

The Registrar
SGTU University, Gurugram

Subject: Permission to organize a **Collaborative Hands-on Workshop**, on **“Introduction to GIS and QGIS”** on **02 September 2022**.

Respected Sir,

On behalf of the Department of Civil Engineering, FEAT; and Faculty of Agricultural Sciences, we would like to request you to permit us for organizing a **Collaborative Hands-on Workshop** titled **“Introduction to GIS and QGIS”** on **02 September 2022** from **11 AM to 01 PM**, in **Geospatial Research laboratory, Room No. G-12, E Block**, for our students and faculty members. This workshop will familiarize them with the basics of GIS and an open-source GIS software-QGIS. The exercises performed during this workshop will familiarize them with the functionality of QGIS and also concretize their GIS-related concepts. GIS is a trending domain and this workshop will enhance the job prospects of the students. No financial commitments are involved in this session.

Date: 02- September-2022

Timing: 11:00 AM-1.00 PM

Speaker: Dr. Aditya Kapoor (Assistant Professor, Department of Civil Engineering, FEAT)

Kindly consider the request and give valuable permission for the same.

With Best Regards,

Dr. Aditya Kapoor (AP, CE) *[Signature]*

Dr. Neeraj Saini (HOD CE) *[Signature]* 22/08/22

DEAN (FEAT) *[Signature]* 22/08/22

Mr. Ramesh Abhishek (HOS, FASC) *[Signature]* 22/08/22

DEAN (FASC) *[Signature]* 22/08/2022

*May be considered
approved phase*

ve
Approved
[Signature] 25/8/22

Faculty of Agricultural Sciences
SGTU University
Gurugram

[Signature]
Registrar
SGTU University
Gurugram
Dean FEAT



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Ref. No.: SGTU/CRC/2022-2023/C.E./004

Date: 26-08-2022

CIRCULAR

This notice informs you that on **02-09-2022**, a **Capability Enhancement Program** titled "**Introduction to GIS and QGIS 1**" will be held to develop **Analytical skill development** among students of the **Faculty of Engineering and Technology & Faculty of Agriculture Sciences**.

Monika
CRC Coordinator

To

The Dean, FEAT and FASC (To be distributed to concerned students)

CC: Students Section



SGT UNIVERSITY

**Department of Civil Engineering, FEAT &
Faculty of Agricultural Sciences (FASC)**
organizes Collaborative

Hands-on Workshop on “INTRODUCTION TO GIS AND QGIS”

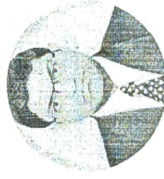
Organizing Committee



Prof. (Dr.) Mamta Dahiya
Dean, FEAT



Prof. (Dr.) Ashok Kumar
Dean, FASC



Dr. Neeraj Saini
Head of the Department
Department of Civil Engineering



Mr. R. Abhishek
Head of the Section
Department of Agricultural Engineering



Dr. Aditya Kapoor
Assistant Professor
Department of Civil Engineering,
GT University

Guest Speaker

WORKSHOP

📅 02nd September, 2022 | ⌚ 11:00 AM to 1:00 PM

Venue: Geospatial Research Laboratory (G-12) Ground floor, E-Block



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved University) **GURGAON, Delhi-NCR**

Department of Civil Engineering,

Faculty of Engineering & Technology

in association with

Faculty of Agricultural Sciences

“Introduction to GIS and QGIS”

Type of event: Hands-on-Workshop

(Students Skill Development Session)

Date: 05/09/2022

Time: 02:00 PM to 04:00 PM

Venue: Geospatial Research Laboratory, Ground floor G-12, E Block

Organizer:

Dr. Neeraj Saini, HOD, Department of Civil Engineering, FEAT.

Mr. Aditya Kapoor, Assistant Professor, Department of Civil Engineering, FEAT.

Mr. Ramesh Abhishek, Assistant Professor, Faculty of Agricultural Sciences

Objectives:

Geographical Information System (GIS) is a system that helps capturing, managing, storing and analysing spatial data. This system has been used since last 200 years to solve several problems such efficient telecom network design, hotspot

analysis, algorithm application etc. However, with advent of computers, GIS is being implemented digitally with use of sophisticated software. These software broadly fall under two categories- commercial and open source. In the present era, open-source software are gaining traction on the account of their customizability and community driven approach. The most commonly used open-source software in the domain of GIS is QGIS (earlier known as Quantum GIS). Its knowledge can greatly enhance the skills of the students that will greatly enhance the employability of students.

In the light of this discussion, Department of Civil Engineering, FEAT and Faculty of Agricultural Sciences (FASC), organized a collaborative hands-on-workshop for students of FEAT and FASC titled 'Introduction to GIS and QGIS' on 5th September 2022 from 2 PM to 4 PM at geospatial research laboratory, Ground floor of E block. The session started with basic introduction of GIS and its historical applications. Then they were familiarized with basic functionalities of QGIS software such the tabs, icons, setting the display units. Then the participants were enlightened with the advanced capabilities of QGIS such as vector and raster files and they were instructed about the procedure to add basemaps from online repositories and download the topographical maps from the online repository of US Army Maps. At the end of the session, doubts of the participants were resolved by the speaker.

About the Speaker/Guest:

Dr. Aditya Kapoor is an Assistant Professor at the Department of Civil Engineering, FEAT. He received his Ph.D. degree from IIT Ropar. During his Ph.D. and bachelors, he extensively worked with GIS software such as QGIS and ArcGIS. Additionally, he underwent 1-month QGIS certificated training course organized by GIS Vision India Pvt Ltd in June 2022.

Audience:

33 students (enumerated at the end of this document) from FEAT and FASC were present in this event.

Brief Report:

Dr. Aditya Kapoor
SGT Jitendra Singh
Gurgaon (Haryana)

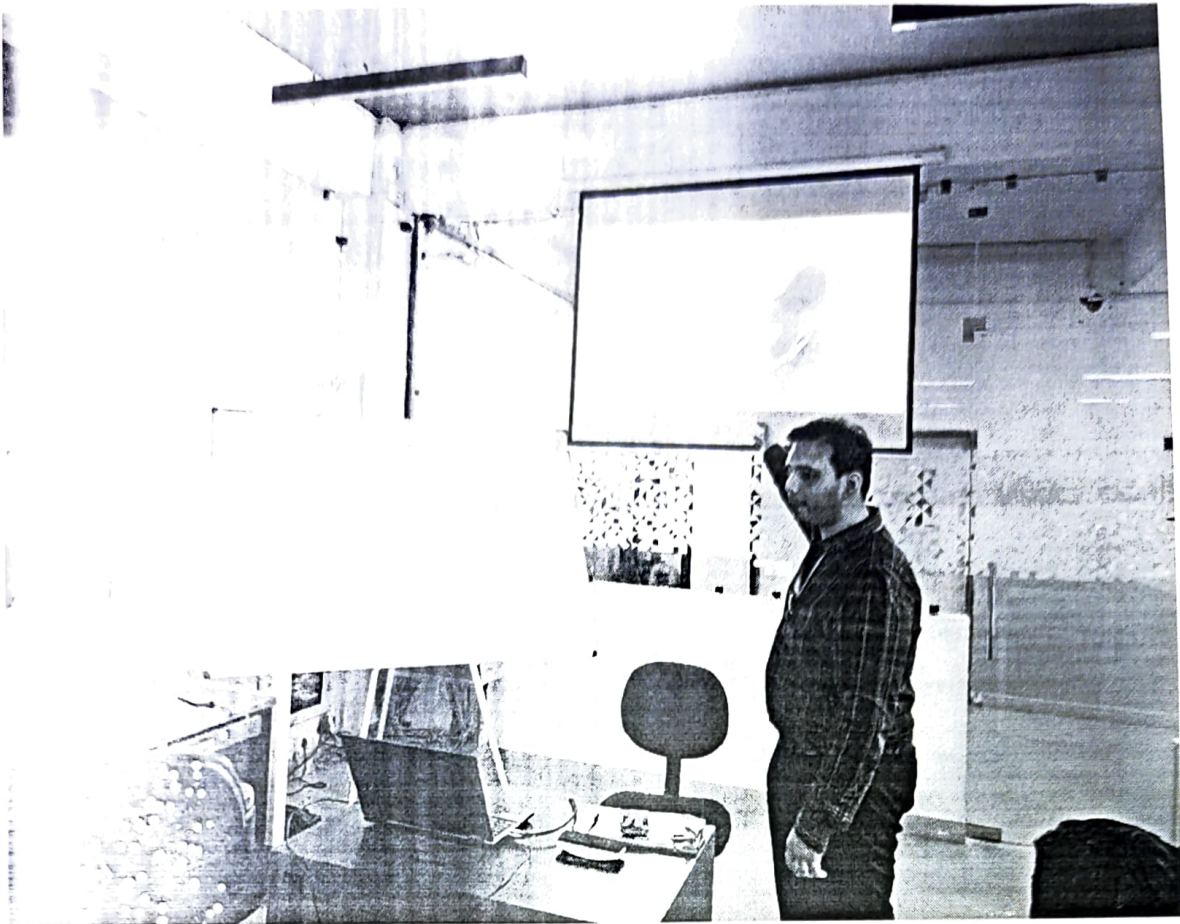
GIS stands for Geographic Information System and it is being used for solving spatial data related problems for last 200 years. With technological advancements, GIS started being implemented on computers using software. One such popular open source software named QGIS is being extensively used by research and academic community to capture, store, manage and analyze spatial data sets. Its knowledge can greatly enhance the skill set and employability of students. With this viewpoint, the **Department of Civil Engineering, Faculty of Engineering & Technology, SGTU, and Faculty of Agricultural Sciences organized a collaborative Hands-on-Workshop titled 'Introduction to GIS and QGIS' by Dr. Aditya Kapoor, assistant professor, department of civil engineering, FEAT, SGTU on 5th September 2022 from 2 PM to 4 PM at a geospatial research laboratory, ground floor (G-12), E Block students of FEAT and FASC.** This session covered

- 1) Introduction to GIS
- 2) Historical applications of GIS
- 3) Introduction and basic functionalities of QGIS such as tools and bars
- 4) Raster and vector files, and how to download them from online repositories
- 5) Advanced capabilities of QGIS such as georeferencing

Learning Outcomes:

In this session, the students of FEAT and FASC were enlightened with the fundamentals of GIS and its historical usage, followed by demonstration of its basic features of QGIS such as tools and bars. Then the speaker enumerated the file types (Raster and Vector). Participants learned about the basemaps and procedure to add them, followed by downloading and geo-referencing of the raster file. They also learnt about the coordinate system and how to set the proper display units. Being an industry standard software, such sessions enhance the employability of the students.

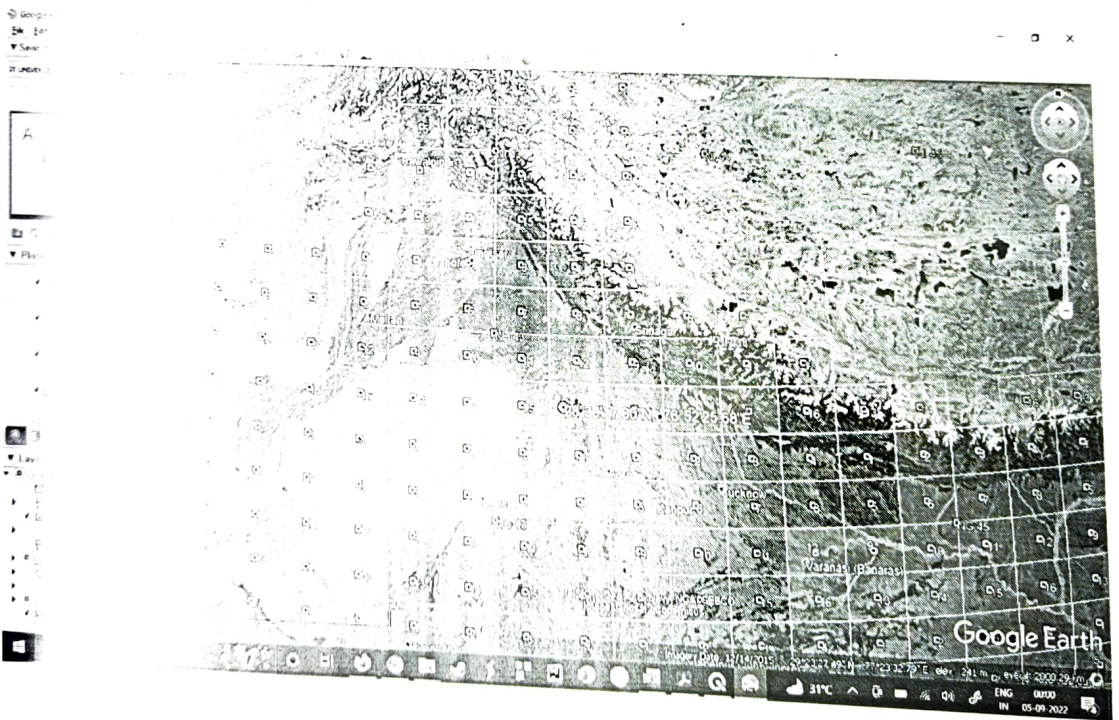
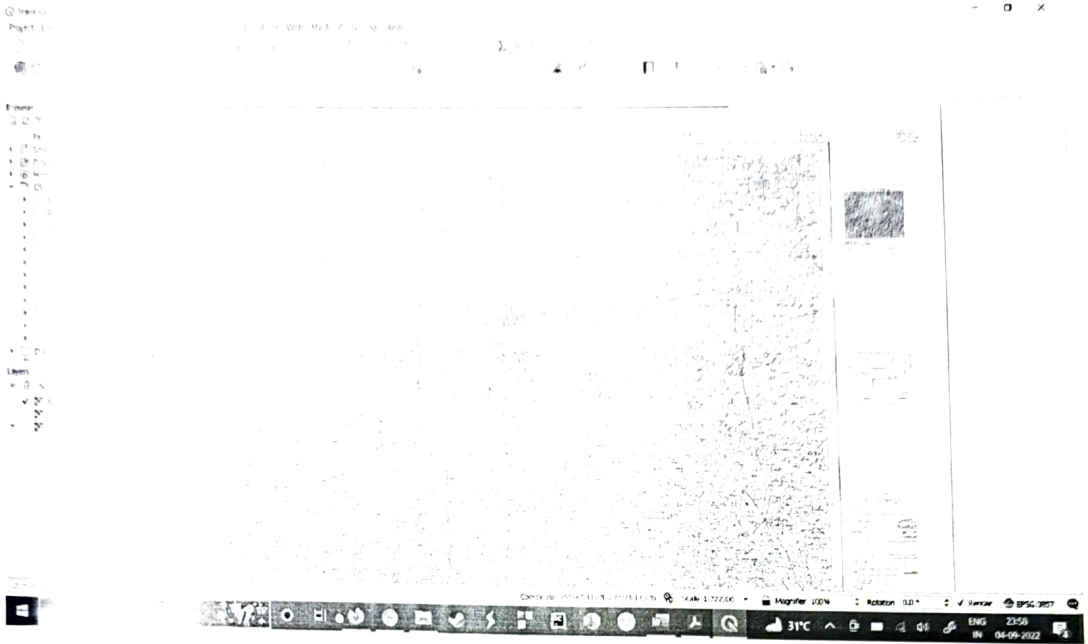
Faculty of Engineering & Technology
SGT University
Gurgaon (Haryana)



Dr. Aditya Kapoor introducing GIS and QGIS 1



Students working on Introducing GIS and QGIS 1



Outputs of QGIS Software

Prepared by: Dr. Arun & Team
SGT University
Gurgaon (Haryana)

List of Participants:

Sl. No.	Registration No.	Student's Name	Program
1	1101002	SARA SHEORAN	B.Sc. (Hons.) Agriculture
2	1101003	SHUBHAM SHARMA	B.Sc. (Hons.) Agriculture
3	1101004	ABHISHEK SHARMA	B.Sc. (Hons.) Agriculture
4	1101006	ISHIKA	B.Sc. (Hons.) Agriculture
5	1101007	MRITYUNJAYA SHARMA	B.Sc. (Hons.) Agriculture
6	1101008	YASHWANI	B.Sc. (Hons.) Agriculture
7	1101009	MUSKAN	B.Sc. (Hons.) Agriculture
8	1101011	KANIKA	B.Sc. (Hons.) Agriculture
9	1101013	ANJALI SHARMA	B.Sc. (Hons.) Agriculture
10	1101014	REENKI	B.Sc. (Hons.) Agriculture
11	1101015	JYOTI SAINI	B.Sc. (Hons.) Agriculture
12	1101016	RUCHIKA CHHILLAR	B.Sc. (Hons.) Agriculture
13	1101019	SUHAIL KHAN	B.Sc. (Hons.) Agriculture
14	1101020	SUCHETA	B.Sc. (Hons.) Agriculture
15	1101021	SEIJAL	B.Sc. (Hons.) Agriculture
16	1101022	VARNIKA ARYA	B.Sc. (Hons.) Agriculture
17	1101023	RAVEENA YADAV	B.Sc. (Hons.) Agriculture
18	1101024	MAYANK	B.Sc. (Hons.) Agriculture
19	1101025	PAYAL KATARIA	B.Sc. (Hons.) Agriculture
20	1101026	POOJA	B.Sc. (Hons.) Agriculture
21	1101027	NAMITA	B.Sc. (Hons.) Agriculture
22	1101028	HIMANSHU YADAV	B.Sc. (Hons.) Agriculture
23	1101030	SUBHAM	B.Sc. (Hons.) Agriculture
24	1101037	PALLAVI	B.Sc. (Hons.) Agriculture
25	1101041	RAKHI YADAV	B.Sc. (Hons.) Agriculture
26	1101042	DIPESH KUMAR	B.Sc. (Hons.) Agriculture
27	1101044	ANSHUL	B.Sc. (Hons.) Agriculture

28	21100145	SAURABH SHARMA	B.Sc. (Hons.) Agriculture
29	21100191	Vicky Rajput	B.Tech. Mechanical Engineering
30	21100192	Aditya Negi	B.Tech. Mechanical Engineering
31	21100193	Naman Chauhan	B.Tech. Mechanical Engineering
32	21100194	Yatharth Bhardwaj	B.Tech. Mechanical Engineering
33	21100195	Ayush Kumar Singh	B.Tech. Mechanical Engineering
34	21100196	Harender Kumar	B.Tech. Mechanical Engineering
35	21100197	Ankit Yadav	B.Tech. Mechanical Engineering
36	21100198	Shubham Jha	B.Tech. Mechanical Engineering
37	21100199	Kamesh	B.Tech. Mechanical Engineering
38	21100201	Sharan	B.Tech. Mechanical Engineering

Faculty of Engineering & Technology
SGT University
Gurgaon (Haryana)

Shree Guru Gobind Singh Tricentenary University Haryana

Faculty of Engineering and Technology

Department: Civil Engineering / BSc(Hons) Agriculture / ME

Event Title: Introduction to GIS and Date: 5/9/2022

S.No	Enrollment no.	Name	Course/Semester	Signature
1	201101002	Sara Sheoran	B.Sc	S. Sheoran
2	201101003	Shobham Sharma	"	Shubham
3	201101004	Abhishek Sharma	"	Abhishek
4	201101006	Isika	"	Isika
5	201101007	Mritunjaya	"	Mritunjaya
6	201101008	Yashuani	"	Yashuani
7	201101009	Muskan	"	Muskan
8	201101011	Kanika	"	Kanika
9	201101013	Anjali sharma	"	Anjali
10	201101014	Reenki Chhillar	"	Reenki
11	201101015	Suhaib Khan	"	Suhaib
12	201101020	Sucheta	"	Sucheta
13	201101021	Sejal	"	Sejal
14	201101022	Varnika Arya	"	Varnika Arya
15	201101023	Ravaha Yadav	"	Ravaha
Coordinator(s) (Name, Department and signature)				

Shree Guru Gobind Singh Tricentenary University Haryana
Faculty of Engineering and Technology

Department:

Event Title:			Date:	
S.No	Enrollment no.	Name	Course/Semester	Signature
1	201101024	Mayank	B.Sc.	Mayank
2	201101025	Pooja Kataria	"	Pooja
3	201101026	Pooja	"	Pooja
4	201101027	Namita	"	Namita
5	201101028	Himanshu Yadav	"	Himanshu
6	201101030	Shubham	"	Shubham
7	201101037	Pallavi	"	Pallavi
8	201101041	Rakhi Yadav	"	Rakhi
9	201101042	Dipesh Kumar	"	Dipesh
10	201101044	Anshul	"	Anshul
11	201101045	Vicky Rajput	B-Tech.	Vicky R
12	211303001	Aditya negi	"	Aditya
13	211303002	Naman Chauhan	"	Naman
14	211303003	Yatharth Bhardwaj	"	Yatharth
15	21303004	Ayush Kumar	"	Ayush
Coordinator(s) (Name, Department and signature)				

Shree Guru Gobind Singh Tricentenary University Haryana
Faculty of Engineering and Technology

Department:

Event Title:			Date:	
S.No	Enrollment no.	Name	Course/Semester	Signature
1	211303006	Harender kumar	1.	har ^{er}
2	211303007	Ankit Yadav	"	ajul
3	211303008	Shubham Jha	"	Shubham
4	191303003	Kamlesh	"	Kamlesh
5	191303011	Sharan	"	Sharan
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
Coordinator(s) (Name, Department and signature)			Dr. Aditya Kapoor	

HOD
 Department of Civil Engineering
 Faculty of Engineering & Technology
 SGT University
 Gurugram (Haryana)

Department of
 Civil Engg

Dean
 Faculty of Engineering & Technology
 SGT University
 Gurgaon (Haryana)