



**JNAN VIKAS MANDAL'S**

**Mohanlal Raichand Mehta College of Commerce  
Diwali Maa Degree College of Science  
Amritlal Raichand Mehta Degree College of Arts  
Padmashree (Dr.) R.T. Doshi Degree College of Computer Science  
Plot No.9, Sector -19, Airoli, Navi Mumbai  
NAAC Re-Accredited CGPA-3.33 'A'-Grade**

Date: 18<sup>th</sup> June, 2022

**NOTICE**

All departmental members are hereby informed that the department meeting is arranged on 18<sup>th</sup> June, 2022 at 11:30 a.m. at M.Sc IT Lab.

**Agenda**

1. Conduction of Certificate course of Msc-IT Part-2 students.
2. Exam conduction of certificate course.

*B881*

Mrs. Sunitha Joshi  
In-charge M.Sc.I.T.

*JK*

Mrs. Janhavi Kshirsagar  
CS-IT Coordinator

*Leena*

Dr.(Mrs.) Leena Sarkar  
Principal

**PRINCIPAL**  
JNAN VIKAS MANDAL'S  
M.R. MEHTA COLLEGE OF COMMERCE  
D.M. COLLEGE OF SCIENCE  
A.R. MEHTA COLLEGE OF ARTS  
Dr. R.T. DOSHI COLLEGE OF COMPUTER SCIENCE  
Plot No.9, SEC. - 19, AIROLI,  
NAVI MUMBAI-400 708





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**Minutes of Meeting**

The online departmental meeting was held on 18<sup>th</sup> June, 2022 at 11:30 a.m in M.Sc IT Lab.

Following matters were discussed and finalized as per agenda.

• **Conduction of Certificate Course of M.Sc. (IT) Part-2 students.**

- ❖ It was decided that the Bridge Course should be conducted from 20<sup>th</sup> June, 2022 to 25<sup>th</sup> June, 2022. Total 4 subjects are included in the Certificate Course. And it was decided that it should be 30 hrs.
- ❖ Syllabus compilation preparation of time table for certificate course is assigned to Asst. Prof. Sharayu Kadam in a Msc-IT department.

• **Exam conduction of Certificate Course**

- ❖ After completion of lectures of Certificate course on 25<sup>th</sup> June, 2022 exam will be conducted for students.
- ❖ Asst. Prof. Mustufa Nullwala will conduct exams for Msc-IT Part-2 students.
- ❖ It will be conducted on google form and the exam will be conducted at 1 pm.
- ❖ And finally the marksheet will be shared to the certificate committee for distribution of certificates.

**Adjournment**

Meeting was adjourned at 7:00 pm.

**Following members were present:**

1. Dr.(Mrs.) Leena Sarkar (Principal)
2. Mrs. Janhavi Kshirsagar
3. Dr. Sunitha Joshi
4. Mr. Ashish Chavan
5. Mr. Mustufa Nullwala
6. Mrs. Sharayu Kadam

Signature  
Leena  
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B881  
Mrs. Sunitha Joshi  
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**JVM'S Mehta Degree College**

**Certificate Course Syllabus for Academic Year 2022-23**

**Class : M.Sc.I.T.-Part 2**

**Duration : 30 sessions**

**Course Objectives:**

- To learn background of VR including a brief history of VR, different forms of VR and related technologies, and broad overview of some of the most important concepts
- To provide background in perception to educate VR creators on concepts and theories of how we perceive and interact with the world around us

**Course Outcome:**

- Understanding the devices used for VR and AR.
- Apply the concepts of VR and AR in real life.

Sr No	Topics	Lectures
1	<b>Module 1: Virtual Reality-</b> Introduction of Virtual Reality: Fundamental Concept and Components of Virtual Reality. Primary Features and Present Development on Virtual Reality. Unit 2: Multiple Models of Input and Output Interface in Virtual Reality: Input -- Tracker, Sensor, Digitalglobe, Movement Capture, Video-based Input, 3D Menus & 3DScanner etc. Output -- Visual /Auditory / Haptic Devices.	07
2	<b>Module 2: Augmented Reality</b>	07



	<p>What is Augmented Reality? Introduction, A Brief History of Augmented Reality, how does the AR technology work? features of augmented reality, Applications and Threats.</p> <p>Challenges with Augmented Reality, difference between AR and VR, AR systems and functionality, Augmented reality methods, visualization techniques for augmented reality.</p>	
3	<p><b>Module 3:</b>  <b>What is mixed reality?</b> Difference between VR, AR and MR, What is a hologram? Benefits and uses of mixed reality for business. How do mixed reality devices work? Classification based on Display Environments for MR, Display Technologies that are used for Mixed Reality Display, Best headsets for business, Trackers used to define the Mixed Reality scene, Techniques used for Processing Scenes and Representation, MR Technical Challenges and Trend, The future of mixed reality.</p>	08
4	<p><b>Module 4: What is extended reality (XR)?</b> How Extended Reality Works?, Pillars of Extended Reality, Challenges of XR, XR vs AR, XR vs MR, Xr vs VR, Applications for Extended Reality, Current Limitations of XR, The Future of XR</p>	08

Module 1: Asst. Prof. Archana Sanap

Module 2: Asst. Prof. Janhavi Kshirsagar

Module 3 & 4: Asst. Prof. Mustufa Nullwala

*BSS*

Mrs. Sunitha Joshi  
In-charge M.Sc.I.T.

*JKV*

Mrs. Janhavi Kshirsagar  
CS-IT Coordinator

*Leena*

Dr.(Mrs.) Leena Sarkar  
Principal



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Time	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
8:30 – 9:15	MN	AS	AS	MN	AS	JK
9:15 – 10:00	JK	JK	MN	AS	MN	MN
10:00 – 10:45	MN	AS	MN	MN	JK	AS
11:00-11:45	AS	MN	JK	JK	MN	JK
11:45-12:30	MN	MN	MN	AS	JK	MN


Mrs. Janhavi Kshirsagar(JK)

Mrs. Archana Sanap(AS)

Mr. Mustufa Nullwala(MN)

  
Mrs. Sunitha Joshi  
In-charge M.Sc.I.T.

  
Mrs. Janhavi Kshirsagar  
CS-IT Coordinator

  
Dr.(Mrs.) Leena Sarkar  
Principal

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Flyer



**JNAN VIKAS MANDAL'S DEGREE COLLEGE**  
Plot No. 9, Sector -19, Airoli, Navi Mumbai 400 708  
NAAC Re-accredited "A" Grade (CGPA-3.33)

Department of M.Sc . Information Technology  
Organizes  
Certificate Course  
Topic: Reality Track in IT

Course Mentors:  
Asst.Prof. Mustufa Nullwala  
Asst.Prof. Janhavi Kshirsagar  
Asst.Prof. Archana Sanap

Course Duration:30 Hrs  
Course Commencement: 20th JUNE 2022 – 25th JUNE 2022

Dr. Sunitha Joshi  
M.Sc.IT Coordinator

Asst.Prof. Janhavi Kshirsagar  
CS-IT Coordinator

Dr. (Mrs.) Leena Sarkar  
Principal, JVM



**JNAN VIKAS MANDAL'S DEGREE COLLEGE**  
**NAAC RE-ACCREDITED 'A' GRADE (CGPA-3.33)**  
Plot No. 9, Sector - 19, Airoli  
Navi Mumbai, Maharashtra - 400 708

## CERTIFICATE

*This certificate is awarded to*

<< NAME >>

*who has successfully completed Online Certificate Course on "REALITY TRACK IN IT"  
organized by Department of M.Sc.(Information Technology) of JVM's Degree College  
between 20<sup>th</sup> June– 25<sup>th</sup> June 2022.*

Dr. Sunitha Joshi  
Coordinator M.Sc.IT

Asst.Prof. Janhavi Kshirsagar  
Coordinator CS-IT

Dr. (Mrs.) Leena Sarkar  
Principal JVM

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### Certificate Course Report for M.Sc. I.T. Part 2 Semester III


The department of M.Sc. I.T. of J.V.M's Degree College conducted a certificate course for M.Sc. I.T. Part 2 Semester III students in the academic year 2022-2023 from 20<sup>th</sup> June 2022 to 25<sup>th</sup> June 2022. The course was designed To provide background in perception to educate VR creators on concepts and theories of how we perceive and interact with the world around us. Following topics were included in Certificate Course syllabus:

- Augmented Reality
- Virtual Reality
- Mixed Reality

The course was spread over a period of 06 days with four lectures daily. The faculty shared all the relevant study material on Google Classroom with students. At the end of the course, a post certificate course test was conducted after the completion of the certificate course to assess the ability of students, after clearing the test students were awarded the certificate of completion.

  
Mrs. Sunitha Joshi  
In-charge M.Sc.I.T.

  
Mrs. Janhavi Kshirsagar  
CS-IT Coordinator

  
Dr.(Mrs.) Leena Sarkar  
Principal



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**Plot No. 9, Sector - 19, Airoli**  
**Navli Mumbai, Maharashtra - 400 708**

## CERTIFICATE

*This certificate is awarded to*

*Snehal Namdeo Warude*

*who has successfully completed Online Certificate Course on "REALITY TRACK IN IT" organized by Department of M.Sc.(Information Technology) of JVM's Degree College between 20<sup>th</sup> June- 25<sup>th</sup> June 2022.*

Dr. Sunitha Joshi  
Coordinator M.Sc.IT

Asst. Prof. Janhavi Kshirsagar  
Coordinator CS-IT

Dr. (Mrs.) Leena Sarkar  
Principal JVM



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**Plot No. 9, Sector - 19, Airoli**  
**Navli Mumbai, Maharashtra - 400 708**

## CERTIFICATE

*This certificate is awarded to*

*Omkar Dilip Dhumal*

*who has successfully completed Online Certificate Course on "REALITY TRACK IN IT" organized by Department of M.Sc.(Information Technology) of JVM's Degree College between 20<sup>th</sup> June- 25<sup>th</sup> June 2022.*

Dr. Sunitha Joshi  
Coordinator M.Sc.IT

Asst. Prof. Janhavi Kshirsagar  
Coordinator CS-IT

Dr. (Mrs.) Leena Sarkar  
Principal JVM

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