

Department

of

Mathematics

**Veer Narmad South**

**Gujarat University, Surat**

Prospectus

2026-27

# **\*Profile of the Department\***



## **\*About the Department**

**Est.:1978**

Department of mathematics laid down its foundation jointly with the department of Statistics and later established as a separate PG department in the university campus. Department has taken the leadership to implant PG course in the field of Computer Science.

The department is well equipped with computational facilities and library. Four full time resourceful faculty members are actively engaged in research. Core area of the research are Numerical Analysis, Fluid Dynamics, Megneto-hydrodynamics, Approximation theory, Computational Techniques, Applied Functional Analysis, Number Theory, Combinatorics, Bio Fluid Dynamics and Optimization Techniques. Students of the department actively participates in the various academic and co-curricular activities indicates our scientific excursion.

# MESSAGE FROM HEAD



यथा शिखा मयूराणां , नागानां मणयो यथा ।

तद् वेदांगशास्त्राणां , गणितं मूर्ध्नि वर्तते ॥




*“Like the crests on the heads of peacocks, like the gems on the hoods of the serpents, Astronomy (Mathematics) is at the top of the Vedanga sastras – the auxiliary branches of the Vedic knowledge.”*

This sloka gives the importance of Mathematics among various sciences. Very often it is referred as "Queen of all sciences". At the same time mathematics have applications in all scientific studies. And hence mathematics is also considered as " expounder of all sciences".

The University Department of Mathematics was started in the year 1978. Department has taken the leadership to implement PG courses in the field of Computer Science. The Department is well equipped with computational facilities and library. The resourceful faculty members actively engage in research. The broad areas of specialisation of the faculty are Numerical Analysis, fluid Mechanics, Megneto-hydrodynamics, Approximation Theory, Computational Techniques, Applied Functional Analysis, Number Theory, Bio-Fluid Dynamics, and Optimization Techniques. The students of the department are actively participating in the various academic and co-curricular activities indicates our scientific excursion.

The aim of the department is to pursue excellence in Mathematics through teaching. We are achieving our objectives with the help of significantly experience faculties.

## Profile of the permanent Faculties

Photo	Name	Designation	Specialization	E-Mail
	<b>Dr. Dilip C. Joshi</b> M.Sc., M.Phil., Ph.D.	Professor and Head	Spline Interpolation, Numerical Methods	<a href="mailto:dcjoshi@vnsgu.ac.in">dcjoshi@vnsgu.ac.in</a>
	<b>Dr. Devbhadra V. Shah</b> M.Sc., Ph.D.	Associate Professor	Number Theory, Combinatorics	<a href="mailto:dvshah@vnsgu.ac.in">dvshah@vnsgu.ac.in</a>
	<b>Dr. Priti V. Tandel</b> M.Sc., M.Phil., Ph.D.	Assistant Professor	Fluid Dynamics, Numerical Analysis, Mathematical Modelling	<a href="mailto:pvtandel@vnsgu.ac.in">pvtandel@vnsgu.ac.in</a>

## Course offered:

M.Sc. Mathematics,

M.Sc. Mathematics (Evening)

Ph.D. Mathematics

**CAREER OPPORTUNITY:** Teaching & Research, Banking, ICT and Software company, Data analyst, Research organization

**AFTER M.SC.** - (1) B.Ed. + M.ED. + Ph.D ( School teacher, Education Department)

(2) Ph. D. (Entrance test/NET/GSLET)

(3) GPSC EXAM For recruitment in Diploma Engineering College

(4) Any Science College (B.SC.), BCA College, Degree Engineering College (in all government / self-finance Colleges)

(5) Bank, LIC etc. (Through Competitive Exam)

(6) Any Coaching classes

**ELIGIBILITY:** (SC/ST- 35%, OPEN/SEBC-40%) A candidate who has obtained his/her Bachelor's Degree with Mathematics shall be considered eligible for admission to M.Sc. - Mathematics course.

<b>Duration: 2 years</b> <b>ADMISSION PROCESS :</b> <b>Merit based</b>	Intake	REG.	H.P.	S.F.
	(M.Sc. Mathematics)	63	13	150
	M.Sc. Mathematics (Evening)	-	-	75

<b>Fee Structure *</b>				
	REGULER	HIGHER PAYMENT	SELF FINANCE	EVENING
BOYS	5205	5205+17100 =22305	5205+17100 =22305	5205+17100 =22305
GIRLS	2355	2355+17100 =19455	2355+17100 =19455	2355+17100 =19455

\*Fees may increase in the academic year 2026- 27 and it will be acceptable to all admitted students.

## Cut off

2024-25						
	SEAT	GEN	SEBC	SC	ST	EWS
<b>Uni. Dept.</b>	<b>GIA REG.</b>	<b>50.70</b>	-	-	<b>68.70</b>	-
	<b>GIA-HP</b>	-	-	-	-	-
	<b>SF</b>	-	-	-	-	-
	<b>Evn.</b>	-	-	-	-	-

### ADMISSION PROCESS:

**Application form: Online mode (<https://gcas.gujgov.edu.in>)**

**Admission allotment:** Merit based

(Reservation Policy: SC-7%, ST-15%, SEBC-27%, EWS- 10%)

NCC B/C certificate / NSS merit certificate /

Saptdhara competition (1<sup>st</sup>,2<sup>nd</sup>,3<sup>rd</sup> rank) certificate: 2% will be added in Merit

## **VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**

### **SYLLABUS FOR M.Sc. (MATHEMATICS)**

<b>Sem.-I Theory Paper / Practical</b>	<b>Sem.-II Theory Paper / Practical</b>	<b>Sem.-III Theory Paper / Practical</b>	<b>Sem.-IV Theory Paper / Practical</b>
ADVANCED REAL ANALYSIS	ADVANCED ABSTRACT ALGEBRA	FUNCTIONAL ANALYSIS – I	FUNCTIONAL ANALYSIS - II
ORDINARY DIFFERENTIAL EQUATIONS	COMPLEX ANALYSIS	ADVANCED NUMERICAL ANALYSIS	ADVANCED LINEAR ALGEBRA
TOPOLOGY	PARTIAL DIFFERENTIAL EQUATIONS	CALCULUS OF VARIATION ( NEW )	INTEGRAL EQUATIONS
ADVANCED NUMBER THEORY	ANALYTIC NUMBER THEORY	DIOPHANTINE EQUATIONS	PARTITION THEORY AND CRYPTOGRAPHY
INTEGRAL TRANSFORMS - I	INTEGRAL TRANSFORMS - II	ADVANCED INTEGRAL TRANSFORMS - I	ADVANCED INTEGRAL TRANSFORMS - I
MATHEMATICAL SOFTWARE	MATHEMATICAL MODELLING	FLUID DYNAMICS	COMPUTATIONAL FLUID DYNAMICS
SKILL BASED ELECTIVE PAPER - MATHEMATICS FOR COMPETITIVE EXAM	SKILL BASED ELECTIVE PAPER - MATHEMATICS FOR COMPETITIVE EXAM	SKILL BASED ELECTIVE PAPER : BASICS OF DATA SCIENCE	SKILL BASED ELECTIVE PAPER : BASICS OF DATA SCIENCE
SKILL BASED ELECTIVE PAPER - VEDIC MATHEMATICS	SKILL BASED ELECTIVE PAPER - VEDIC MATHEMATICS	SKILL BASED ELECTIVE PAPER : BASIS OF FINANCIAL MATHEMATICS	SKILL BASED ELECTIVE PAPER - BASICS OF FINANCIAL MATHEMATICS
PRACTICAL	PRACTICAL	PRACTICAL	PRACTICAL

## Infrastructure of the Department

Classrooms	08
Laboratory	02
Library	01
Hall	01
Girls room	02

### Library



# Classrooms



## Laboratory- 1



Computer Laboratory equipped with more than 30 Computers along with LAN and internet facility, smart board, PA system, Audio visual components are the inherent components of the laboratory.

## Laboratory- 2



Computer Laboratory equipped with more than 30 Computers along with LAN and internet facility, e-books, digital materials are also available in this laboratory.

## **Cultural activity / Competition achievement**

- **Teacher's day celebration**
- **Gurupurnima celebration**
- **Tree plantation day celebration**
- **PPT presentation competition**
- **Project competition**
- **Essay competition**
- **Elocution competition**
- **Debate competition**
- **Quiz competition**
- **Mehandi competition**
- **Rangoli competition**
- **Painting competition**
- **Poster making competition**
- **Slogan writing competition**
- **Participation in University Youth Festival events:**
  - **Classical Dance**
  - **Light Vocal Music**
  - **Handicraft**
  - **Drama**
  - **Garba**
  - **Kala Yatra**
  - **Poetry Recitation**
  - **Drawing**
  - **Mono Acting**









## **Conferences / Workshops / STTP organized by the Department in last 5 years**

- 1. Workshop on 'Basic Excel for Data Science' (Oct. 4 – 22, 2024)**
- 2. National Workshop on 'Problem solving in Mathematics' (Mar. 5 – 7, 2024)**
- 3. 10<sup>th</sup> International Conference and 26<sup>th</sup> Annual Conference of Gwalior Academy of Mathematical Sciences on "Mathematical Modelling, Simulation and Computational Methods" (Dec. 11 – 13, 2023)**
- 4. STTP on "Scientific Computing using Python" (June 12 – 16, 2023)**
- 5. 4<sup>th</sup> Prof. P. C. Vaidya International Conference in Mathematical Sciences (Mar. 4 - 5, 2023)**
- 6. State Level Mathematical Problem-Solving Workshop on 'NET-SLET Examination' (Mar. 5 – 6, 2022)**
- 7. Virtual International Conference on Emerging Trends in Applied Sciences (Oct. 28 – 29, 2021)**
- 8. National webinar on 'The Life and Legacy of Srinivasa Ramanujan' (Dec. 22, 2020)**
- 9. Invited talks by the eminent speakers of national / international repute are regularly organized.**

## **Other celebrations by the Department**

- 1. National Mathematics Day is celebrated on every 22<sup>nd</sup> December.**
- 2. Yoga day is celebrated on every 21<sup>st</sup> June.**
- 3. Cyber Security / Cyber-crime Awareness lectures are organized.**
- 4. Alumni meets are organized.**
- 5. Freshers' party and Annual functions are organized.**
- 6. Various festivals are celebrated by the students.**

## **Facility and benefit given by Govt./Dept.**

- 1. Scholarship benefit given by the Government to SC/ST/SEBC and OBC students by Digital Gujarat platform.**
- 2. National scholarship available for Minority students.**
- 3. Free ship card facility given by Government to SC/ST students.**
- 4. Single girl child scholarship given by government.**
- 5. Hostel facility available in the University campus. (Subject to availability of rooms)**
- 6. Bus/Railway concession given by the Department.**
- 7. Other benefit given by University and Government.**
- 8. Students are encouraged to participate and are sponsored for lectures delivered during the conferences.**
- 9. Students are encouraged to participate in various national level 'Mathematics Training and Talent Search Programme' (MTTS).**
- 10. Department encourage students to participate in various National / State level Competitions**