## Report on Parametric Modelling for RHINO and GrassHopper software

**SDC Workshop:** Parametric Modelling for RHINO and Grasshopper software

**Resource person:** REVA NEST \_ CADCENTER

**Venue:** Room No 431\_ School of Architecture

Semester: 6 th Semester

No. of Students: 63

**Dates:** 23<sup>rd</sup> Feb to 26<sup>th</sup> Feb, 2023.

The School of Architecture conducted a workshop for the 6th-semester students on **Parametric Modelling for RHINO and Grasshopper software**. The purpose was to introduce the basics of **RHINO and Grasshopper** from the introduction to rendering techniques with a parametric design. The SDC has completed 32 Hours from 23<sup>rd</sup> Feb to 26<sup>th</sup> Feb 2023.

The workshop was an introductory session for students to explore and discover the world of computational design through the process of evolving from the basics. This session helped students to explore the fundamentals of Parametric architecture, morphing basic shapes into new, less literal forms and understanding how you can creatively express your ideas and thoughts with the help of the same. This will ultimately help create more focused, innovative, and human designs.

In this course aimed for architecture students that will not only learn the basics of Rhinoceros, but also acquire the necessary skills to be able to model complex forms efficiently. They gained an understanding of strategies that will allow you to create high end architectural diagrams of the concept, site analysis and even its structure. By the end of training students has learnt to create any architectural design effortlessly and represent it in an appropriate manner. Grasshopper course has provided students with essential skills to be able effectively use Grasshopper. The course started with overview of parametric design history and powerful applications in current professions. This was followed by introduction to Grasshopper interface and seven sessions where students get training on various parametric concepts and ability to think algorithmically through lectures, case studies as well as home exercises. By the end of the course, students has gained the knowledge to allow them dive in further in grasshopper and it is advanced applications within creative practices.

## Key concepts covered:

- Highlighting the important aspects of Rhino and Grasshopper as computational design
- Understanding the concept of computational design
- Fundamentals of morphing basic shapes into new, less literal forms
- Understanding how Rhino work for parametric design
- Rendering Techniques in Rhino









## Parametric Modelling with Rhino and Grasshopper



School of Architecture in collaboration with REVA Nest and UIIC offers a 4-day skill development course for 6<sup>th</sup> semester students

Venue: School of Architecture | Dates: 23<sup>rd</sup> to 26<sup>th</sup> FEB 2023.

Tutors: REVA NEST \_ CADCENTER

The following are the few photographs from the Session:









## The following are the few photographs of student's work from the Session:



















