

**Title:** Introduction to automation in geomatics engineering routines through hands-on tutorials in python 3

**Significance:** The knowledge and applications of Geomatics Engineering have grown nationwide in the current decade. State and national engineering colleges have increasingly adopted Geomatics Engineering as an essential part of Civil Engineering curriculum, and numerous remote sensing and GIS bodies have been reinforced. One of the chief organisations dealing with the applications, and requiring essential know-how of this subject is Indian Space Research Organization. The knowledge of the processing and refining of satellite products is one of the aspects of Geomatics Engineering. In this webinar, we will deal with the automation of several routine tasks in the life of a Geomatics student. The event is expected to be exciting for the curious students.

**Date:** Monday, June 15, 2020 | 10:00 am – 11:00 am

**Software Requirements:**

1. ArcGIS – any version
2. Visual Studio Code (open source)

**Presenter:** Bankim C. Yadav, Research Scholar @ IIT Roorkee (CV attached)

**Structure:**

10:00 am – 10:15 am (15 mins):

1. Making the participants familiar with the field of Geomatics Engineering, with no pre-requisite knowledge.
2. Recent advances in the applications of Geomatics Engineering, while discussing the notable journals covering such advances

10:15 am – 10:25 am (10 mins):

1. Setting up the tools for the hands-on tutorials

10:25 am – 10:55 am (30 mins):

1. Hands on python tutorial of the routine tasks in Geomatics using the ArcGIS Pro/ArcGIS Desktop software
2. The possibility of automation of several other tasks in Geomatics using the ArcGIS Pro/ArcGIS Desktop software, while discussing some key-concepts

10:55 am – 11:00 am (05 mins):

1. Distribution of scripts to the participants preferably as jupyter notebooks
2. Conclusion with self-help practice tips