



All Saints College  
TRIVANDRUM

# GEOGEBRA

MAT.C.23.1



संस्कृत शिक्षण संस्थान मुंबई  
संस्कृत शिक्षण संस्थान  
Indian Institute of Technology Bombay  
Powai, Mumbai 400 076, India

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IIT Bombay

## CERTIFICATE OF SPOKEN TUTORIAL (ST) TRAINING

Ref. No. STIITB 2024/4420

21<sup>st</sup> August 2024

To,  
**The Principal,**  
All Saints' College,  
Thiruvananthapuram, Kerala-695007.

We are delighted to provide your Institute with the Letter of Certification depicting the Training you undertook for students. **All Saints' College, Thiruvananthapuram, Kerala** engaged many learners right in taking the - ST-IIT Bombay courses and acquiring powerful IT knowledge. This is under the partnership agreement between All Saints' College and ST (Spoken Tutorial) Program- IIT Bombay- powered by the National Mission on Education through ICT, MoE, Govt. of India.

The Student Development Program (SDP) on **GeoGebra 5.04** was appreciated by the students of your Institute. The training was done between 15<sup>th</sup> July 2023 & 14<sup>th</sup> August 2023 and covered 18 students and faculties. Again, in deep acknowledgement of your stellar efforts, we wish to collaborate many more times in this manner with you.

Details of Participants enrolled in the Software Training Workshops under Spoken Tutorial, IIT Bombay:

Sr. No.	Name	Sr. No.	Name
1	Athira.M.A	10	Sania Ben Rose
2	Neha.G.R	11	Arathi S
3	Riya Ronald	12	Raneesha A
4	Sreya SR	13	Riswana A
5	Vivani Aris	14	Nancy B
6	Athira S. R	15	Farsana S
7	Mary Cross . S	16	Rooby U
8	Balameenakshi S R	17	Fathima J
9	Lekshmi R	18	Arathi. R.S

For and On behalf of  
**Spoken Tutorials,**  
**Indian Institute of Technology, Bombay**



*Akanksha Saini*  
**Mrs. Akanksha Saini**  
**National Coordinator**  
**Spoken Tutorial Project, IIT Bombay**



*Rashmi*  
**PRINCIPAL**  
**All Saint's College**  
**Thiruvananthapuram**



भारतीय प्रौद्योगिकी संस्थान मुंबई  
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Indian Institute of Technology Bombay  
Powai, Mumbai-400 076, India

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Website: www.iitb.ac.in

IIT Bombay

### Letter of Appreciation

Ref. No. STHTB 2024/4417

21<sup>st</sup> August 2024

To,  
**Mrs. Sebina Mathew C**  
Assistant Professor,  
Mathematics Department,  
All Saints' College,  
Thiruvananthapuram-, Kerala-695007.

This is to express thanks and appreciation to **Mrs. Sebina Mathew C.** for spreading awareness and holding the following 1-month SDP, organised by **All Saints' College, Thiruvananthapuram, Kerala,** in collaboration with **Spoken Tutorial, IIT Bombay.**

#### Student Development Program:

**"GeoGebra 5.04"** from 15<sup>th</sup> July 2023 to 14<sup>th</sup> August 2023, attended by 18 students

You are making an outstanding contribution to using ICT-based teaching and learning methodology for your faculty members and students. Your contributions to the implementation of the Spoken Tutorial Project are significant and have played a part in it becoming the fastest-growing NMEICT Project. Your excellent skills and courteous personality have helped tremendously in spreading awareness of Spoken Tutorial IIT Bombay.

I would like to personally thank you for contributing to the software training and awareness events in your Institute. I am sure that we will continue to get your continued support for making India IT literate and spreading project existence in the state of Kerala.

For and On behalf of  
**Spoken Tutorials,**  
**Indian Institute of Technology, Bombay**



*Akanksha Saini*

**Mrs. Akanksha Saini**  
National Coordinator  
Spoken Tutorial Project, IIT Bombay



*Reshmi*

**PRINCIPAL**  
**All Saint's College**  
**Thiruvananthapuram**

**Department of Mathematics 2023-24**  
**Report on Certificate course - GeoGebra**

The Department of Mathematics, All Saints' College, Thiruvananthapuram conducted a certificate course on GeoGebra in Association with Spoken Tutorial Programme IIT Bombay for the academic year 2023-24. GeoGebra is a mathematics software for all level which brings together geometry, algebra, spread sheets graphing, statistics and calculus. 18 students Participated and completed the course. The list of students is attached.

Sl: No	Reg No of the candidate	Name of the candidate
1	22022100001	ARATHI . R.S
2	22022100003	BALAMEENAKSHI. S . R
3	22022100004	FARSANA S
4	22022100005	FATHIMA J
5	22022100006	LEKSHMI R
6	22022100007	NANCY B
7	22022100008	NEHA.G.R
8	22022100009	RISWANA A
9	22022100010	ROOBY.U
10	22022100011	ARATHI S
11	22022100012	ATHIRA M.A.
12	22022100013	ATHIRA.S.R
13	22022100014	RANEESHA A
14	22022100015	RIYA RONALD
15	22022100016	SREYA S R
16	22022100017	VIYANI ARIS
17	22022100018	MARY CROSS S
18	22022100019	SANIA BEN ROSE



*Reshmi*  
PRINCIPAL  
All Saint's College  
Thiruvananthapuram





## ALL SAINTS' COLLEGE THIRUVANANTHAPURAM

Affiliated to University of Kerala  
Re-accredited with A+ Grade by NAAC



**spoken-tutorial**

Powered by  
Ministry of Human Resources and  
Development, Government of India

Certificate Course conducted by  
The Department of Mathematics, All Saints' College, Thiruvananthapuram  
in Association with Spoken Tutorial Programme IIT Bombay  
for the academic year 2023-24

On GeoGebra

Duration – 30 hours

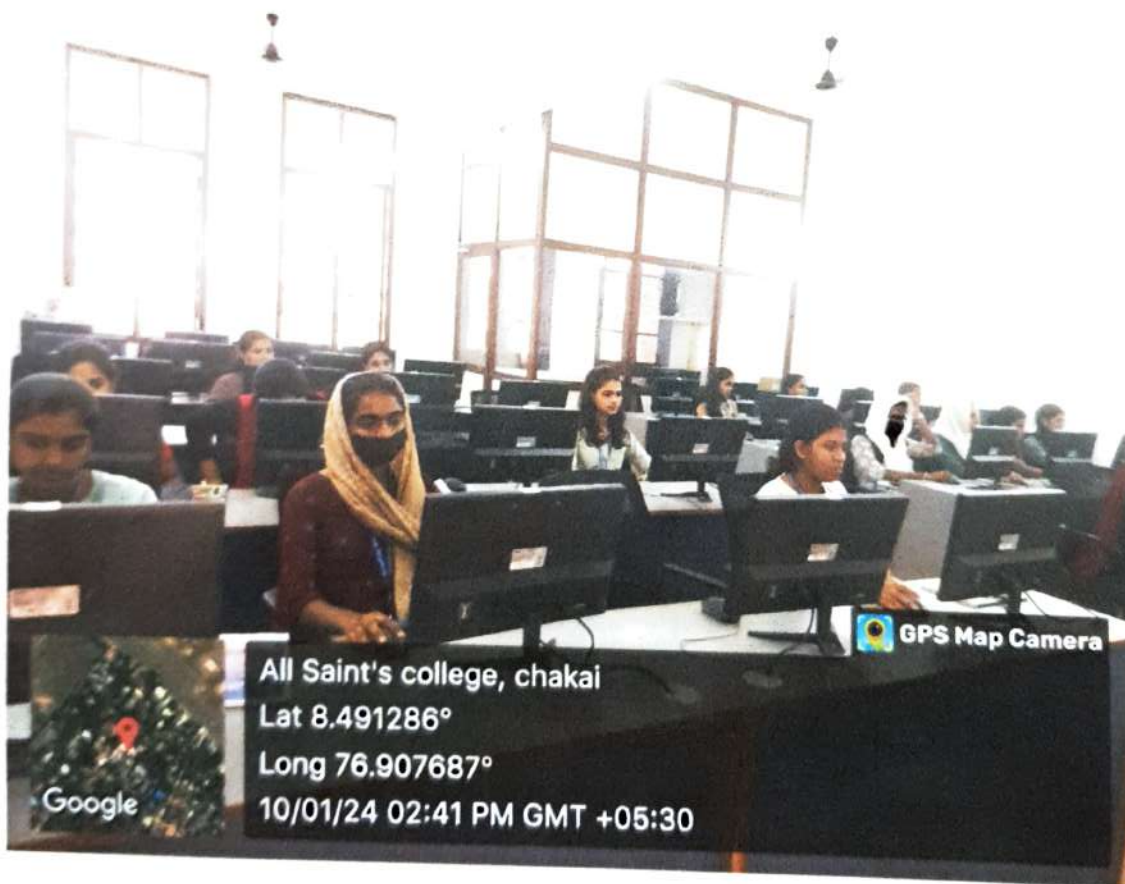
Registration starts on 10/7/23 and ends on 13/7/23  
Event Date: 15/7/23 to 14/8/23



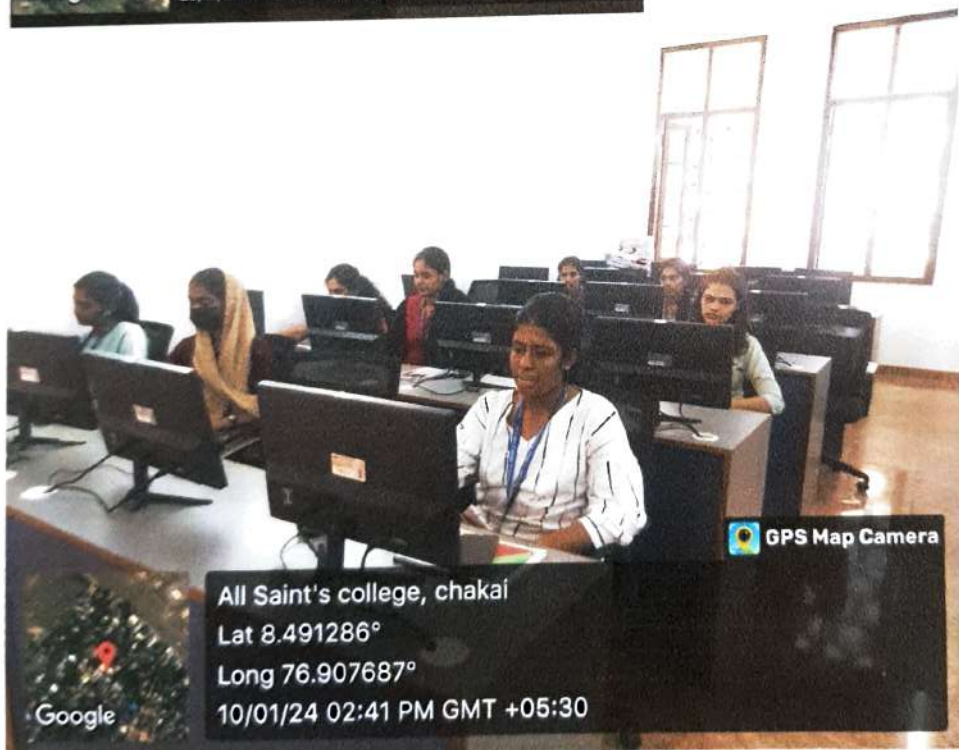
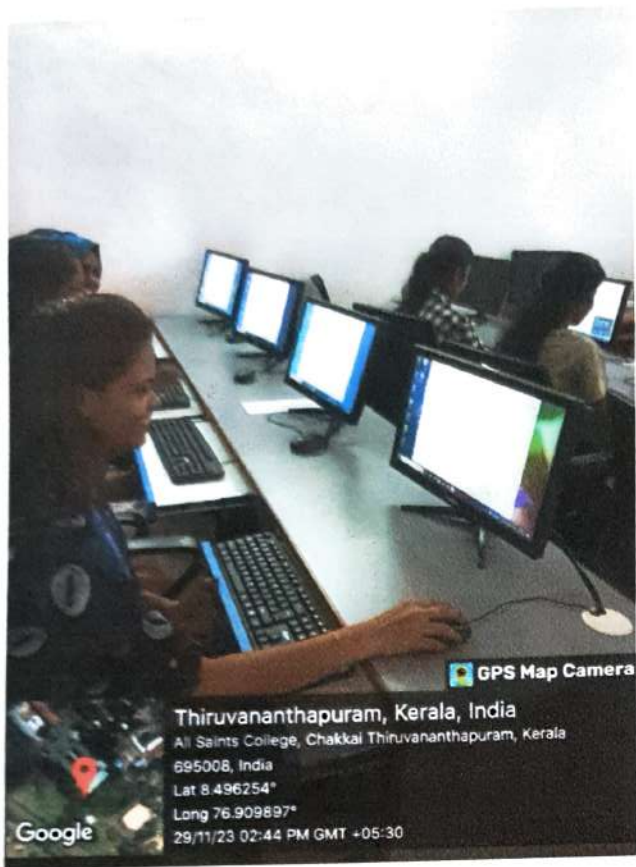
Srigowri M P  
Training Manager  
Spoken Tutorial - IIT Bombay

Event coordinator &HOD  
Mrs. Sebina Mathew C

Principal  
Dr. Reshmi R Prasad



*Reshmi*  
PRINCIPAL  
All Saint's College  
Thiruvananthapuram



*Reshmi*  
PRINCIPAL  
All Saint's College  
Thiruvananthapuram



Spoken Tutorial  
Project at  
IIT Bombay

## Certificate for Completion of Training

This is to certify that **Sreya SR** successfully passed a **GeoGebra 5.04** test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

**Credits: 1    Score: 60.00%**

Prof. Kannan M Moudgal  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.

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All Saint's College  
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Spoken Tutorial  
Project at  
IIT Bombay

## Certificate for Completion of Training

This is to certify that **Sania Ben** successfully passed a **GeoGebra 5.04** test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

**Credits: 1    Score: 72.50%**

**Prof. Kannan M Moudgalya**  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.



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Project at  
IIT Bombay

## Certificate for Completion of Training

This is to certify that **Lekshmi R** successfully passed a **GeoGebra 5.04** test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

**Credits: 1    Score: 40.00%**

Prof. Kannan M Moudgalya  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.

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Spoken Tutorial  
Project at  
IIT Bombay

## Certificate for Completion of Training

This is to certify that **Mary Cross** successfully passed a **GeoGebra 5.04** test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

**Credits: 1    Score: 72.50%**

Prof. Kannan M Moudgalya  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.



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Spoken Tutorial  
Project at  
IIT Bombay

## Certificate for Completion of Training

This is to certify that **Fathima J** successfully passed a **GeoGebra 5.04** test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

**Credits: 1 Score: 55.00%**

Prof. Kannan M Mondragala  
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.



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# Syllabus

## Module 1

Overview of GeoGebra  
Introduction to GeoGebra

## Module 2

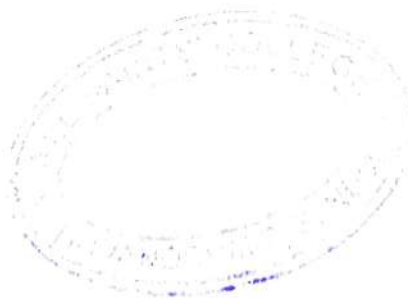
Basics of Triangles  
Congruency of Triangles  
Properties of Quadrilaterals

## Module 3

Properties of Circles  
Create and manage Tools  
Create action object Tools

## Module 4

Sequences in GeoGebra  
Scripting and LaTeX in GeoGebra



*Reshmi*  
**PRINCIPAL**  
All Saint's College  
Thiruvananthapuram

**Department of Mathematics 2023-24**  
**Marks For Certificate course - GeoGebra**

Sl: No	Reg No of the candidate	Name of the candidate	Marks of the candidate
1	22022100001	ARATHI . R.S	45.0
2	22022100003	BALAMEENAKSHI. S . R	55
3	22022100004	FARSANA S	52.5
4	22022100005	FATHIMA J	55
5	22022100006	LEKSHMI R	40
6	22022100007	NANCY B	62.5
7	22022100008	NEHA.G.R	40
8	22022100009	RISWANA A	62.5
9	22022100010	ROOBY.U	62.5
10	22022100011	ARATHI S	67.5
11	22022100012	ATHIRA M.A.	60
12	22022100013	ATHIRA.S.R	60
13	22022100014	RANEESHA A	45
14	22022100015	RIYA RONALD	52.5
15	22022100016	SREYA S R	60
16	22022100017	VIYANI ARIS	55
17	22022100018	MARY CROSS S	72.5
18	22022100019	SANIA BEN ROSE	72.5



*Reshmi*  
**PRINCIPAL**  
 All Saint's College  
 Thiruvananthapuram