techno-scientific ethos, the college has carved a special niche for itself in a short span since its inception. As a result the college has been one of the pioneer college of the university Accredited and Re-Accredited as "A" grade institute by NAAC in 2009 and 2016 respectively. College is also recognized

under section 2(f) and 12(B) of UGC for its capacity to carry out sophisticated and streamlined research projects. NVPAS has set up novel trends and policies on the campus and has pioneered many useful systems with encouraging results. The College gives the student exposure to the most recent developments and trends in science and technology. Students are furnished with an opportunity to develop their overall personality by participating in various extra-curricular activities that the College organizes. The college has also started M. Sc. (CA & IT) Integrated five year course from June 2012.

I welcome you to one of the most premier institutes of Charutar Vidya Mandal and Gujarat with a fervent hope that your intimate interaction with the College will equip you with the skills, knowledge, wisdom and values required to cope with the challenges and changes that society and world at large will pose thereafter.

C. L. Patel

Chairman,
Charutar Vidya Mandal



To aspire and strive for excellence in education by developing and sharpening intellectual and human potential of the learners for the good of the society and our stake holders.

From Principal's Desk

Natubhai V. Patel College of Pure and Applied Sciences (NVPAS) has been a dream destination for those aspiring to pursue their interest in the discipline of pure and applied sciences. The college offers some of the best academic resources for excellence in these disciplines, be it by way of faculty, infrastructure, library, or computers. NVPAS attracts the best students from and across the country. We endeavour to enhance their potentialities to greater heights. While the college provides a blend of academic, cultural and scholarly resources, it also brings to the students a dynamic environment for the overall development of their personalities, aspirations and talents. Studying at NVPAS is a challenging and inspiring experience where a student's own commitment to her/his potential can help in obtaining maximum benefits from the college. We at **Natubhai V. Patel College of Pure and Applied Sciences (NVPAS)** are therefore constantly striving to open up new vistas and the branches of education thereby providing new edge and the need-of-time education. NVPAS is the first among all the colleges

affiliated to Sardar Patel University, Vallabh Vidyanagar to be accredited 'A' grade in 2009 and I feel proud to inform you that we got reaccredited 'A' Grade by NAAC in 2016 for another 5 years. In addition to this it is the first self-financed college of the state to be recognized under 2(f) and 12(B) by UGC, New Delhi due to its constant stress upon innovative, scholastic research activities. Good number of research projects, funded by renowned agencies like UGC, DBT, ISRO, GSBTM, etc. have been accomplished by our erudite faculty members. Due to constant training of the faculty members with the various types of faculty development program in the booming areas of Science and Technology the students get the benefit of the research experience of the faculty members. The college has very effective counseling system backed with continuous evaluation program in the form of weekly test to keep an eye on the academic development of the student. The energetic, experienced and motivated faculty members not only impart quality education to the students but also serve as a family for those students

who are away from their home. This dynamic team of faculty members also take keen interest in the co-curricular activities for all round personality development of the students. Our college offers B. Sc. Degree courses in Biosciences, Chemical Sciences, Physical Sciences, Mathematics and Computer Sciences besides BCA details of which are given in this booklet. The college has started M.Sc. (CA & IT) Dual Degree-integrated five year course from June 2012.

We are running career oriented courses in Industrial Biotechnology for college students funded by UGC, New Delhi and a Number of Certificate courses in different Subjects. I am confident that the college, with its rich legacy, besides being blessed by Almighty, will be able to contribute richly in shaping young minds thereby resulting in progress of the nation.

Basudeb Bakshi
Principal



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
Charutar Vidya Mandal's
Natubhai U. Patel College of Pure and Applied Sciences
Vallabh Vidyanagar, Dist. Anand, affiliated to Sardar Patel University,
Gujarat as
Accredited
with CGPA of 3.01 on four point scale
at A grade
valid up to March 16, 2021*

Date : March 17, 2016



DP Singh
Director

EC(SC)/13/A&A/54.2

Certificates of UGC approval

NVPAS Certificate for Section 2(f) & 12(B) of the UGC Act, 1956


UNIVERSITY GRANTS COMMISSION
RAJADUR SHAH ZAFAR MARG
NEW DELHI-110 002

T. N-12/02 (CPT-I) May, 2003

The Registrar,
Sardar Patel University,
Vallabh Vidyanagar-388 120 (Gujarat).

13 MAY 2003

Subj- List of Colleges prepared under Section 2 (f) & 12 (B) of the UGC Act, 1956.
Inclusion of New College.

Sir,

I am directed to refer to the letter No. NVP/0-2/210/03 dated 05-03-2003 on the subject cited above and to say that the name of the following College has been included in the above list under Non-Government Colleges teaching upto Bachelor's Degree:-

Name of the College	Year of Establishment	Remarks
Natubhai V. Patel College of Pure and Applied Sciences, Vallabh Vidyanagar-388 120.	1996	The College is eligible to receive Central assistance in terms of the Rules framed under Section 12-B of the UGC Act, 1956.

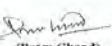
The Indemnity Bond and other documents in respect of the above Colleges have been accepted by the Commission.

Yours faithfully,

(Sharanjit Singh)
Deputy Secretary

Copy to:-

1. The Principal, Natubhai V. Patel College of Pure and Applied Sciences, Vallabh Vidyanagar-388 120.
2. The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi-110 001.
3. Joint Secretary, UGC, Western Regional Office, Gandhinagar, Poonam University Campus, Pune (M.S.).
4. Section Officer, PD-III Section, UGC, New Delhi.
5. All Sections, UGC, New Delhi.
6. Guard file.


(Prem Chand)
Section Officer

Message from Chief Minister

Apntocm16012010



Date:16-1-10

MESSAGE

I am very much happy to note that **Natubhai V. Patel College of Pure and Applied Science** ranked second among fifty two Colleges in the country, and entered the list of accredited Institutes by NAAC. Efforts towards quality – consciousness for pure and applied science have also been reflected for creating and sustaining quality standards and scientific research. To share the success and enjoy such sharing will bring sustaining happiness from such efforts.

I appreciate the achievement and congratulate all of you.


(Narendra Modi)

To,
Dr. Basudeb Bakshi - Principal,
Natubhai V. Patel College of Pure and Applied Science,
Vallabh Vidyanagar – 388 120.
Email:nvpascollege@yahoo.co.in

Narendra Modi
Chief Minister, Gujarat State



Unique.... NVPAS

SHAPING SCIENTIFIC DREAMS

Because...

- One of the self financed Science college in Gujarat to be Re-Accredited 'A' grade by NAAC.
- We got Reaccredited 'A' Grade by NAAC in the year 2016 for another 5 years.
- First self-financed College in Gujarat to get 2(f) & 12(8) certification from UGC in appreciation of its Quality Research Competence.
- Personality development programmes for the students.
- Entrance Exam Preparation Cell (EEPC) for P.G. Courses.
- Biotechnology capacity building cell of Gujarat State Biotechnology Mission, Government of Gujarat for V. V. Nagar and Vadodara region.
- First College in Gujarat to offer B. Sc. in Bioinformatics & Genetics.
- Highly qualified and Techno savvy Faculty.
- Immaculate, Interactive and Target oriented system of personal counseling.
- Techno-Scientific and Thought Provoking Ambience.
- Training and Placement Cell.
- Research Projects sanctioned from UGC, ISRO, NME-ICT, DBT and other National Funding Agencies.
- Weekly unit Test throughout the Year as Academic Growth Measurement Tool.
- Frequent academic seminars, conferences and workshops on the latest and up-to-the-minute developments in the field of Science and Technology.
- Assistance for SC-ST Scholarship
- Assistance for UGC - Inspire Scholarship.





The College

INCEPTION

Established in 1996 by Dr. C.L.Patel, the visionary **Chairman of Charutar Vidhya Mandal (CVM)** with the aim of imparting quality education in the emerging areas of Pure and Applied Sciences, **Natubhai V. Patel College of Pure and Applied Sciences (NVPAS)** has become one of the top-notch premier institutes across the nation in a short span since its inception. NVPAS, an English medium - self financed college, boasts an astounding concourse of state-of-the-art infrastructure, highly qualified academicians, holistic approach to education and techno-scientific ambience. NVPAS is the first self-financed college across the state to enjoy **UGC section 2(f) and 12B** registration. NVPAS is among the few colleges of the state to get accredited 'A' Grade by NAAC in the first and the second cycle consecutively, NVPAS has students and faculty representation from across the country,

AFFILIATION:

The college is affiliated to Sardar Patel University, Valiabh Vidyanagar, Gujarat.

MEDIUM OF INSTRUCTION:

Medium of instruction is English.

OUR VISION

We are determined to constantly strive towards excellence in science education and research by promoting academic freedom, experimentation with new paradigms and creativity in complete alignment with the principles of human well being and social welfare.

OUR MISSION

The college has an aim to impart quality education and cultivate a community of enlightened minds with insatiable thirst for knowledge who acquire and apply scientific knowledge within the compass of ethical, ecological and economic values for the sustained and inclusive growth of society and nation.

Learning Outcomes

Students will be able to

- *Develop communication skills and language proficiency.*
- *Develop curiosity in the subject by sharing information and facts.*
- *Become a human being with a firm value base which respects others and Society. Develop technical competence, logical and scientific thinking and reasoning ability. Develop a desire to achieve, innovate and implement the knowledge gained.*
- *Strive to achieve high standards in academics so that they have the capacity to meet the professional requirements of the competitive world.*
- *Understand the subject which inculcates knowledge and wisdom among them.*



Core NVPAS

Infrastructure

Away from the hubbub of the city and located in the heart of Vidyanagar, College sways in the lush green lap of Mother Nature with essential services of bank and post office at stone's throw. The College has four-storied building with spacious class-rooms in adequate number and full-fledged elevator facility serves as a connecting link mediating huge premises. The College also has a well-furnished, air-conditioned Conference Room to facilitate interaction among faculty members and visitors, small presentations and meetings. Wide roads and parking space, well-equipped and modernized laboratories for teaching & research. An easy access to Internet and separate premises for library are the few of the nonpareil trademarks of the college.

S. S. Patel Library of NVPAS

Located opposite the College is the full fledged computerized library of NVPAS in operation since 1998. Covering a huge carpet area of 7906 sq. feet, the library comprises of multiple reader-friendly compartments like reading hall, seminar hall, reference corner etc. In possession of more than 15000 books, 60 periodicals and 250 audio-visual aids and bustling from 9.00 am to 6.00 pm, the NVPAS



Library has the capacity of accommodating 150-200 students at a time.

Library series has been implemented since June 2013 to enable the students access 5000 e-books and periodicals from INFLIBNET of UGC. For the same separate infrastructure of 3 computers are provided.

NVPAS Auditorium

The college houses a state-of-the-art auditorium with seating capacity of 180 guests on the second floor of the library building. All the seminars, workshops and conferences organized by the college are held in the auditorium.

Hostel Accommodation

Information regarding Hostels of CharutarVidyamandal is as follows:

1. Each college is allotted a specific number of rooms in the Hostels.
2. Students admitted to hostels shall have to follow rules and regulations of C.V.M. regarding hostel fees etc.
3. Students shall have to stay in the hostels on their own responsibility.
4. Each student shall have to produce Physical fitness certificate from an authorized doctor.
5. The amount of fees and the rules and regulations etc. are given in form for the admission to the hostel.
6. There are separate hostels for Girls (Square & Ranak) and Boys (C. U. Hostel).



Teaching Staff

Teaching staff comprises of highly qualified, competent and experienced teachers of which 72% are with Ph. D. degree. College faculty members are actively engaged in research as a result of which presently many Major & Minor Research Projects are going on in the areas of Environmental Science, Microbiology, Biotechnology, Chemical and Physical Sciences.

Unit Tests and Preliminary

Examinations

The college conducts unit tests every week to measure the understanding and retention level of students in terms of what is taught to them in classroom. Moreover, these tests keep the students on the alert throughout the year regarding their studies and help them to gauge and analyze their academic growth.

Apart from unit tests the college conducts Preliminary Exam per course in every semester also. Average marks of all the tests are counted as the Internal marks. If a student does not appear in any one of the unit tests or preliminary exam on medical or any other justifiable grounds, it is compulsory for that student to appear in the Arrear Test. If a student does not fulfill the minimum requirement of attendance or internal evaluation defined by University, he/she will be

detained from the Internal / University Exam.

Internal Marks

The weightage of internal marks is 30%. The student will be detained as per the norms of the Sardar Patel University, Vallabh Vidyanagar with reference to the internal marks of student in semester system.

Eligibility Criteria for

Examination

The acceptance of examination form of a student for the relevant examination does not automatically make him/her eligible to appear at the examination (S. P. Uni. 0.78, 0.79 and 0.83) The attendance for keeping terms must be 80% of the total working days.

Counseling System

NVPAS Counseling is a unique, interactive and target-oriented system, involving students, teachers and parents, resolved to accomplish optimum educational goals by making the process of graduation smooth and rewarding for students. It specifically seeks to address common student concerns ranging from anxiety, stress, fear of change and failure to homesickness and a slew of academic worries by bridging the formal as well as communicative gaps between the students and the institution at large.

Counselors are trained to act as the guardians of the students at the college level to make up for the absence of their parents. They remain in close touch with the students allotted to them throughout the year, cater to their emotional and intellectual needs and convey their growth report and feedback, academic or otherwise, to their parents at regular interval of time.

Entrance Exam Preparation

Cell (EEPC)

EEPC is an initiative to make the students of NVPAS competent & competitive to clear Entrance Exams for securing admission in various P. G. Courses like M. Sc. Biotechnology, Microbiology, Biochemistry, Bioinformatics etc. at a few of India's most premier institutes like IIT, IISc Bangalore, TIFR Mumbai and some Central Universities through JNU Combine Entrance Exam (CEE) for M.Sc. Biotechnology. In the history of NVPAS, a huge number of students have cleared various entrance exams due to the spirited efforts made by College EEPC.

This College is recognized by Gujarat State Biotechnology Mission (GSBTM) as a capacity building cell in biotechnology of Anand-Vadodara region.



Getty Images/Lauren Burl

Courses Offered

The College offers the following courses

(A) B. Sc. (Bachelor of Science)

The college offers three year degree course in traditional and non-traditional areas of pure and applied sciences leading to B.Sc. degree with Biotechnology, Genetics, Bioinformatics, Environmental Sciences, Microbiology, Instrumentation, Chemistry, Industrial Chemistry, Computer Science, Information Technology and Mathematics as the principal subject.

Applied Physics & Applied Mathematics will be offered from 2018.

Course Structure For B.sc./B.C.A./M. Sc. (CA & IT)

In FY B Sc students can opt for Maths Group (A Group) or Biology Group (B Group). The courses to be studied at F. Y. B.Sc. are in accordance with Choice Based Credit System (CBCS).

Course Structure for B. Sc. & BCA (First Year)

Semester- 1

Core Courses	
Subjects	Core : I
	Core : II
	Core : III
Ability Enhancement	
Skill Development	

Semester- 2

Core Courses	
Subjects	Core : I
	Core : II
	Core : III
Ability Enhancement	
Skill Development	

Core : I, Core : II & Core : III Titles of these subjects are under preparation.

Course Structure for B. Sc. [Second Year]

College offers the following traditional and non-traditional courses in pure and applied sciences leading to the degree of Bachelor of Science. Admission to these courses will be strictly as per the merit of FY.B.Sc. University theory exam results.

1. Chemistry Group

Chemistry, Industrial Chemistry

2. Physics Group : Instrumentation, Applied Physics (Proposed) from 2018.

3. Biology Group

Biotechnology, Environmental Science, Microbiology, Genetics, Bioinformatics.

4. Computer Group

Computer Science, Information Technology

5. Mathematics: Pure Mathematics Applied Mathematics (Proposed) from 2018.

SUBJECTS OFFERED

No.	Subject
01.	Chemistry
02.	Industrial Chemistry
03.	Computer Science
04.	Information Technology
05.	Instrumentation
06.	Mathematics
07.	Biotechnology
08.	Microbiology
09.	Environmental Science
10.	Genetics
11.	Bioinformatics
12.	BCA
13.	M.Sc. (CA & IT)

Chemistry

Basic sciences have a bottom-up approach which facilitates the specializations and super specializations towards the end of the education. The ideal syllabus covering basic, advanced and emerging trends in chemistry has made this course irresistible for an aspiring science graduate. Broad subject coverage like inorganic chemistry, polymer chemistry, physical chemistry, organic chemistry and analytical chemistry provides a very strong foundation of the concepts of chemistry.

[Second Year]

Semester- 3

Core Courses		
Core : I Chemistry	1.	Physics Chemistry
	2.	Physical Chemistry
	3.	Parcticals
Core : II Physics / IC/Maths	1.	Paper-I OPTICS
	2.	Paper-II Basic Solid State Electronics
	3.	Practicals
Elective Courses		
Elective	4.	Elective
	5.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Core : I Chemistry	1.	Inorganic Chemistry
	2.	Applied Aspects of Chemistry
	3.	Parcticals
Core : II Physics / IC/Maths	1.	Paper-I Electromagnetic Theory & Spectroscopy
	2.	Paper - II Solid State Physics
	3.	Practicals
Elective Courses		
Elective	4.	Elective
	5.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Chemistry	1.	Organic Chemistry
	2.	Organic Chemistry
	3.	Inorganic Chemistry
	4.	Inorganic Chemistry
	5.	Physical Chemistry
	6.	Physical Chemistry
	7.	Physical Chemistry (Practicals)
	8.	Organic Chemistry (Practicals)
	9.	Inorganic Chemistry (Practicals)

Semester- 6

Core Courses		
Chemistry	1.	Organic Chemistry
	2.	Organic Chemistry
	3.	Inorganic Chemistry
	4.	Inorganic Chemistry
	5.	Physical Chemistry
	6.	Physical Chemistry
	7.	Physical Chemistry (Practicals)
	8.	Organic Chemistry (Practicals)
	9.	Inorganic Chemistry (Practicals)



Industrial Chemistry

Industrial chemistry is a combination of chemical technology and chemistry. Industrial visits and trainings are the flavors of industrial chemistry. The knowledge of subjects like unit operations, unit processes, plastics and polymers, dyes and drugs, management, safety and hazards, instrumentation, pollution and organic chemistry infuses confidence in students to work as an entrepreneur, research scientist, and plant in charge, lab chemist and in many other fields.

[Second Year]

Semester- 3

Core Courses		
Industrial Chemistry	1.	Heavy & Fine Chemicals
	2.	Chemical Process Principles
	3.	Practicals
Physics	1.	Optics
	2.	Basic Solid State Electronics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Industrial Chemistry	1.	Engineering Materials
	2.	Chemical Plant Utilities
	3.	Practicals
Physics	1.	Electromagnetic Theory and Spectroscopy
	2.	Solid State Physics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

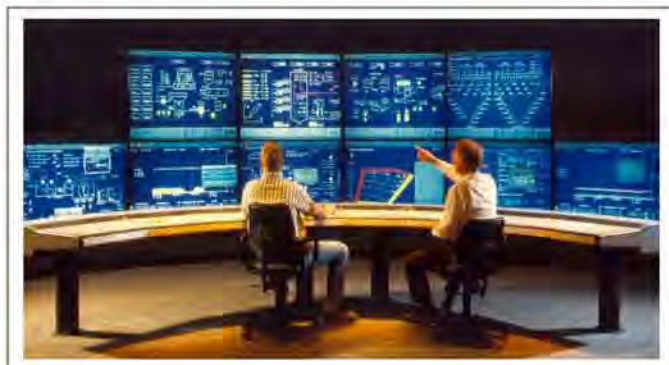
[Third Year]

Semester- 5

Core Courses		
Industrial Chemistry	1.	Organic Chemistry-II
	2.	Unit Process in Organic Manufacture
	3.	Petroleum Technology
	4.	Business Organisation
	5.	Mechanical Operations
	6.	Fluid Mechanics & Heat Transfer
	7.	Practicals
	8.	Practicals
	9.	Practicals

Semester- 6

Core Courses		
Industrial Chemistry	1.	Synthetic Dyes of Intermediates
	2.	Pharmaceuticals
	3.	Polymer Technology
	4.	Management, Costing for Plant Design
	5.	Industrial Instrumentation for Process Control
	6.	Mass Transfer Operations
	7.	Practicals
	8.	Practicals
	9.	Practicals



Instrumentation

Instrumentation is a branch of physics which deals with the measuring and controlling variables, the instruments related to the process variables and its calibration. It is also known as "the art and science of measurement and control". In the present era of automation, instrumentation has become an inevitable part of any industry or research laboratory. The field encompasses all the electronic instrumentation starting from power supplies to the computerized control of equipment and processes at large. The syllabi includes applications of the basic concepts of process and control instrumentation related to electronic instrumentation, microprocessors, Programmable Logic Controllers (PLC), Distributed Control System (DCS), Supervisory Control And Data Acquisition

(SCADA) systems, certain types of measurements like pressure, flow, level, temperature, etc. After graduation students can pursue Masters in Robotics, Bio-medical Instrumentation, Electronics etc, or can go for a host of other professional courses like VLSI, Embedded System Design, etc in and outside the country.

Applied Physics (Proposed from 2018)

Applied Physics is a discipline of subject which apart from providing students with a solid footing on the theoretical aspects of basic science, it also prepares them for the practical applications of scientific laws and procedures. It forms the basis for many of the technological revolutions which we encounter today in our daily life. The subject has a strong interdisciplinary orientation, with an emphasis on combinations of subjects with design studies, nanotechnology, nuclear science, materials science, control systems, remote sensing, electronics and communications, opto-electronics, as well as biophysics to name a few. Applied Physics has a wide range of career opportunities after obtaining Post Graduation, both nationally and internationally, such as in research and development, production in the scientific process industries, teaching career, clinical laboratory science, health services administration, high-tech industry, biopharmaceutical industry, services industry, information technology, manufacturing technology, medical services, and many more. Thus the applied physics degree is a very adaptable degree that can be tailored for a large number of career possibilities.

[Second Year]

Semester- 3

Core Courses		
Instrumentation	1.	Measurements and Indicators
	2.	Basic Instrumentation and LASERS
	3.	Practicals
Electronics	1.	Electronic Devices
	2.	Instrumentation and Digital Electronics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Instrumentation	1.	Signal Conditioning Systems
	2.	Calibration, Recorders, Signal Analysers and Optical Fibre
	3.	Practicals
Electronics	1.	Electronic Devices and Application
	2.	Instrumentation and Digital Electronics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Instrumentation	1.	8085 Microprocessor and Architecture Programming-I
	2.	Process Measurement Technique-1
	3.	Introduction to Control System
	4.	Programmable Logic Controller (PLC)-1
	5.	Industrial Electronics-1
	6.	Analytical Instrumentation
	7.	Practicals
	8.	Practicals
	9.	Project work based on theory papers

Semester- 6

Core Courses		
Instrumentation	1.	8085 Microprocessor and Architecture Programming-I
	2.	Process Measurement Technique-II
	3.	Advanced Control System
	4.	Programmable Logic Controller (PLC)-2
	5.	Industrial Electronics-II
	6.	Analytical and Biomedical Instrumentation
	7.	Practicals
	8.	Practical
	9.	Project work based on theory papers

Biotechnology

Biotechnology is an integration of knowledge about life and living organisms with modern technology to create new systems, devices, materials, food etc. that is essential to life and the well being of man. Thus it is an interdisciplinary science blending not only biology, but also other subjects, including physics, chemistry, mathematics and Engineering. Biotechnology is one of the fastest growing fields as it finds applications in diverse areas like medicine, food technology, pharmaceuticals, agriculture

and environmental conservation. In fact, the use and application of biotechnology spans a wide range of activities, including developing new varieties of seeds, improving livestock breeds, creating pesticides of various kinds, formulating cures for genetic disorders and developing industrial enzymes that hasten the production processes. Currently, there are more than 250 biotechnology health care products and vaccines available to patients, more than 13.3 million farmers around the world use agricultural biotechnology to increase yields, prevent damage from insects and pests and reduce farming's impact on the environment.

Under Ministry of Science and Technology a separate Department of Biotechnology (DBT) (www.dbtindia.nic.in) was established in 1986 which gave a new drive to the development of biotechnology in India. The State Government of Gujarat has also identified Biotechnology as the most potential tool for development and to facilitate the development of biotechnology in the State, it has constituted Gujarat State Biotechnology Mission (GSBTM), under the umbrella of Department of Science and Technology.



[Second Year]

Semester- 3

Core Courses		
Biotechnology	1.	Fundamentals of Biotechnology - I
	2.	Applications of Biotechnology - I
	3.	Practicals
Biochemistry	1.	Biochemistry of Biomolecules - I
	2.	Biophysical & Environmental Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Biotechnology	1.	Fundamentals of Biotechnology - II
	2.	Applications of Biotechnology - II
	3.	Practicals
Biochemistry	1.	Biochemistry of Biomolecules - II
	2.	Biophysical Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Biotechnology	1.	Molecular Biology
	2.	Molecular Techniques
	3.	Plant Biotechnology
	4.	Immunology
	5.	Environmental Biotechnology
	6.	Cell Biology
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)

Semester- 6

Core Courses		
Biotechnology	1.	Recombinant DNA Technology & Applications
	2.	Animal Biotechnology
	3.	Enzymology
	4.	Virology
	5.	Industrial Biotechnology
	6.	Metabolism
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)



Environmental Science

The subject of Environmental Science is a multi-disciplinary comprising of various branches like chemistry, geology, Geo-chemistry, physics, life science, agriculture, public health, sanitary engineering and so on. Precisely the subject encompasses various areas like ecology, toxicology, pollution control and management, geomorphology, remote sensing, wild life management, bio-diversity conservation of natural resources, Biotechnology and Microbiology.

Recent faster growth in industrialization and urbanization has disturbed the natural balance of the environment and the result is unsustainable process of growth and development. Catastrophes like climate change, global warming, earthquake, desertification and coastal inundation are fast plaguing the individual and society. In the time of environmental degradation, the scientific education is also experiencing paradigm shift from classical to the applied one. The subject of environmental science is therefore, precisely designed for training the youth to tackle with all environmental issues.

Environmental science graduates have multiple career option. They can work with different government department and agencies like forest and environment, pollution control, urban planning, industries, water resources and agriculture etc.

Now NGOs working for environmental protection are a good option for an environmental scientists. Private industries and firms also absorb a large chunk of environmental scientists. Waste treatment industries, refineries, distilleries, mines, fertilizer plants, food processing industries and textile mills employ environmental scientists. Environmental scientists also can be involved in research activities at national and state level agencies. Environmental scientists also can seek employment in media as environmental journalists. Teaching in colleges, universities is also a good option available for environmental science candidates. There are ample opportunities for successful placement, research fellowship and grants for higher degree like Ph. D.

[Second Year]

Semester- 3

Core Courses		
Environmental Science	1.	Concepts of Ecology
	2.	Fundamentals of Environmental Science
	3.	Practical Based on ENV 01 and 02
Biology	1.	Cytology
	2.	Fundamentals of genetics and evolution
	3.	Practical Based on BIO 01 and 02
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Environmental Science	1.	Components of ecology
	2.	Environmental Pollution, Wildlife & Biodiversity
	3.	Practical Based on ENV 01 and 02
Biology	1.	Concepts of Biology
	2.	Genetics
	3.	Practical Based on BIO 01 and 02
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Environmental Science	1.	Environmental Biotechnology
	2.	Pesticide, Herbicide, Fungicide Toxicology
	3.	Environmental Pollution
	4.	Earth System Sciences
	5.	Natural Resources
	6.	Population Dynamics & Biostatistics Env. Sci
	7.	Practical Based on ENV 01 and ENV 02
	8.	Practical Based on ENV 03 and ENV 04
	9.	Practical Based on ENV 05 and ENV 06

Semester- 6

Core Courses		
Environmental Science	1.	Environmental Microbiology
	2.	Environmental Toxicology
	3.	Waste Management
	4.	Oceanography & Remote sensing
	5.	Ethnobiology, Biodiversity, Forestry & Wildlife
	6.	Environmental Issues & Legislation
	7.	Practical Based on ENV 01 and ENV 02
	8.	Practical Based on ENV 03 and ENV 04
	9.	Practical Based on ENV 05 and ENV 06

Microbiology

Microbiology has gained new stature. Microorganisms & their activities increasingly central to many of the concerns of society both nationally & internationally.

The problem of global environment, the recognition of the need to recycle natural resources, the discovery of recombinant DNA & the resulting high technology of genetic engineering these & other development have placed Microbiology in the lime light. Microbiology has emerged as the key biological science. Micro-organisms provide the model used in molecular biology

for research. This research at molecular level has provided and continues to provide the answers to numerous fundamental questions in genetics, metabolism, cell forms & functions. There is a growing recognition of the potential of micro-organisms in many applied areas. The ability of microorganisms to degrade oil in oil spills, herbicide, pesticide, as an ability to supplement food, to produce energy & other uses of micro-organisms are becoming increasingly attractive.

Since the syllabus takes into account many frontiers of biology, the candidates will also be in great demand abroad. Some of the Interested student will also be able to pursue the doctoral studies both in India & abroad after the completion of the PG Degree.



[Second Year]

Semester- 3

Core Courses		
Microbiology	1.	Fundamental of Microbiology-I
	2.	Fundamental of Microbiology-II
	3.	Practicals
Biochemistry	1.	Biochemistry of Biomolecules-I
	2.	Biophysical & Environmental Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Microbiology	1.	General Microbiology
	2.	Applied Microbiology
	3.	Practicals
Biochemistry	1.	Biochemistry of Biomolecules-I I
	2.	Biophysical Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Microbiology	1.	Fundamentals of Molecular Biology
	2.	Bioinstrumentation
	3.	Microbial Physiology & Enzymology
	4.	Immunology
	5.	Microbial Diversity & Ecology
	6.	Fermentation Technology
	7.	Practicals
	8.	Practicals
	9.	Practicals

Semester- 6

Core Courses		
Microbiology	1.	Molecular Genetics
	2.	Tools and Techniques in Molecular Biology
	3.	Microbial Biochemistry
	4.	Medical Microbiology
	5.	Agriculture & Environmental Microbiology
	6.	Industrial Microbial Technology
	7.	Practical
	8.	Practical
	9.	Practical

Genetics



Genetics is a branch of biology that deals with the heredity and variation of organisms. The mechanism of heredity eluded researchers until this century when they accepted the theory that offspring inherit their traits by the transmission of discrete units of information now called genes. The gene concept became more clear with the discovery that genes consist of DNA. The arrangement of DNA into chromosomes of eukaryotic cells makes it possible to transmit traits. The study of genetics includes three aspects of genes: Transmission, Expression and mutations. Areas of study include both Mendelian and non-Mendelian hereditary diseases,

genomics and mapping, Bioinformatics, developmental biology, Neurogenetics, sex determination, cytogenetics, human malformation, and chromatin structure and function. Conceptual approaches to medically related biological problems are employed frequently with the aid of automation and advanced imaging techniques, towards the goal of disease prevention, control and eradication methods such as gene therapies.

[Second Year]

Semester- 3

Core Courses		
Microbiology	1.	Cell Molecular Biology and Genetics
	2.	Principles of Genetics-I
	3.	Practicat
Biochemistry	1.	Invertebrate and Vertebrate
	2.	Animal Physiology and Adaptation
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Microbiology	1.	Molecular Genetics & Biostatistics
	2.	Principles of Genetics-II
	3.	Practicals
Biochemistry	1.	Invertebrate Vertebrata & Animal Behaviour
	2.	Physiology, Economic Zoology, Toxicology & Wildlife
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

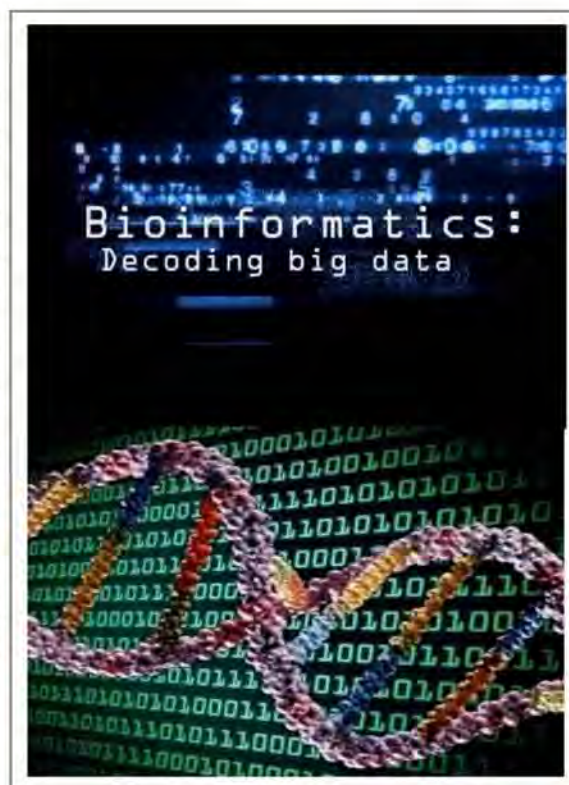
Core Courses		
Microbiology	1.	Instrumental Methods of Analysis
	2.	Molecular and Microbial Genetics
	3.	Introduction to Genetic Engineering
	4.	Plant Biotechnology
	5.	Immunogenetics
	6.	Human Genetics
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)

Semester- 6

Core Courses		
Microbiology	1.	Biological Chemistry and Metabolism
	2.	Recombinant DNA Technology
	3.	Principles of Genetics and Breeding
	4.	Bioinformatics
	5.	Animal Biotechnology
	6.	Biomedical Genetics
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)

Bioinformatics

Bioinformatics is managing of biological information using computer technology. Computers are used to gather, store, analyze and integrate biological and genetic information which can then be applied to gene-based drug discovery and development. It is an interdisciplinary research field that combines biology, computer science, mathematics and statistics into a broad-based field that will have profound impacts on all fields of biology. The field of Bioinformatics focuses on developing and applying computationally intensive techniques to quickly and efficiently study heap of genomic information, chemical structure and other biological data. Over the past few decades rapid developments in all the Omics and Information technology have been combined to produce a tremendous amount of information related to molecular biology. The scope of bioinformatics is in areas like database design and maintenance, sequence assembly, proteomics, clinical pharmacologist, sequence analysis, informatics developer and bio-analytics. Excellent job opportunities are available in Biotech and Pharmaceutical companies in India,



[Second Year]

Semester- 3		
Core Courses		
Computer Science	1.	Problem Solving Methodology and Programming in C
	2.	Computer Fundamentals
	3.	Practicals
Bioinformatics	1.	Basics in Bioinformatics
	2.	Cell Biology and Genetics
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4		
Core Courses		
Computer Science	1.	Web Designing and Application using HTML
	2.	Computer Networking and Internet
	3.	Practicals
Bioinformatics	1.	Bioinformatics Sequence Analysis
	2.	Biochemistry
	3.	Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5		
Core Courses		
Bioinformatics	1.	Visual Programming
	2.	Object Oriented Programming and Data Structure
	3.	Basics of Immunology
	4.	Genetic Engineering- 1
	5.	Bioinformatics Applications-I
	6.	Structural Bioinformatics and RDBMS-I
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)

Semester- 6		
Core Courses		
Bioinformatics	1.	Web application Development using PERL
	2.	Object Oriented Programming using JAVA
	3.	Advanced Immunology
	4.	Genetic Engineering-II
	5.	Bioinformatics Applications- II
	6.	Structural Bioinformatics and RDBMS-II
	7.	Practicals (Paper 1 & 2)
	8.	Practicals (Paper 3 & 4)
	9.	Practicals (Paper 5 & 6)



Computer Science

In the present age, Computer Science offer wide opportunities. All sector of the economy require the services of skilled computer people. Professionals are required in areas such as programming, engineering, database, information warehousing, internet and e- commerce in an organization. Bachelor of computer science is a three years undergraduate degree designed for the students who wish to study computer in depth as well as with specific training in software engineering. This degree mainly focuses on the development of skills in software development, functional knowledge of computer science, internet communications, and network.

[Second Year]

Semester- 3

Core Courses		
Computer Science	1.	Fundamentals of Computer Programming using C
	2.	Computer Organization
	3.	Practicals
Mathematics	1.	Advanced Calculus
	2.	Numerical Analysis
	3.	Mathematics Practical
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Computer Science	1.	Advance C and Introduction to Data Structure
	2.	Operating Systems
	3.	Practicals
Mathematics	1.	Linear Algebra
	2.	Differential Equations
	3.	Mathematics Practical
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Computer Science	1.	Object Oriented Programming Using C++
	2.	Business Data Processing Through DBMS
	3.	Visual Programming Through VB. NET
	4.	Computer Networks
	5.	System Analysis & Design
	6.	Computer Graphics & Multimedia
	7.	Practicals - I
	8.	Practicals - II

Semester- 6

Core Courses		
Computer Science	1.	Object Oriented Programming Using Java
	2.	Relational Database Management System
	3.	Web Designing & Applications
	4.	Introduction to Microprocessors and Assembly Languages
	5.	Software Engineering
	6.	E - Commerce
	7.	Practicals - I
	8.	Practicals



Information Technology

With tremendous developments made in the field of Information Technology, the need for trained professionals has also increased over the years. Various companies require professionals who can manage their sensitive data in a secure way. This course covers all the technical aspects such as software, database, networking etc. B.Sc. (IT) offers more options in management of systems which is combination of software, communication, internet etc... Candidate with B.Sc. (IT) will have more exposure in management of systems and networks. The job opportunities related to information systems are: Programmer, Programmer Analyst, Business Systems Analyst, Systems Engineer, Systems Integration Engineer, System Administrator, Customer Engineer, Field Engineer, etc.

[Second Year]

Semester- 3

Core Courses		
Information Technology	1.	Fundamentals of Information Technology
	2.	Problem Solving Methodology & Programming in C
	3.	Practical
Mathematics	1.	Advanced Calculus
	2.	Numerical Analysis
	3.	Mathematics Practical
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

Semester- 4

Core Courses		
Information Technology	1.	Computer Organization and Digital Computer Electronics
	2.	Web Designing & Applications
	3.	Practical
Mathematics	1.	Linear Algebra
	2.	Differential Equations
	3.	Mathematics Practicals
Elective Courses		
Elective	1.	Elective
	2.	Elective
Foundation Course		
	1.	Functional English

[Third Year]

Semester- 5

Core Courses		
Information Technology	1.	Relational Database Management Systems-I
	2.	Data and File Structures
	3.	Visual Programming through VB.NET
	4.	Operating Systems
	5.	System Analysis, Design & Software Engg.
	6.	Computer Architecture and Microprocessor
	7.	Practical-I
	8.	Practical-II

Semester- 6

Core Courses		
Information Technology	1.	Relational Database Management Systems-II
	2.	Web Application Development Using PHP
	3.	Object Oriented Programming Using JAVA
	4.	Software Project Management
	5.	Information Security
	6.	Data Communication & Networking
	7.	Practical- 1
	8.	Practical II and Project

(B): Bachelor of Computer Applications

This is an undergraduate three years program where students are introduced to various areas of computer science, programming, database design, software engineering, and networking and information systems. The course prepares graduates for further postgraduate degrees or employment in variety of roles in organizations requiring expert professionals who can apply computer science principles to solve problems induced between business and technology, BCA graduates can start their career as programmers and can rise to top level management. The course is aimed at developing the computer professionals in the wide range of application such as business sectors, government sectors, scientific research, medical science, social sciences, management, communication etc.



Semester- 1

Core Courses		
BCA	1.	Fundamentals of Computer Programming Using C
	2.	Computer Organization
	3.	Personal Computer & Software Packages
	4.	Fundamentals of Web Designing
	5.	Practicals
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Communication Skills in English- I
	2.	Mathematics-I

Semester- 2

Core Courses		
BCA	1.	Advanced C Programming & Introduction to Data Stru.
	2.	Systems Analysis & Design
	3.	Database Management Systems Using Open office base
	4.	Web Application Development
	5.	Practicals
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Communication Skills in English - II
	2.	Mathematics - II

Semester- 2

Core Courses		
BCA	1.	Relational Database Management Systems-I
	2.	Object Oriented Programming and C++
	3.	Advanced Data and File Structures
	4.	Practicals
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Financial and Accounting Management

Semester- 4

Core Courses		
BCA	1.	Relational Database Management Systems-II
	2.	Object Oriented Programming Through Java
	3.	Operating Systems
	4.	Practicals
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Computer Based Numerical & Statistical Methods

Semester- 3

Core Courses		
BCA	1.	Visual Programming Through VB.NET
	2.	Computer Graphics
	3.	Software Engineering
	4.	Practicals
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Operations Research

Semester- 6

Core Courses		
BCA	1.	Server-side Web Programming
	2.	Computer Networks
	3.	Business Information Systems
	4.	Practical
Elective Courses		
	1.	Elective
Foundation Course		
	1.	Systems Software

(C) M.Sc. Information technology (CA & IT) (Integrated - Dual Degree Course)

(C) M.Sc. Information Technology (CA & IT): This is an Integrated - Dual Degree five years Post Graduate Programme. The objective of the programme is to prepare the competent IT managers, who can contribute to the upliftment of their organization by their excellent skill of Information Technology. The curriculum would stress on development of skills essential for developing a career in the field of business computer applications. The programme aims at developing IT professional with analytical skill, reporting skill, programming skill, networking and troubleshooting skill so that they can contribute in management decisions, development of websites, maintain / upgrade the software applications and networking and work as a good team member. After successful completion of the course, one can be employed as Systems Analyst, Software Engineer, Project leader, system programmer etc. at a higher grade.



Semester- 1		
Core Courses		
Core	1.	Introduction to Information Technology
	2.	Computer Organization
	3.	Problem solving methodology & Programming in C
	4.	PC Softwares
	5.	Practical-I
Elective Courses		
Any one	1.	Desktop Publishing
	2.	IT in Business
Foundation Course		
	1.	Functional English-I
	2.	Mathematics-I

Semester- 3		
Core Courses		
Core	1.	Operating Systems - 1
	2.	Advanced Data and File Structures
	3.	Object Oriented Programming and C++
	4.	Relational Database Management Systems-I
	5.	Practicals-III
Elective Courses		
Any one	1.	Business Information System
	2.	RDBMS for Small Scale Organizations
Foundation	1.	Financial and Accounting Management

Semester- 5		
Core Courses		
Core	1.	Software Engineering-1
	2.	Computer Architecture
	3.	Object Oriented Programming through Java
	4.	Server side Web Programming using ASP.NET
	5.	Practical -V
Elective Courses		
(any one)	1.	Multimedia Technology
Elective	2.	Introduction to Green IT
Foundation	1.	Operation Research

Semester- 7		
Core Courses		
Core	1.	System Software
	2.	Analysis and Design of Algorithms
	3.	Advanced Java Programming
	4.	Advanced Computer Networking
	5.	Practical -VII
Elective Courses		
Any one	1.	Image Processing
	2.	Bioinformatics
		Total Credits 25

Semester- 9		
Core Courses		
Core	1.	Emerging Trends in IT
	2.	Data Warehouse and Data Mining
	3.	Compiler Design
	4.	Application Development using android Platform-II
	5.	Practical - IX
Elective Courses		
Any one	1.	Distributed Computing
	2.	Parallel Computing
		Total Credits 25

Semester- 2		
Core Courses		
Core	1.	Management Information Systems
	2.	Systems Analysis & Design
	3.	Advanced C Programming & Introduction to Data Structure
	4.	Web Application Development
	5.	Practical-II
Elective Courses		
Any one	1.	Digital Electronics
	2.	Introduction to Computer Hardware
Foundation Course		
	1.	Functional English- II
	2.	Mathematics-11

Semester- 4		
Core Courses		
Core	1.	Operating Systems - II
	2.	Data Communication & Networking
	3.	Visual Programming Through VB. NET
	4.	Relational Database Management Systems-II
	5.	Practicals-IV
Elective Courses		
Any one	1.	Cyber Security
	2.	Basics of UNIX Operating System
Foundation	1.	Computer Based Numerical and Statistical Methods

Semester- 6		
Core Courses		
Core	1.	Software Engineering-II
	2.	E-Commerce
	3.	Computer Graphics
	4.	Linux and Shell Programming
	5.	Practicals-VI and Project
Elective Courses		
(any one)	1.	Enterprise Resource Planning
Elective	2.	Introduction to Simulation
Foundation	1.	Software Project Management

Semester- 8		
Core Courses		
Core	1.	Web Programming using PHP
	2.	Wireless Communication
	3.	Artificial Intelligence
	4.	Application Development using Android platform- 1
	5.	Practical -VI II
Elective Courses		
Any one	1.	Software testing
	2.	Geographic Information System
		Total Credits 25

Semester- 10		
Core Courses		
Core	1.	Project Work
		Total Credits 25

Note: Nomenclature of M.Sc. IT (Integrated) Program is changed to B.Sc. (Computer application and Information Technology) - M.Sc. (Computer Application and Information Technology) i.e. B.Sc. (CA & FT) - M.Sc. (CA & IT) Dual Degree Program from academic year 2016-17 onwards.

Career Oriented courses



Department	Subject	Type	Duration	No. Of Seats
Microbiology	Process development in Industrial Biotechnology	Certificate	1 year	30
		Diploma	2 Years	30
Genetics	Tools and Techniques in Molecular diagnostics	Certificate	30 hrs.	30
Computer Science	Certificate course in web designing	Certificate	30 hrs.	30
English	Communication skills in English	Certificate	30 hrs.	100

Eligibility & Enrollment

B.Sc.

1. Candidates seeking admission to the B.Sc. (1st Semester) class must have passed H.S.C. (Science Stream) Examination of Gujarat State or its equivalent Examination with the subjects English, Gujarati/Hindi, Physics, Chemistry and Maths/Biology.
2. Students intending to take admission to B.Sc. (1st Semester) (Bio group) must have passed 12th (Science) exam either from Gujarat Board or Central Board or other board with biology as one of the subjects.
3. Students willing to take admission to B.Sc. (1st Semester) (Maths Group) must have passed 12th (Science) exam either from Gujarat Board or Central Board or other board with Mathematics as one of the subjects. Students who have passed 10+2 (Science Stream) with both Maths & Biology as one of the subjects are eligible for admission in Biology or Maths Group.

B.C.A.

- Students intending to take admission to B.C.A. must have passed Higher Secondary Examination (12th standard in any stream) with English (compulsory).

B.Sc./B.C.A. (3rd & 4th Semester)

- Candidates seeking admission to B.Sc./B.C.A. (3rd Semester) must have passed B.Sc./B.C.A. (1st & 2nd Semester) Examination conducted by this university or an equivalent examination from any other university or Examining body,

B.Sc. / B.C.A. (5th & 6th Semester)

- The admission to B.Sc./B.C.A. (5th Semester) will be as per the results of B.Sc./B.C.A. (3rd & 4th Semester) and rules of Sardar Patel University.

B.Sc. (CA & IT) - M.Sc. (CA & IT) (5 years Integrated dual degree course)

- Candidates seeking admission to this course must have passed 12th Science / Commerce from Gujarat Board / CBSE / ICSE/equivalent board.

M. Sc. (IT) (Semester 7th lateral entry)

- Candidate seeking admission must have passed BCA / B. Sc. (CS) / B. Sc. IT, Admission will be subject to approval from university.

Important Note

- A foreign national seeking admission should possess a valid passport and visa. He/she should get equivalence certificate from association of Indian universities, New Delhi. Further details can be availed from the college office.
- For CBSE, ICSE and Certain other Board's students, some relaxation in the listed subjects may be given. Such students should contact the college office for guidance.





Admission Procedure

- The students who have passed XII Science/Commerce/Art Stream Examination of Gujarat Board are admitted to the college as per eligibility. They are required to fill up enrolment form, which will be available from college office.
- Along with the duly filled in application form, they will have to submit original Mark sheet of H.S.C. Examination with its true copy.
- They will also have to pay the designated amount as fees and charges as soon as their admission is granted.
- The admission to F.Y.B.Sc. shall be treated as provisional until enrolment certificate is issued by the University.
- The students who have passed H.S.C. Examination of Central board or the boards of other state or countries and are provisionally admitted to F.Y.B.Sc. shall have to produce Final Eligibility Certificate from Sardar Patel University.
- Their admission to F.Y.B.Sc. shall be treated as provisional until this certificate is produced.
- The admission of the defaulting student will be cancelled and the college fees and other charges will be
- forfeited on expiry of period, decided by Sardar Patel University.

COLLEGE FEES

Fee Structure

1. ***For F.Y.B.Sc / B.C.A/ M.Sc.(CA & IT)**
Rs. 30,000/-per semester
2. **For S.Y.B.Sc / B.C.A / T.Y.B.Sc. / B.C.A / M.Sc.(CA & IT) (2nd year to 5th year)**
see the college notice board or website www.nvpas.edu.in

- Hostel fees will be charged extra.
- The fee structure is subject to revision during the course

***Subject to approval from Sardar Patel University**

IMPORTANT NOTE:

1. The fees and other charges once paid will not be refunded under any circumstances.
2. The fees and charges will not also be refunded to:
 - (a) Provisionally admitted students who fail to produce final eligibility certificate of Sardar Patel University and consequently whose admission is cancelled.
 - (b) Students whose terms are not granted by the university.
3. NRI students will have to remit fees as per NRI fee structure.
4. The refund of college Fees will be as per rules displayed on college notice board.

REFUND OF CAUTION MONEY

DEPOSIT:

- (i) The original Fee Receipt should be carefully preserved for production at the time of claiming refund of caution money deposit only after the end of the course.
- (ii) For the students leaving the college, the caution money deposit will lapse if not claimed in writing within one year of the last day of the term last attended. Refund of deposit will be made by cheque on producing the Identity Card at the end of the course as no claim for refund can be entertained without it.

BORROWING ORIGINAL CERTIFICATES:

All the students who have been admitted to the college shall deposit their original X, XII Examination mark sheets and SLC with the college office. The X / XII marksheet or SLC can be borrowed only after the commencement of the academic year for a period of ten days by applying to the Principal in a prescribed form with a photocopy of the fee receipt of the college. All certificates should be deposited in the college before the university exams.



Academic Activities

Computer Science Department

- Department has jointly organized with ISTAR and V.P. Science College one day seminar on "Android Studio- Mobile Application Development" on 10th September 2016.
- Department has jointly organized with ISTAR and VP science college two days workshop on GIS, Remote sensing and GPS on 24th AND 25th Jan 2016.
- Department developed an ERP System.
- Department started a Certificate course in Web Designing of 30 hrs duration in academic year 2016- 17 the syllabus was modified as per the present industrial requirement.
- Department has organized Seminar on "Google Search Engine Techniques". Hands on Training on "Web designing using Word Press" Seminar on "GIS".

Chemistry Department

- Department has organized INDUSTRIAL VISIT " RAINBOW CHEMICALS UNIT 2, GIDC VAPI The activities of the department began with two days industrial visit to " RAINBOW CHEMICALS UNIT 2, GIDC VAPI on 11th July 2016.
- Department has jointly organized a state level workshop on " Sophisticated Instrumental Method of Analysis in Chemical Sciences" with the sister institution on 16th Feb 2017.
- Department has organized Alumni lecture of Dr. Abhishek Gami Alumini (Gold medalist of 2008 batch) at present Founder & MD of United wolfram and United Schichten, Proprietor - United Cartle and Director - Krishna Gems delivered on a talk on the " High tecnology industries based on chemical sciences & Future prospect of

Chemistry in academics and Industries" on 28th December 2016 to students of T.Y.B.Sc chemistry & IC.

Industrial Chemistry Department

- Department has arranged industrial visit to Alembic Pharma ,Halol and Vimal Microns Ltd, Mehsana for T.Y. BSc. Students.
- Department has also arranged industrial visit to Royal Castor Ltd, Mehsana for S.Y. BSc. Industrial Chemistry Students.
- "IC-Fest 2017" an interclass oral and poster presentation competition was arranged by the department to make students aware about the current research trends.
- Dr. Vishal Makadia (R&D Manager of RoyalCastor Products Limited) has invited to deliver a talk in IC-Fest 2017.
- Mr. Joeb Saiyad an alumni has invited for a talk for T.Y. BSc students.

Bio and Env. Science Department

- Academic visit to Tissue Culture Lab, Santokpura was organized on 21st September 2016, for T Y B Sc students. Students were exposed to methodologies and preparation of tissue cultured banana plants.
- An educational tour to Okha, Jamanagar marine National park was organized from 19th Feb 2017 to 23rd Feb 2017 for S.Y B.Sc Env.Science.
- The world Population day was celebrated by arranging guest lecture and competitions. Dr. Vahida Thomas- Senior faculty from SEMCOM was the keynote speaker of the event.
- On the occasion of Carbon Day, the club organized a seminar, poster exhibition and quiz competition.

- World Wetland Day was celebrated on 2nd February 2017 at Pariej wetland. As invited by GEER foundation and Forest Department, 18 students took part in celebration.

Biotechnology/Genetics/Bioinformatics Department

- State level Intercollegiate level competition was organized by the department jointly with Microbiology deptt on 7th January, 2017.
- Skill development programme on tissue culture and mushroom cultivation has been organized jointly by BT GT BNF and Microbiology department.
- Department organized a 6 days crash workshop for SYBSc and TYBSc students under EEPC and N-BT-CBC from 14th -20th February, 2017 sponsored by GSBTM Gandhinagar. More than 120 students participated in this workshop.

Microbiology Department

- Dept. conducted a skill development programme on Mushroom cultivation under the guidance of Dr. Mrugesh Shukla.
- T. Y. B.Sc. students of the Dept. made an industrial visit to CETP plant Environ Infrastructure Pvt. Ltd. at Umaraya.
- An event called GENE Quest-2017 a state level model making competition was organized by the dept. in collaboration with Dept. of BT/GT/BNF
- A guest Lecture of Dr. Mrugeshbhai Shukla from M. G. Science institute Ahmedabad was arranged for the students of TY B. Sc.
- A guest Lecture of Dr. Kuldeep Patel, Deputy General Manager of Baroda Agrochem was organised by the dept. for the students of T.Y.B.Sc of Micro, BT and ES students.

Computer Science Department

- Department has jointly organized with ISTAR and V.P. Science College one day seminar on "Android Studio- Mobile Application Development" on 10th September 2016.
- Department has jointly organized with ISTAR and VP science college two days workshop on GIS, Remote sensing and GPS on 24th AND 25th Jan 2016.
- Department developed an ERP System.
- Department started a Certificate course in Web Designing of 30 hrs duration in academic year 2016- 17 the syllabus was modified as per the present industrial requirement.
- Department has organized Seminar on "Google Search Engine Techniques". Hands on Training on "Web designing using Word

Press" Seminar on "GIS".

Chemistry Department

- Department has organized INDUSTRIAL VISIT " RAINBOW CHEMICALS UNIT 2, GIDC VAPI The activities of the department began with two days industrial visit to " RAINBOW CHEMICALS UNIT 2, GIDC VAPI on 11th July 2016.
- Department has jointly organized a state level workshop on " Sophisticated Instrumental Method of Analysis in Chemical Sciences" with the sister institution on 16th Feb 2017.
- Department has organized Alumni lecture of Dr. Abhishek Gami Alumni (Gold medalist of 2008 batch) at present Founder & MD of United wolfram and United Schichten, Proprietor - United Cartle and Director - Krishna Gems delivered on a talk on the "

High technology industries based on chemical sciences & Future prospect of Chemistry in academics and Industries" on 28th December 2016 to students of T.Y.B.Sc chemistry & IC.

Industrial Chemistry Department

- Department has arranged industrial visit to Alembic Pharma, Halol and Vimal Microns Ltd, Mehsana for T.Y. BSc. Students.
- Department has also arranged industrial visit to Royal Castor Ltd, Mehsana for S.Y. BSc. Industrial Chemistry Students.
- "IC-Fest 2017" an interclass oral and poster presentation competition was arranged by the department to make students aware about the current research trends.
- Dr. Vishal Makadia (R&D Manager of RoyalCastor Products Limited) has invited to deliver a talk in IC-Fest 2017.



Co-Curricular and Extra Curricular Activities

NATIONAL SERVICE SCHEME

- The Leadership Orientation Programme for Senior NSS Volunteers was organized in the College Auditorium on 11-07-2015. The Programme Officer talked about leadership quality and skill of Team-work.
- NSS Orientation Programme titled 'PARAMPARA' was organized at Sardar Patel Memorial, Karamsad for newly enrolled volunteers on 15-07-2015. The heads and Conveners of various student cells informed students about various activities organized by the concerned cells or clubs throughout the year
- The NSS Unit, in association with A. D. Gorwala Blood Bank, Karamsad organized a Blood donation Camp on 24-07-2015 wherein 125 units of blood was collected. Principal Sir praised this enthusiastic participation of the students
- The NSS Unit of the college organized ANNUAL NSS CAMP at Alarsa village (Ta: Borsad and Dist: Anand). The camp was

held from 03.01.16 to 09.01.16. Total 150 students participated in this camp.

NATIONAL CADET CORPS

- SUO AMIT BHATT was selected youth exchange programme to singapore from 17 to 26 nov -2016. He participated in the international cadet exchange programme along with the cadets of UK, USA and Singapore.
- Seven students Shivangi Patel, Nandini Trivedi, Jiya Patel, Shreya Pandya, Shakshi Dixit, Pari Upadhyay, Krupa Mehta participated in 68th REPUBLIC DAY COMMEMORATION RUN (05 km) ON 22 JAN 2017 organized by NCC group HQs 13 Gujarat Bn V.V. Nagar from BJVM COLLEGE V.V. Nagar

FACULTY OF SPORTS

- This year (2016-17) 200 students had registered for physical training which is one of the Three compulsory subjects to be obtained by first year B.Sc, BCA and M.Sc. Students. Our students actively participated

in various sports activities like inter-class cricket, Football and inter class volleyball tournament and also university level tournament.

- Sports day was organized on February 2017 and named 'Annual Athletic Meet'.

FACULTY OF CREATIVE EXPRESSION

- Ms. Shiksha Sharma (TYMI) won the Second Prize in the Elocution Competition organized by P. G. dept of Economics.
- The Faculty of Creative Expression organized Cartooning, Painting, Poster-Making, Photography, Rangoli-Making, Clay Modeling, Collage and Elocution Competition during the pre-youth festival in the month of August. Hundred and Thirty-One students enthusiastically participated in these competitions.
- Ms. Shruti Maithani (SYMI) and Ms. Aarushi Davesar (FYBSc Div-A) won the First Prize in the Debate Competition organized by N. S. Patel Arts College, Anand.



Co-Curricular and Extra Curricular activities

NATIONAL SERVICE SCHEME

- The Leadership Orientation Programme for Senior NSS Volunteers was organized in the College Auditorium on 11-07-2015. The Programme Officer talked about leadership quality and skill of Team-work.
- NSS Orientation Programme titled 'PARAMPARA' was organized at Sardar Patel Memorial, Karamsad for newly enrolled volunteers on 15-07-2015. The heads and Conveners of various student cells informed students about various activities organized by the concerned cells or clubs throughout the year
- The NSS Unit, in association with A. D. Gorwala Blood Bank, Karamsad organized a Blood donation Camp on 24-07-2015 wherein 125 units of blood was collected. Principal Sir praised this enthusiastic participation of the students
- The NSS Unit of the college organized ANNUAL NSS CAMP at Alarsa village (Ta: Borsad and Dist: Anand). The camp was held from 03.01.16 to 09.01.16. Total 150 students participated in this camp.

NATIONAL CADET CORPS

- SUO AMIT BHATT was selected youth exchange programme to singapore from 17 to 26 nov -2016. He participated in the international cadet exchange programme along with the cadets of UK, USA and Singapore.
- Seven students Shivangi Patel, Nandini Trivedi, Jiya Patel, Shreya Pandya, Shakshi Dixit, Pari Upadhyay, Krupa Mehta participated in 68th REPUBLIC DAY COMMEMORATION RUN (05 km) ON 22 JAN 2017 organized by NCC group HQs 13 Gujarat Bn V.V. Nagar from BJVM COLLEGE V.V. Nagar

FACULTY OF SPORTS

- This year (2016-17) 200 students had registered for physical training which is one of the Three compulsory subjects to be obtained by first year B.Sc, BCA and M.Sc. Students. Our students actively participated in various sports activities like inter-class cricket, Football and inter class volleyball tournament and also university level tournament.

- Sports day was organized on February 2017 and named 'Annual Athletic Meet'.

FACULTY OF CREATIVE EXPRESSION

- Ms. Shiksha Sharma (TYMI) won the Second Prize in the Elocution Competition organized by P. G. dept of Economics.
- The Faculty of Creative Expression organized Cartooning, Painting, Poster-Making, Photography, Rangoli-Making, Clay Modeling, Collage and Elocution Competition during the pre-youth festival in the month of August. Hundred and Thirty-One students enthusiastically participated in these competitions.
- Ms. Shruti Maithani (SYMI) and Ms. Aarushi Davesar (FYBSc Div-A) won the First Prize in the Debate Competition organized by N. S. Patel Arts College, Anand.
- Ms. Palak Shah (TYES) and Ms. Dhrusha Jani (TYES) represented the college in the Debate Competition organized by S. M. Patel College of Home Science, V. V. Nagar.

NATURE CLUB PORTFOLIO

- Van Mahotsav was held on 27.7.16 The Guest for the occasion was Dr P.Manivel, Principal Scientist of Directorate of Medicinal & Aromatic Plants, Boriavi. He delivered an interesting lecture on medicinal plants to the students of NVPAS.
- Save Tiger's Day was celebrated on 29.7.16. On this occasion a Poster Competition on Conservation of Tigers was

held. Students participated and made posters. Dr Devika of Home Science college was the Judge.

- A movie on Conservation of Tigers was shown at the college Auditorium. The students of NVPAS enjoyed the movie with a strong note on conserving Tigers.

FACULTY OF MUSIC DANCE AND THEATRE

- As a part of the Janmashtami-Independence Day Celebration the portfolio organized a three-hour cultural event called **SAMARTHYA** in the College Premises on **29-08-16**. The event involved participation of nearly 150 students into various activities like folk dance, solo singing and dancing events, classical dance, Matkifod etc.
- As a part of Teachers' Day Celebration, the portfolio organized a programme entitled **GURUKRUPA** on **08-09-16** wherein students decorated their respective classes. The students of well decorated classes were given some prizes. Also, students performed dance and songs.
- As a part of Navaratri celebration, the portfolio organized a special event called **RANZANAT** on **15-10-16**. Students enjoyed this event a lot.
- **SILSILA -2017** – The Talent Eve was organized on **22-02-17**. Approximately 110 students participated in various events including singing, dancing, drama etc.

KNOWLEDGE SHARING FORUM

- The knowledge sharing forum organized a Quiz competition based on Reasoning and Aptitude Test under the title **SARAT 2016** wherein Hundred and Eighty Nine students participated. The winners were felicitated with scholarship.

RED RIBBON CLUB

- The NSS Unit, in association with District Legal Services Authority, Anand, organized



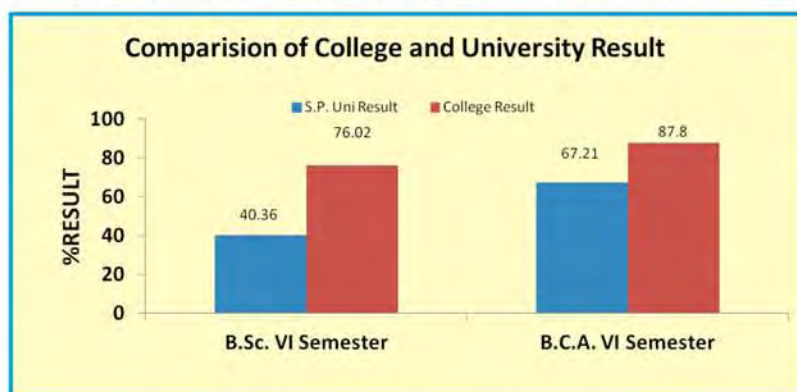
Student Excelled in Various National/State Level Competition

Name of the Student	Department	Class	Competition/Event	Level	Rank
Mr. Sanjay Khub chandani	Computer Science	M.Sc. IT 6 th Sem.	TECHNOCASE-2016	National	3rd
Ms. Devanshi Shah	Computer Science	BCA-6 th Sem.	TECHNOASTRUM-2017	State	1st
Mr. Vijay Thakkar	Computer Science	M.Sc. IT 6 th Sem.	Photography Competition	State	2nd
Ms. Rashmi Thakkar	Bio & ES	Research Scholar	National Conference on 'Environmental Pollution: Consequences and control	National	2nd

Five Gold Medals are secured by the students at S.P. University 6th Semester B.Sc. Examination.

Sr No	Name	Subject	Name of Gold Medal
01	Mr. Yuvrajsinh J Chauhan	Industrial Chemistry	"Dipee Chemicals Private Limited (Ankleshwar) Gold Plated Medal"
02	Mr. Sumer Pankaj	Environmental Science	"Charutar Vidya Mandal Gold Plated Medal"
03	Mr. Dixant R. Thakor	Information Technology	"Charutar Vidya Mandal Gold Plated Medal"
04	Ms. Nishithaben Patel	Genetics	"Dr. B.R. Patel Gold Medal"
05	Mr. Yuvrajsinh J. Chauhan	Industrial Chemistry	"Dr. D.A. Raval Gold Medal"

Academic Excellence - Year 2016





NVPAS Rules and Regulations

- The students are required to collect all the information prior to taking admission to the respective course.
- A student admitted to this college will be issued an Identity Card, which he/she must carry in the College premises and shall produce when any authorized person asks for it. Disciplinary actions will be taken against the students failing to do so.
- The use of mobile phones is strictly prohibited inside the college and hostel campus. The Charutar Vidya Mandal reserves the right to punish any student violating this rule.
- The students of all classes are required to attend all theory, practicals and tutorial classes. Those who wish to avail leave of absence due to unavoidable, compelling reasons should apply in a specified form to the Principal and obtain his prior permission before availing leave of absence. Defaulters will be strictly dealt with.
- Regular attendance in laboratory is essential. A student should produce his/her journal duly certified by the Head of the Department that he/she has satisfactorily completed the laboratory assignment. This certificate will be issued only on the basis of regularity of attendance in the laboratory.
- Certificate stating absence due to sickness, participation in sports or co-curricular activities should be produced within ten days of the recovery or completion of the event. The certificate submitted after the prescribed time limit will not be taken into cognizance.
- **4s per university rules 80%** attendance is compulsory otherwise the student will be detained and not allowed to appear in university examination.
- Ragging of students or any such kind of activity is strictly prohibited inside the college and hostel premises.
- Smoking, Consumption of Pan Masala / Tobacco or chewing Gum will be a breach of discipline and liable for penalty of ₹. 150/-.
- Students indulging into the activities damaging the college property will be punished severely and may be penalized with a heavy fine.
- For the students staying outside the 25 kms radius of the college it is compulsory to stay in the college hostel.
- For the students staying in college hostel it is compulsory to take food in the hostel mess. (Wherever it is available).
- No programmes can be arranged in the college except those permitted by the Management or University or Government.
- Student staying in hostel must inform to the hostel Superintendent/Rector about the personal vehicle he/she is has.
- Students found copying or carrying unauthorized material, aiding and abetting unfair means in the examination hall will be instantly expelled from the examination hall and will be marked zero in that paper.
- Student must completely obey all the rules and the regulations of the college and management which may be revised during the course.
- The college and hostel fees once paid will never be refunded under any circumstances.
- All legal matters are subject to the jurisdiction of Anand.

Intellectuals at NVPAS

Prof. P.S. Shrivastava

Dean, Faculty of Science,
Centre for Biotechnology,
Jamiya Hamdard, New Delhi

Prof. P.K. Yadav

School of Life Science, JNU,
New Delhi

Prof. Abhijit Sen

Sr. Scientist, IPR, Gandhinagar

Prof. Himanshu Majumdar

Scientist, PRL, Ahmedabad

Mr. Kamlesh Udhani

UPL, Ankleshwar

Mr. Sunilbhai Lalbhai

Atul Chemicals, Atul.

Prof. M.H. Mehta

GSFC, Baroda.

Prof. K.C. Upadhyaya

Ex. V.C., M.S. University, Baroda

Prof. P.C. Vaidya

Ex. V.C., Gujarat University, Ahmedabad

Prof. J.J. Shah

FNA, Ex-Head, Dept. of Biosciences,
Sardar Patel University, V.V. Nagar

Prof. Y.S. Mohan Ram

Ex-Head, Delhi University, Delhi

Shri N. Narsimhan

Group Director, ISRO, Ahmedabad.

Dr. C. Chatterjee

INDEXTB, Gandhinagar

Dr. Milind Antani

ENT, Surgeon, Anand

Dr. Milind Watve

Dept. of Microbiology,
Abasaheb Garware College, Pune

Mr. U.A. Vora

Gujarat Forest Res. Institute, Gandhinagar

Dr. Kalyan Banerjee

UPL, Ankleshwar

Dr. T.V. Raman Rao

Reader, Dept. of Biosciences,
Sardar Patel University, V.V. Nagar

Mr. R.M. Pandya

Divisional Head, ISRO, Ahmedabad

Mr. A.K. Saxena (IFS)

Mission Director,
GSBTM, Gandhinagar

Dr. Amit Ghosh

Director, Indian Institute of Advance
Research, Gandhinagar

Dr. A. K. Singh

Director, ERDA

Dr. R. P. Dubey

Ex Group Director, ISRO

Dr. R. P. Kathariya

Director, Research, AAU, Anand

Dr. P.K. Ghosh

Director, CSMCRI,
Bhavanagar

Dr. N.K. Singh

IARI, New Delhi

Dr. M.V. Rajam

South Campus, Delhi University

Dr. N.S. Shekhawat

JNV University, Jodhpur

Dr. Vinay Kumar

BARC, Mumbai

Dr. Hemant Purohit

NEERI, Nagpur

Dr. Prashant Phale

III Mumbai

Dr. R.S. Verma

III Chennai

Dr. Sanjay Nene

NCL Pune

Dr. P.N. Mukhopadhyay

CEO, Genome Biotechnologies, Pune

Dr. M. Nethaji

IISC, Bangalore

Guruji Shri G. Narayanan

Chairman, Excel Industries

Dr. Omkar Tiwari

SSO, Dept. of Biotechnology, New Delhi

Dr. Anil Kane

Kalpsar Project Committee Member

Govt. of Gujarat

Dr. G. Nareshkumar

Head, Dept. of Biochemistry
M. S. University, Vadodara

Dr. Satyabrata Maiti

Director, DMAPR

Mr. Sandeep Jayn

Under Secretary, UGC

Dr. Narottam Sahu

Senior Scientist - Science City, Gujarat

Industrial Support for Training & Visits

Zydus Cadila Health Care

Zandu Pharmaceuticals

Weith Leaderly Ltd.

Veil Plast Ltd.

Valsad Sugar Factory

Valiabh Pesticides Ltd.

United Phosphours Ltd.

Thermal Power Station

Thermal Power Station

Tata Chemicals Ltd.

Tata Cement Ltd.

Swiss Glasscoats Ltd.

Rasayan Laboratory

Poll-Cent Ltd.

Narayan Organics Ltd.

Mother Dairy

Marigold Paints Ltd.

Lupin Laboratories Ltd.

JK Paper & Pulp Mills

Jay-Kay Paints Ltd.

ISRO

Isagro Asia Agrichem Ltd.

IPCL

Indroda Park

Indian Rayon Industries

Indian Oil Cooperation Ltd.

HIFA Plast

Ahmedabad

Vapi

Atul, Valsad

V.U. Nagar

Valsad

V.U. Nagar.

Mithapur

Ukai

Dhuvaran

Mithapur

Mithapur

V.U. Nagar

Anand

Ankleshwar

Ankleshwar

Baroda

V.U. Nagar

Ankleshwar

Songadh

V.U. Nagar

Ahmedabad

Ankleshwar

Baroda

Gandhinagar

Veraval

Vadodara

V.U. Nagar

Gujarat Pollution Control Board (GPCB)

Gujarat Pollution Control Board

Gujarat Heavy Chemicals Ltd.

GSFC

GNFC

GACL

CPF, IPCL Unit

CIPET

Charotar Cooperative Sugar Factory

Central Pollution Control Board (CPCB)

Cancer Research institute

for Advance studies

Bombay Natural History

and Society (BNHS)

Bhabha Atomic Research Centre

Berger Paints Ltd.

BayerABS Ltd.

Baroda Dairy

Aum Ceramics

Atul Ltd.

Asian Paints Ltd.

Arch-Chern Ltd

Anand Paper & Boards Mill V

Ambuja Cements Ltd.

DMAPR-ILAR

AAU

CFSL

Gandhinagar

Baroda

Veraval

Baroda

Bharuch

Ranoli

Gandhar

Ahmedabad

Palaj

Baroda

Mumbai

Bombay

Mumbai

V.U. Nagar

Nandesari

Baroda

V.U. Nagar

Atul, Valsad

Ankleshwar

V.U. Nagar

asana

Kodinar

Anand

Anand

Gandhinagar



NVPAS FAMILY

Dr. Basudeb Bakshi (M. Sc., Ph.D.)
Principal

BIOSCIENCES GROUP



Dr. Rita N. Kumar
HOD-Envi. Sci. & Biology
M. Sc., Ph.D.



Dr. Akshay Gupte
HOD - Microbiology
M. Sc., Ph. D.



Dr. Madhumati R. Bora
HOD-BT, GT & BNF
M. Sc., Ph.D.



Dr. Yachanakumari Jha
M. Sc., NET, Ph.D.



Dr. Kundankumar Mishra
M. Sc., NET, Ph.D.



Dr. Amit Ballani
M. Sc., NET, Ph.D.



Dr. Urvish D. Chhaya
M. Sc., NET, Ph. D.



Dr. Pratibha Chaurasia
M. Tech., M. Sc. NET, Ph.D.



Dr. Sushmita Sahoo
M. Sc., Ph. D.



Dr. Isha V. Desai
M. Sc., Ph. D.



Dr. Ami H. Patel
M. Sc., M. Phil, Ph. D.



Dr. Anjali Kulkarni
M. V. Sc., NET, Ph. D.



Dr. Usha Verma
M. Sc., M. Ed, Ph. D.



Dr. Simin Umrigar
M. Sc., Ph. D.

CHEMISTRY AND INDUSTRIAL CHEMISTRY GROUP



Dr. Smita Srivastava
HOD-Chemistry
M. Sc., B. Ed., Ph.D.



Dr. Shveta P. Joshi
M. Sc., Ph. D.



Dr. Bhavin V. Patel
M. Sc., Ph.D.



Dr. Ketul N. Patel
M. Sc., Ph.D.



Dr. Archana G. Shah
HOD - IC
M. Sc., Ph. D.

MATHEMATICS GROUP



Mr. Bhailal P. Patel
HOD-Mathematics
M. Sc., M. Phil



Mr. Niraj S. Babariya
M. Sc., NET, M. Phil

ENGLISH GROUP



Mr. Kartik Jagtap
HOD-English
M. A., M. Phil, Ph.D (Conti.)



Mr. Rakesh A. Patel
M. A., B.Ed., M. Phil,
Ph.D (Conti.)

PHYSICAL INSTRUCTOR



Mr. Dharmesh R. Patel
M.P.E., M. Phil



COMPUTER SCIENCE GROUP



Mr. Shreya B. Bhavsar
HOD - Computer Science
M.Sc., MCA, M. Phil., Ph.D. (Conti.)



Dr. Tejash H. Thakkar
BBA, PGDCA, MCA,
Ph. D.



Mr. Mayur M. Patel
B. Sc., MCA,
Ph. D. (Conti.)



Dr. Chetan R. Dudhagara
B. Sc., MCA,
Ph. D.



Dr. Ghanshyam Parmar
BCA, MCA, M.Phil.,
Ph. D. (Conti.)



Dr. Hashmukh B. Patel
B. Sc., MCA,
Ph. D. (Conti.)



Dr. Digvijay Virpura
B. Com., MCA,
Ph. D. (Conti.)

PHYSICAL SCIENCES GROUP



Dr. Himanshu J. Trivedi
HOD - Physics, M. Phil., Ph.D.



Dr. Yogesh A. Patel
M. Sc., Ph. D.



Dr. Mehul Dave
M. Phil., Ph. D.



Dr. Dhananjay Dhruv
M. Sc., Ph. D.

NVPAS

Advisory Committee

The advisory committee of the distinguished persons has been set up to monitor the progress of the college and offer suggestions.

Sr. No.	Name & Position	Designation
1.	Dr. C.L. Patel, Chairman,	Chairman Charutar Vidya Mandal
2.	Shri Mayurbhai N. Patel Member	N .V. Patel Charity Trust, Baroda
3.	Dr. S. G. Patel Member	Hon. Secretary Charutar Vidya Mandal
4.	Dr. Nikhil Zaveri Member	Director General Charutar Vidya Mandal
5.	Shri V. M. Patel Member	Hon.Jt. Secretary Charutar Vidya Mandal
6.	Shri B. P. Patel Member	Hon.Jt. Secretary, Charutar Vidya Mandal
7.	Mr. Mayurbhai Patel Member	Hon.Jt. Secretary, Charutar Vidya Mandal
8.	Dr. Vipul Desai Member	Management Advisor Charutar Vidya Mandal
9.	Director Member	Director SICART
10.	Director Member	Director ISTAR Principal
11.	Principal Member	V.P. & RPTP Science College, V.V. Nagar
12.	Dr. B. B. Choksi Member	Professor Department of Computer Science S. P. University
13.	Dr. Basudeb Bakshi	Principal NVPAS



ACADEMIC PLANNER 2017-18

June 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Activities of the Month

12/06 : Reopening of the College, Principal's Address and Commencement of the Term for BSc, BCA & MSc(CA & IT)
 12/06 : Commencement of Theory classes for FY & TY BSc & All BCA & MSc(CA & IT)
 14/06 : Orientation Programme for SYBSc Students
 15/06 : Counselling for SYBSc Students
 19/06 : Commencement of Theory classes for SYBSc students & Practicals /Tutorials for FY & TY BSc & All BCA & MSc(CA & IT)
HOLIDAYS
 26/04 : Holiday for Ram-jan-Id(Id-Ul-Fitra)

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

July 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Activities of the Month

03/07 : Commencement of Madhyastha Samiti Activities
 06/07 : Inauguration of KSF activities
 13/07 : 'Parampara', Inauguration of Madhyastha Samiti Activities
 20/07 : Inauguration of Gyandhara activities
 24/07 : Commencement of Unit Tests

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

August 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

Activities of the Month

11/08 : Celebration for Independence Day & Janamashtmi
 20/08 : Open House
HOLIDAYS
 07/08 : Holiday for Rakshabandhan
 15/08 : Holiday for Independence Day & Janmashtmi
 17/08 : Holiday for Pateti
 25/08 : Holiday for Samvatsari

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

September 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

Activities of the Month

05/09 : Teachers' Day Celebration
 16/09 : Ratri Before Navratri
 24/09 : NSS Day Celebration
HOLIDAYS
 02/09 : Holiday for Bakri-Id(Eid-Ul-Adha)
 30/09 : Holiday for Dusshera

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

October 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

Activities of the Month

16/10 : Commencement of Diwali Break for BSc, BCA & MSc(CA & IT)
 30/10 : Commencement of University Exam for MSc(CA & IT)
HOLIDAYS
 02/10 : Holiday for Gandhi Jayanti
 19/10 : Holiday for Diwali
 20/10 : Holiday for New Year Day
 21/10 : Holiday for Bhai-Bij
 31/10 : Holiday for Sardar Patel Jayanti

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

November 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

Activities of the Month

06/11 : Commencement of University Exam
Holidays
 04/11 : Holiday for Guru Nanak Jayanti

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

ACADEMIC PLANNER 2017-18

December 2017

Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Activities of the Month

04/12 : Commencement of Second Term Teaching work
 14/12 : Seminar on Energy Conservation
 18/12 : Inauguration of NSS Annual Camp
 28/12 : Sports Day

HOLIDAYS

02/12 : Holiday for Id-e-Milad-Un-Nabi
 25/12 : Holiday for Christmas

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

January 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

Activities of the Month

08/01 : Commencement of Unit Tests for second term

HOLIDAYS

26/01 : Holiday for Republic Day

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

February 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

Activities of the Month

04/02 : Open House
 12/02 : Talent Evening

HOLIDAYS

13/02 : Holiday for Mahashivratri

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

March 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

Activities of the Month

03/03 : Vallabh Vidyanagar Day Celebration

05/03 : Annual Day Celebration

26/03 : Commencement of University Exam for BSc, BCA & MSc(CA & IT)

HOLIDAYS

02/03 : Holiday for Holi

19/03 : Holiday for Chetichand

29/03 : Holiday for Mahavir Jayanti

30/03 : Holiday for Good Friday

All dates for holidays and activities are subject to change as per the directives of University/Management/Government

April 2018

Mon	Tue	Wed	Thu	Fri	Sat	Sun
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

Activities of the Month

23/04 : Commencement of Summer Vacation for BSc & BCA

30/04 : Commencement of Summer Vacation for MSc(CA & IT)

HOLIDAYS

14/04 : Holiday for Dr. Babasaheb Ambedkar Jayanti

18/04 : Holiday for Bhagvan Shree Parshuram Jayanti

25/04 : Holiday for Ramnavmi

All dates for holidays and activities are subject to change as per the directives of University/Management/Government