



Human Resource Development Centre
(UGC SPONSORED PROGRAMME)
GUJARAT UNIVERSITY
AHMEDABAD - 9



Gujarat University

One week Mathematics Workshop on

“Geometrical Interpretation of Mathematical Concepts”

(20th March 2017 to 25th March 2017)

Sponsored by Rashtriya Uchchar Shiksha Abhiyan

Registration

<https://goo.gl/forms/bN6KrOuiF2v85Im92>

INTRODUCTION:

Human Resource Development Centre of Gujarat University in association with DASS Scientific Research Labs Private Limited (DASS SRL) is going to organize a week long Mathematics Workshop on “Geometrical Interpretation of Mathematical Concepts”, specially to focus on a new system of mathematics Teaching and Demonstration. This is a short-term course (STC) sponsored by Rashtriya Uchchar Shiksha Abhiyan (RUSA).

THEME OF THE MATHEMATICS WORKSHOP: MATH BOLIYE

The idea behind the mathematics workshop is to inculcate a culture of speaking about mathematics in common parlance. India has enormous contribution towards the advancements of Science, Technology, Engineering and Mathematics. The innovative thought of promoting mathematics through mass communication will add another dimension to the advancement of modern civilization.

(गणित के बारे में आम भाषा बोलने के एक संस्कृति पैदा करने के लिए गणित कार्यशाला के पीछे विचार है। भारत में विज्ञान, प्रौद्योगिकी, इंजीनियरिंग, और गणित की प्रगति की ओर भारी योगदान है। जन संचार के माध्यम से गणित को बढ़ावा देने का अभिनव विचार आधुनिक सभ्यता के विकास के लिए एक और आयाम जोड़ देगा।)

ABOUT THE WORKSHOP:

Teaching advanced mathematical concepts to the students remained a challenge for centuries. It has become more challenging in the twenty-first century due to rapid advancement of technologies. With the rapid advancement of technologies, mathematics and related subjects are developing at an accelerated rate. Day by day new topics are being added and the old topics are getting substantial facelift. But the teaching methodology of these subjects remained stagnant for years. This is creating a huge gap between the required skill and the actual skill of students. Majority of the students struggling to keep pace with the new developments. Time has come to introduce proper technology to teach, learn, understand advanced mathematical concepts. In this workshop, an attempt will be made to explore different technologies available for solving mathematical problems and understanding advanced mathematical concepts required for higher studies.

This workshop is meant to help participants and professionals to model and visualize few important mathematical concepts, so that they can correlate these into any other form and develop a quick understanding of a problem and instantly find a method for its solution logically. The workshop provides few tricks that will help to analyze a problem without any complexity.

This is a mathematics Workshop and participants are required to bring their own Laptops.

ABOUT HUMAN RESOURCE DEVELOPMENT CENTRE

Human Resource Development Centre was established in 1987 as Academic Staff College but It was renamed as Human Resource Development Centre in the year 2015. It is established as a crucial link between teacher motivation and the quality of education. Human Resource Development Centre has been working for excellence in higher education since 1987. It helps the College and University teachers in developing their skills. It organizes specially designed orientation programmes for all new entrants at the level of lecturers. It also organizes such programmes (orientation or refresher courses) for serving teachers to cover every teacher at least once in three to five years. It tries to encourage teachers to participate in seminars, symposia, workshops, Short Term Courses, etc.

ABOUT GUJARAT UNIVERSITY

Gujarat University is one of the largest and oldest universities of the state of Gujarat. It was established in 1949 under the Gujarat University Act. The idea of setting up the university conceived in 1940s and the seed of inceptions was laid down by Shri Sardar Vallabhbhai Patel under the chairmanship of Mr. G. B. Mavlankar in consultation with Mr. Kasaturbhai Lalbhai and Acharya Anand Shankar Dhruv. Gujarat University is

affiliating university, having more than 350 affiliated colleges, 35 post graduate departments and more than 50 affiliated post graduate centres with diversified courses in faculties of Arts, Commerce, Science, Education, Law, Medical, Dental, etc. The university spans over eight districts like Ahmedabad, Gandhinagar, Kheda, Anand, Vadodara, Panchmahal, Dahod, Mahisagar and two union territories. Therefore, it covers a significant geographical area of the state and provides expressions to the educational aspiration of about 2 Crore Urban, Rural and Tribal communities of the region. Starting with the only university in the region during the erstwhile Bombay Province, at present almost all 10 universities of the state have evolved from Gujarat University.

SESSION BREAKUP:

Day 1 (March 20th, 2017 Monday)

11:00 a.m. - 11:30 a.m. Inauguration
11:30 a.m. - 11:45 a.m. Tea/Coffee Break
11:45 a.m. - 01:15 p.m. Brainstorm: Math is Not Hard
01:15 p.m. - 02:30 p.m. Lunch Break
02:30 p.m. - 03:45 p.m. Evolution of Mathematics
03:45 p.m. - 04:00 p.m. Tea/Coffee Break
04:00 p.m. - 05:15 p.m. Characteristics of curves and Exploring Dynamic World

Day 2 (March 21st, 2017 Tuesday)

11:00 a.m. - 12:15 p.m. Drawing Points, Lines, circles
12:15 p.m. - 12:30 p.m. Tea/Coffee Break
12:30 p.m. - 01:45 p.m. Three Dimensional Transformations
01:45 p.m. - 02:30 p.m. Lunch Break
02:30 p.m. - 03:45 p.m. Homogeneous Coordinate System
03:45 p.m. - 04:00 p.m. Tea/Coffee Break
04:00 p.m. - 05:15 p.m. Drawing Cubes, Surfaces and Animation

Day 3 (March 22nd, 2017 Wednesday)

11:00 a.m. - 12:15 p.m. Geometry revisited with a new perspective
12:15 p.m. - 12:30 p.m. Tea/Coffee Break
12:30 p.m. - 01:45 p.m. Trigonometry revisited with a new perspective
01:45 p.m. - 02:30 p.m. Lunch Break
02:30 p.m. - 03:45 p.m. Mathematics - Past Present Future
03:45 p.m. - 04:00 p.m. Tea/Coffee Break
04:00 p.m. - 05:15 p.m. Vedic Mathematics

Day 4 (March 23rd, 2017 Thursday)

11:00 a.m. – 12:15 p.m. Technologies – MATLAB, MUPAD, LOGO, EXCEL

12:15 p.m. – 12:30 p.m. Tea/Coffee Break

12:30 p.m. – 01:45 p.m. Linear Algebra

01:45 p.m. – 02:30 p.m. Lunch Break

02:30 p.m. - 03:45 p.m. Fractals

03:45 p.m. – 04:00 p.m. Tea/Coffee Break

04:00 p.m. - 05:15 p.m. Series

Day 5 (March 24th, 2017 Friday)

11:00 a.m. – 12:15 p.m. Limit and continuity

12:15 p.m. – 12:30 p.m. Tea/Coffee Break

12:30 p.m. – 01:45 p.m. Calculus of One Variable

01:45 p.m. – 02:30 p.m. Lunch Break

02:30 p.m. - 03:45 p.m. Integration

03:45 p.m. – 04:00 p.m. Tea/Coffee Break

04:00 p.m. - 05:15 p.m. Function of two variables

Day 6 (March 25th, 2017 Saturday)

11:00 a.m. – 12:15 p.m. Victory over Vectors

12:15 p.m. – 12:30 p.m. Tea/Coffee Break

12:30 p.m. – 01:45 p.m. Vector Functions

01:45 p.m. – 02:30 p.m. Lunch Break

02:30 p.m. - 03:45 p.m. Simplifying Complex Algebra

03:45 p.m. – 04:00 p.m. Tea/Coffee Break

04:00 p.m. - 05:15 p.m. Complex Functions

ABOUT THE SPEAKER: MR. CHANCHAL DASS, FIE

- A fellow of Institution of Engineers (Mechanical Engineering) with Post Graduate Diploma in “Operations Research” and Master of Business Administration in Financial Management
- Worked in a position of Development Strategy Executive in ONGC as Reservoir Engineer.
- Inventor of Multiple Zone Well Completion Technology and Electronic Contract Bridge Gaming App and New system for Mathematics Teaching and Demonstration.
- Life Member of Indian Mathematical Society, American Mathematical Society, Society of Petroleum Engineers (SPE) and Society of Petroleum Geophysicists (SPG), Fellow of the Institution of Engineers.
- Published and presented numerous papers and attended various National and International Conferences, forums and Seminars.
- Chairman, Dass Scientific Research Labs PL and Dass Oilfield Technologies PL
- Recipient of World Oil Award, SPE Regional Service Award, SPE President Award, ONGC Director/ Regional Director’s Award , IIGP finalist, NASSCOM, CII, PALF, GIS, ICEBE Best Paper Award and many more
- Countries visited: USA(2), France(2), Netherland, Belgium, Germany, Cairo, China (3), Luxembourg, Switzerland, Qatar, Dubai(2), Abu Dhabi, Sharjah, Malaysia (4), Thailand(2), Singapore, Georgia, UK, Azerbaijan.
- Contact-email: cdass01@gmail.com and Mobile - 9427030155

WORKSHOP SCHEDULE:

Dates:- 20th March 2017 to 25th March 2017 (6 days)

Timings: - From morning 11:00 am to 5:15 pm followed by lunch and high tea breaks.

PARTICIPANT’S ELIGIBILITY

1. Academic Faculties (including permanent/ adhoc / visiting / contractual / tenure based) working in any colleges, universities, academic institutions etc. are eligible for the STC.
2. Academic Faculties from all disciplines are eligible to join the STC
3. This is RUSA sponsored STC.
4. Participants need to pay Rs 1000/- as registration fee.
5. Participants will be paid TA & DA as per UGC norms

6. Each participant will get a certificate of participation from UGC HRDC, Gujarat University.

HOW TO REGISTER?

Send Registration form by online submission using below mentioned link on or before March 17th, 2017. To fill it out, visit: <https://goo.gl/forms/bN6KrOuiF2v85Im92>. One should complete the attached PDF form also duly signed and counter signed by Principal/ HODs.

PLEASE NOTE

Seats are limited for 30 participants only on first come first serve basis and laptops are mandatory to bring.

CERTIFICATE DISTRIBUTION

All participants of the six day workshop on will be awarded certificate of participation from UGC HRDC, Gujarat University

VENUE

Gujarat University

Room No-44, Human Resource Development Center, Gujarat University, Navrangpura, Ahmedabad – 380 009, Gujarat, India.

COORDINATOR

Mr Chanchal Dass, FIE,
Email-cdass01@gmail.com
Mobile-9427030155

PROF. JAGDISH S JOSHI, PH D

Director (Offtg)
Human Resources Development Centre



UGC – Human Resource Development Centre
Gujarat University, Ahmedabad – 380 009

**Application Form for RUSA Sponsored STC on
Application of Technology in Teaching Mathematics
(20-03-2017 to 25-03-2017)**

Pass – Port
size
Photograph to
be pasted here

- Name (start with surname): _____
- Designation : _____
- Subject : _____ Faculty _____
- Complete Address of the _____
College/University : _____
- Telephone No. with STD Code: _____
- University to which the college is affiliated : _____
- Residential : _____
Address _____

- Telephone No. (STD Code): _____
- Mobile No. : _____
- Email ID : _____
- Birth Date : _____ : Age _____ Years
- Sex : Male/Female
- Whether SC / ST / OBC / OPEN : _____

- **Whether Belong to minority** : Yes/No
- **Do you Need Accommodation? : Yes / No**
- **Enclosed DD No. _____ Dated _____ of Rs. 1000/- in favour of
“Director, HRDC, Gujarat University, Ahmedabad.”**
- **My Bank Details As Under for TA – DA Amount:**
- **Bank Name:** _____ **Bank Branch Name:** _____
A/c No.: _____ **IFSC Code:** _____
- **Whether your Institute is recognized ___ /unrecognized___ under 2(F) by UGC.**
- **Whether your Institute is covered ___ / uncovered __ under 12(B) by UGC.**
- **The particulars given above are correct and I accept full responsibility for the same.**

Date:

Signature

Signature with Stamp of the

Principal/HOD

1. Academic faculties (including permanent / adhoc / visiting / contractual / tenure based) working in college, university, academic institutes etc is eligible for the STC
2. This is RUSA sponsored STC
3. You need to pay Rs 1000/- as registration fees
4. You will be paid TA & DA as per UGC norms
5. Each participant will get a certification of participation from UGC HRDC, Gujarat University.