Department of Mathematics

Veer Narmad South Gujarat University

Prospectus

2024-25

Profile of the Department

*About 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. The 3 full time resourceful faculty members actively engage in research. Core area of the research are Numerical Analysis, Fluid Dynamics, Megneto-hydrodynamics, Approximation theory, Computational Techniques, Applied Functional Analysis, Number Theory, Bio Fluid Dynamics and Optimization Techniques. The students of the department are actively participates in the various academic and co-curricular activity indicates our scientific excursion.

MESSAGE FROM HEAD

Dr. Dilip C. Joshi

yatha sikhA mayoorAnAm nagAnAm manayo yathA I
tadved vedAnga sAstrAnAm jyotisam (ganitam) moordhani sthitam II

"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 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 participates 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	Contact
	Dr. Dilip C. Joshi M.Sc., M.Phil., Ph.D	Professor and Head	Spline Interpolation, Numerical Methods	dcjoshi@vnsgu.ac.in
	Dr. Devbhadra V. Shah M.Sc., Ph.D.	Associate Professor	Number Theory	dvshah@vnsgu.ac.in
	Dr. Priti V Tandel M.Sc., M.Phil., Ph.D.	Assistant Professor	Fluid Dynamics, Numerical Analysis, Mathematical Modelling	pvtandel@vnsgu.ac.in
	Dr. Kaushal B. Patel M.Sc., M.Phil., Ph.D	Associate Professor (S.F.)	Mathematical Modelling & Simulation	kbpatel@vnsgu.ac.in

Course offered:
M.Sc. Mathematics,
M.Sc. Mathematics (Evening)

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

AFTER MSC- (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 college)

(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.

Duration : 2 years ADMISSION PROCESS : Merit based	Intake	REG.	H.P.	S.F.
	(M.Sc. Mathematics)	63	13	150
	M.Sc. Mathematics) (Evening)	-	-	6

Fee Structure *			
	REGULER	HIGHER PAYMENT	SELF FINANCE
BOYS	4435	4435+15000 =19435	4435+15000 =19435
GIRLS	1935	1935+15000 =16935	1935+15000 =16935

*Subject to change

Cut off

2023-24						
	SEAT	GEN	SEBC	SC	ST	EWS
Uni. Dept.	GIA	84.7	71.1	-	70	70.5
	GIA-HP	75.5	51.8	-	50.9	53.7
	SF	-	-	-	-	-

ADMISSION PROCESS :

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

Admission allotment : Merit based

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

NCC – B/C certificate / NSS- merit certificate/Saptdhara competition (1st,2nd,3rd rank) certificate – 2% will be added in Merit

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
SYLLABUS FOR M.Sc. (MATHEMATICS)
Effective from June 2022

Sem.-I Theory Paper/Practical	Sem.-II Theory Paper /Practical	Sem.-III Theory Paper/Practical	Sem.-IV Theory Paper/Practical
ADVANCED REAL ANALYSIS	ADVANCED ABSTRACT ALGEBRA	FUNCTIONAL ANALYSIS – I	FUNCTIONAL ANALYSIS - II
ORDINARY DIFFERENTIAL EQUATIONS	COMPLEX ANALYSIS	CALCULUS OF VARIATION (NEW)	ADVANCED LINEAR ALGEBRA
TOPOLOGY	PARTIAL DIFFERENTIAL EQUATIONS	DIOPHANTINE EQUATIONS	DIFFERENTIAL GEOMETRY
ADVANCED NUMBER THEORY	SPECIAL FUNCTIONS - II	FLUID DYNAMICS	INTEGRAL EQUATIONS
SPECIAL FUNCTIONS - I	INTEGRAL TRANSFORMS - II -	ADVANCED OPERATIONS RESEARCH -	ADVANCED INTEGRAL TRANSFORMS - I
INTEGRAL TRANSFORMS - I	MATHEMATICAL MODELLING	ADVANCED SPECIAL FUNCTIONS - I -	ADVANCED SPECIAL FUNCTIONS - II
LINEAR PROGRAMMING	ANALYTIC NUMBER THEORY	ADVANCED INTEGRAL TRANSFORMS - I	COMPUTATIONAL FLUID DYNAMICS
MATHEMATICAL SOFTWARE	SKILL BASED ELECTIVE PAPER - MATHEMATICS FOR COMPETITIVE EXAM	SKILL BASED ELECTIVE PAPER : BASICS OF DATA SCIENCE	NONLINEAR PROGRAMING
SKILL BASED ELECTIVE PAPER - MATHEMATICS FOR COMPETITIVE EXAM	SKILL BASED ELECTIVE PAPER - VEDIC MATHEMATICS	SKILL BASED ELECTIVE PAPER : BASIS OF FINANCIAL MATHEMATICS	PARTITION THEORY AND CRYPTOGRAPHY
SKILL BASED ELECTIVE PAPER - VEDIC MATHEMATICS			SKILL BASED ELECTIVE PAPER - ALGORITHMIC 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	01

Library

Classroom

GIRLS ROOM

Laboratory- 1

Computer Laboratory equip 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 equip 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
- Mehandi competition
- Rangoli competition
- Painting competition
- Photography competition
- Essay competition
- Quize competition
- Participation in classical dance in youth festival
- Participation in light vocal music in youth festival
- Participation in handicraft in youth festival
- Participation in drama in youth festival
- Participation in garba in youth festival
- Participation in kala yatra in youth festival

Day celebration by Dept.

1. Ramanujan Birth anniversary celebration by Dept. on every 22nd December.

2. Yoga day celebration by dept. on every 21st June.

3. **National Mathematics day celebration.**

Facility and benefit given by Govt./Dept.

1. Scholarship benefit given by Govt. to SC/ST/SEBC and OBC students by Digital Gujarat platform.

2. National scholarship available for Minority students.

3. Freeship card facility given by Govt. to SC/ST students

4. Single girl child scholarship given by govt.

5. Hostel facility available in Uni. campus.

6. Bus/Railway concession given by dept.

7. Other benefit given by Uni. and Government.