

To

The Registrar
SGT University, Gurugram

Subject: Permission to organize a Collaborative Hands-on Workshop, on 'Application of GIS in Civil Engineering and Agricultural Sciences' on 26th September 2022.

Respected Sir,

On behalf of the Department of Civil Engineering, FEAT, and Faculty of Agricultural Sciences, we seek your permission to organize a Collaborative Hands-on Workshop titled 'Application of GIS in Civil Engineering and Agricultural Sciences' on 26th September 2022 from 11 AM to 01 PM at Geospatial Research laboratory, Room No. G-12, E Block, SGT University, for the students. This workshop will demonstrate practical applications of the Geographical Information System (GIS) via open-source GIS software-QGIS, particularly, in the domain of civil engineering and agricultural sciences. 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: 26- 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)

Dr. Neeraj Saini (HOD CE)

Mr. Ramesh Abhishek (HOS, FASC)

DEAN (FEAT)

DEAN (FASC)

Approved

Registrar
SGT University,
Budheta, Gurugram

Dean FEAT

Aditya Kapoor
20/9/22

Neeraj Saini
20/9/22

Ramesh Abhishek
20/9/22

Manu
22/09/22

Arjun
21/9/2022

Dean
Faculty of Agricultural Sciences
SGT University
(Surgeon Haryana)

Faculty of Engineering & Technology
SGT University
Surgeon Haryana



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY

(UGC Approved University)

GURGAON, Delhi-NCR

Department of Civil Engineering, FEAT

and

Faculty of Agricultural Sciences (FASC)

‘Application of GIS in Civil Engineering and Agricultural Sciences’

Type of event: Hands-on-Workshop

Student Development Program

under the aegis of Torque Club

Date: 20/10/2022

Time: 11:00 AM to 1:00 PM

Venue: Geospatial Research Laboratory, Ground floor, E Block

Organizer:

Dr. Neeraj Saini, HOD & Assistant Professor, Department of Civil Engineering, FEAT.

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

Torque Club:

Advisor: Ms. Monika Deshwal (Assistant Professor, Mechanical Engineering Department, FEAT), Co-Advisor: Mr. Kaushal Sharma (Assistant Professor, Civil Engineering Department, FEAT), Co-Advisor: Mr. Asad Habeeb (Assistant Professor, Mechanical Engineering Department, FEAT).

Mr. Ramesh Abhishek, Assistant Professor, Faculty of Agricultural Sciences (FASC)

Objectives:

A major part of Civil engineering is riddled with spatial data such as locations of structures, canals, roads, etc. Similarly, agricultural sciences also encapsulate different types of spatial data such as the location of individual plants, irrigation structures, farmlands, forest area etc. Such spatial data can be collected, stored, managed, and analyzed using the Geographical Information System (GIS) and the associated software. Such software largely falls under two categories- commercial software and open-source software. Commercial software is expensive and imparts a financial burden and on the other hand, open-source software is free and supported by a wide community of active developers.

To familiarize the students with the concepts of GIS, in civil engineering and Agricultural Sciences domain. Also, a demonstration of the procedure to add three types of vector layers- points, lines, and polygon; adding new fields in attribute tables and using them in categorized symbology to visualize the individual elements will be given in the session. Lastly, instruction on the computation of geometrical parameters such as coordinates, length, perimeter, and area of vector elements will be deciphered.

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 bachelor's, he extensively worked with GIS software such as QGIS and ArcGIS. Additionally, he underwent a QGIS-certificated training course organized by GIS Vision India Pvt Ltd.

Audience:

42 students (enumerated at the end of this document) from FEAT and FASC participated in this hands-on workshop

Brief Report:

A major part of Civil engineering is riddled with spatial data such as locations of structures, canals, roads, etc. Similarly, agricultural sciences also encapsulate different types of spatial data such as the location of individual plants, irrigation structures, farmlands, forest areas, etc. Such

spatial data can be collected, stored, managed, and analysed using the Geographical Information System (GIS) and the associated software. Such software largely falls under two categories- commercial software and open-source software. Commercial software is expensive and imparts a financial burden and on the other hand, open-source software is free and supported by a wide community of active developers.

To familiarize the students with the concepts of GIS, the **Department of Civil Engineering (FEAT) and Faculty of Agricultural Sciences** organized the **4th Hands-on-Workshop Session** on GIS titled '**Application of GIS in civil engineering and agricultural sciences**' on **20th October 2022 at 11 AM at Lab No. G-14, Ground floor, E-Block**. Dr. Aditya Kapoor, Assistant Professor, Department of Civil Engineering, was the speaker of the session and he demonstrated the students the procedure to add three types of vector layers- points, lines and polygon; adding new fields in attribute tables and using them in categorised symbology to visualize the individual elements. Lastly, they were instructed to compute geometrical parameters such coordinates, length, perimeter, and area of vector elements.

Learning Outcomes:

In this session, the participants learned and performed the procedure to add three types of vector layers- points, lines, and polygon; adding new fields in attribute tables and using them in categorized symbology to visualize the individual elements. Lastly, they were instructed to compute geometrical parameters such as coordinates, length, perimeter, and area of vector elements.

Being an industry-standard software, such sessions enhance the employability of the students.



Students learning Application of GIS in Civil Engineering

Faculty of Engineering & Technology
SGT University
Gurgaon (Haryana)



GIS Software results shown to Students

List of Participants:










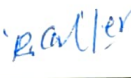
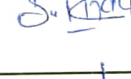


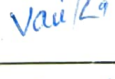
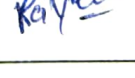
Sl. No.	Registration No.	Student's Name
1	201101002	SARA SHEORAN
2	201101003	SHUBHAM SHARMA
3	201101004	ABHISHEK SHARMA
4	201101006	ISHIKA
5	201101007	MRITYUNJAYA SHARMA
6	201101008	YASHWANI
7	201101009	MUSKAN
8	201101011	KANIKA
9	201101013	ANJALI SHARMA
10	201101014	REENKI
11	201101015	JYOTI SAINI
12	201101016	RUCHIKA CHHILLAR
13	201101019	SUHAIL KHAN
14	201101020	SUCHETA
15	201101021	SEIJAL
16	201101022	VARNIKA ARYA
17	201101023	RAVEENA YADAV
18	201101024	MAYANK
19	201101025	PAYAL KATARIA
20	201101026	POOJA
21	201101027	NAMITA
22	201101028	HIMANSHU YADAV
23	201101030	SUBHAM
24	201101037	PALLAVI
25	201101041	RAKHI YADAV
26	201101042	DIPESH KUMAR
27	201101044	ANSHUL
28	201101045	SAURABH SHARMA
29	211303001	Vicky Rajput

30	211303002	Aditya Negi
31	211303003	Naman Chauhan
32	211303004	Yatharth Bhardwaj
33	211303005	Ayush Kumar Singh
34	211303006	Harender Kumar
35	211303007	Ankit Yadav
36	211303008	Shubham Jha
37	191303003	Kamesh
38	191303011	Sharan
39	191301001	Ankit Singh
40	201301001	Sumukh
41	201301003	Harshjyot
42	201301008	Randeep

Shree Guru Gobind Singh Tricentenary University Haryana

Faculty of Engineering and Technology

Department: Civil Engineering / FASC





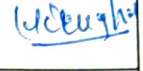






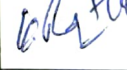


Event Title: <u>Application of GIS in civil Engineering and agricultural Sciences</u>		Date: <u>20/10/2022</u>		
S.No	Enrollment no.	Name	Course/Semester	Signature
1	201101002	Sara Sheoran	B.Sc.	
2	201101003	Shubham Sharma	"	
3	201101006	Ishika	"	
4	201101007	mzityunjaya	"	
5	201101009	MUSKAN	"	
6	201101011	Kanika	"	
7	201101013	Anjali sharma	"	
8	201101014	Reenki	"	
9	201101015	Jyoti sarni	"	
10	201101016	Ruchika Chhillar	"	
11	201101019	Suhail Khan	"	
12	201101020	Sucheta	"	
13	201101021	Sejal	"	
14	201101022	Varnika warya	"	
15	201101023	Raveena Yadav	"	
Coordinator(s) (Name, Department and signature)				

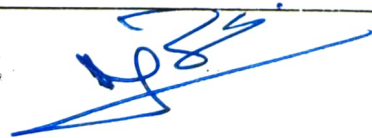
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Faculty of Engineering and Technology

Department: Civil Engineering

Event Title: _____ Date: 20/10/2022

S.No	Enrollment no.	Name	Course/Semester	Signature
1	201101024	Mayank	BSc.	
2	201101025	Payal Kataria	"	
3	201101026	Pooja	"	
4	201101027	Namita	"	
5	201101028	Himanshu Yadav	"	
6	201101030	Subham	"	
7	201101037	Pallavi	"	
8	201101041	Rakhi Yadav	"	
9	201101042	Dipesh kumar	"	
10	201101044	Anshul	"	
11	201101044	Saurabh Sharma	"	
12	211303001	Vicky Rajput	B.Tech.	
13	201101004	Abhishek Sharma	"	
14	201101008	Yashwan i	"	
15				
Coordinator(s) (Name, Department and signature)				



Shree Guru Gobind Singh Tricentenary University Haryana

Faculty of Engineering and Technology

Department: Civil Engineering / FASE

Event Title: Application of GIS in civil engineering and Agricultural Sciences

Date: 20/10/2022

S.No	Enrollment no.	Name	Course/Semester	Signature
1	211303002	Aditya negi	B.Tech	
2	211303003	Naman Chauhan	"	
3	211303004	Yatharth Bhardwaj	"	
4	211303005	Ayush Kumar	"	
5	211303006	Harender Kumar	"	
6	211303007	Shubham Jha	"	
7	211303008	Kamesh	"	
8	191303003	Sharan	"	
9	191303011	Ankit Singh	"	
10	201301001	Sumukh	"	
11	201301003	Harshjyot	"	
12	201301008	Randeep	"	
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

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 Faculty of Engineering & Technology
 SGT University
 Gurgaon (Haryana)