Year 2024-2025;

EVEN Sem Cycle II
Mathematical Experiments Using Code: In order to implement interesting mathematical ideas that are relevant to programming; diverse options will be considered which could range from MonteCarlo methods for estimation, to linear transformations to manipulate graphics, finding Voronoi cells for a set of points in the plain, generating fractals etc.

Abstract

An Adventure into several mathematical concepts and how they lend themselves to creative outcomes using technological tools.

Rigour in the math will be accompanied by creative interpretations of the same concepts, which will be bent towards creative projects and outcomes.

Various tools may be used, depending upon the capability offered and how they match up to the Math concepts we are going to be interested in.

Interesting applications and novel metaphorical interpretations of familiar concepts such as Space, Time, Chance, Shape, Sound and Text will be undertaken as part of this course.

Needless to say, these interpretations will be translated with code into artifacts that may find application in diverse spheres of human activity.

Designs and Artistic pieces will thus be developed that show both, their mathematical lineage and provenance, and the creative applications to enhance human experience.