

# E-Learning Cell

(2021-22)

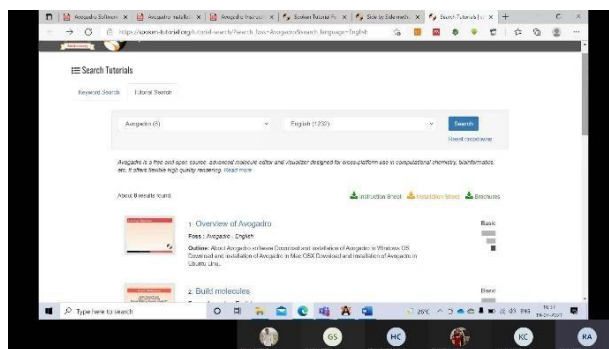
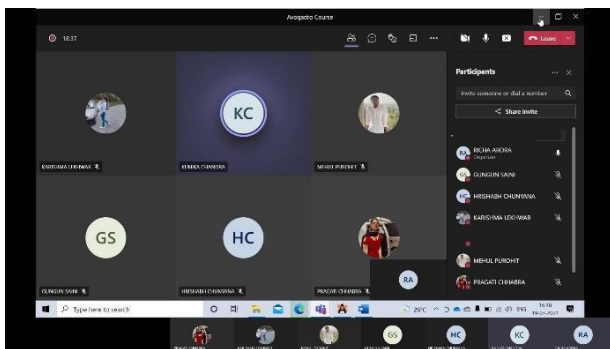
In the academic session 2021-22, E-learning Cell continued with its mission to equip students with the necessary IT skills thus making them more employable.

Under the **Spoken Tutorial Project, an initiative by IIT Bombay**, the Cell successfully conducted the following add-on courses. The courses received many registrations from students across various disciplines.

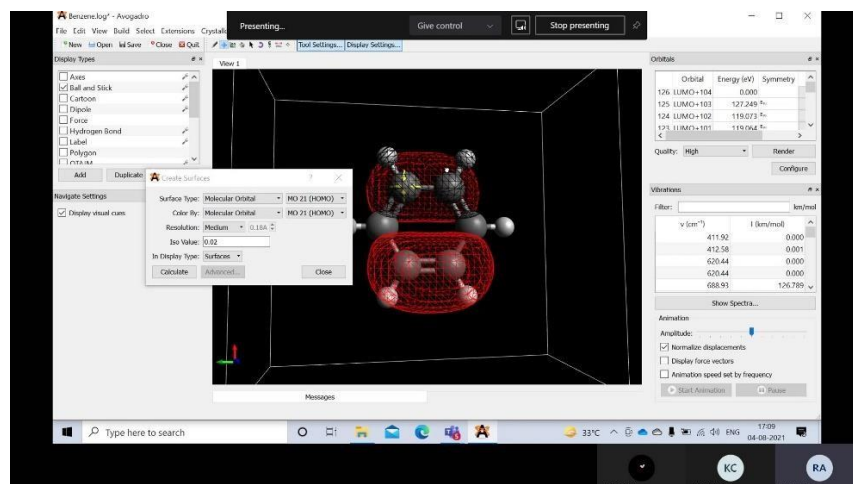
- **Avogadro**

Conducted from :20<sup>th</sup> July 2021- 2<sup>nd</sup> August 2021

It is an advanced molecule editor and visualizer designed for cross-platform use in computational chemistry, molecular modeling, material science, bioinformatics, etc. Avogadro has features for high quality rendering, interactive tools, commands and powerful plug-in architecture.



The orientation of the course was held on 19<sup>th</sup> July 2021 on MS Teams. To assist the students in completing the course, doubts solving sessions were held online on 26<sup>th</sup> July and 4<sup>th</sup> August 2021. The course completion exam was conducted on 24<sup>th</sup> August 2021.



- **Applications of Geogebra**

Conducted from : 22<sup>nd</sup> July 2021- 11<sup>th</sup> August 2021

GeoGebra is a dynamic and interactive mathematics software for geometry, algebra, calculus, trigonometry and statistics. Tools in GeoGebra are helpful in various constructions and calculations. Entry of equations and mapping of various variables can be done using the tools, input bar, CAS and spreadsheet views. Interactive explorations can be done using the tools in 2D and 3D Graphics modes. GeoGebra is a very useful tool to learn and teach different branches of mathematics.

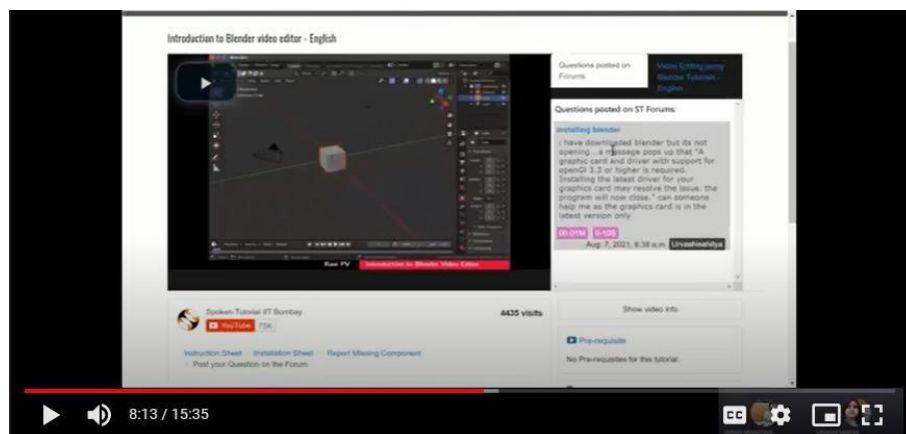
The orientation of the course was held on 22<sup>nd</sup> July 2021 on MS Teams. Doubts solving sessions were held for students online on 29<sup>th</sup> July 2021 and 18<sup>th</sup> August 2021. The course completion exam was conducted on 13<sup>th</sup> September 2021.

- **Video Editing Using Blender**

Conducted from : 1<sup>st</sup> August 2021- 21<sup>st</sup> August 2021

Blender is a cross platform, 3D-multimedia suite with 2D-ability. In this course students learnt how to edit videos using Blender. The sessions gave insight into incorporating features like adding multi-track audio and video editing, annotation, special effects and rendering.

The orientation of the course was held on 29<sup>th</sup> July 2021 on MS Teams. To resolve student queries, doubts solving session was held on 7<sup>th</sup> August 2021. The course completion exam was conducted on 26<sup>th</sup> September,2021.



On popular demand the E-learning cell conducted a second run of popular Data science courses in Python and R.

- **R Course**

Conducted from :4<sup>th</sup> August 2021- 24<sup>th</sup> August 2021

R is an open-source software that facilitates data analysis, modeling, inferential testing and forecasting. It is a user-friendly software which allows to create new function commands to solve statistical problems.

The orientation of the course was held on 3<sup>rd</sup> August 2021 on MS Teams. Meetings were held online to solve students queries and doubts on 10<sup>th</sup> August , 17<sup>th</sup> August and 25<sup>th</sup> August 2021.

- **Python**

Conducted from :21<sup>st</sup> September 2021- 4<sup>th</sup> November 2021

Python is a general-purpose dynamic programming language for Scientific Computing. It is becoming ever more popular for data science. Companies worldwide are using Python to harvest insights from their data and gain a competitive edge.

The orientation of the course was held on 21<sup>st</sup> September 2021 on MS Teams. Doubt solving session for students was held on 28<sup>th</sup> September 2021.

