

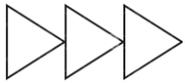
Vishnu Waman Thakur Charitable Trust's  
Bhaskar Waman Thakur College of Science,  
Yashvant Keshav Patil College of Commerce,  
Vidhya Dayanand Patil College of Arts,  
(VIVA College)



Soil and Water  
Analysis  
Techniques  
(CC-SWAT)

# Certificate Course

Class Of 2023



Organised by  
**VIVA Centre for Advanced  
Research & Development  
(VCARD) in association with  
IQAC**

Get an certificate course  
opportunity with us for Soil &  
Water Testing Laboratory

*Join the  
Certificate  
course*

**Register Now!**



- CBZ
- Biochemistry
- Biotechnology
- PCM
- EVS
- Bioanalytical Science

↑ The claSSeS that we have  
Selected for the certificate  
courSe



## For More Information

- Dr. Deepa Verma - Room No. 115, New College
- Mr. Pratik Gangavane - 3rd Floor, Soil & Water testing laboratory, Old Building, VIVA College
- Mr. Santosh Dhangada - 3rd Floor, Soil & Water testing laboratory, Old Building, VIVA College



**CERTIFICATE COURSE FORMAT**

<b>Sr. No</b>	<b>Particulars</b>	
1.	Department	<b>VIVA Centre for Advanced Research and Development</b>
2.	Name of the Course and Course Code	<b>Certificate Course on Soil and Water Analysis Techniques CC - SWAT</b>
3.	Code	<b>CC - SWAT</b>
4.	Duration	<b>30 Hours</b>
5.	Date of Commencement	<b>01-06-2022</b>
6.	Curriculum / Syllabus copy of the course	<p><b>Course description:</b>                      The course provides a comprehensive overview of the Soil and Water Analysis techniques. The course covers the basic principles of Soil and Water and Analysis, its theory, and working of various Instruments required for analysis. This programme is meant for students of Science covering the basics of various analysis and Instrumentation techniques. The students will get knowledge of the application of these techniques in one's life and also how these techniques cater to different fields which include Agriculture, environment, pharmaceuticals, etc.</p> <p><b>Introduction to the Techniques</b>                      Overview, principle and theory of the techniques involved.  <b>Sample preparation for Analysis wet lab techniques.</b>  <b>Sample Analysis using wet lab techniques.</b>  <b>Sample preparation for UV-Vis Spectroscopy.</b>  <b>Working of the instrument UV-Vis Spectrophotometer</b>                      Students will be given a technique where they will be using the machine and would get hands-on experience.  <b>[Observation, Discussion, Result interpretation                      Assessment 01]</b></p> <p><b>Sample preparation for Nitrogen Analyzer.</b>  <b>Working of the instrument Nitrogen Analyzer</b>                      Students will be given a technique where they will be using the machine and would get an handson experience.  <b>[Observation, Discussion, Result interpretation                      Assessment 02]</b></p>

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		<p><b>Sample preparation for Flame Photometer.</b>  <b>Working of the instrument Flame Photometer</b>                  Students will be given a technique where they will be using the machine and would get an hands on experience.  <b>Observation, Discussion, Result interpretation</b>  <b>Assessment 03 (Quiz)</b></p>
7.	Committee (BoS) for framing of syllabus	<ol style="list-style-type: none"> <li>1. Chairman - Dr. Deepa Verma</li> <li>2. Coordinator - Mr. Pratik Gangavane</li> <li>3. Member - Mr. Parneet Gond</li> <li>4. Member - Mr. Santosh Dhangada</li> </ol>
8.	Mode of Delivery of the curriculum	Offline
9.	Assessment procedure	Tests, Quiz
10.	Outcomes of the program	Students will be able to : <ol style="list-style-type: none"> <li>1. Sample preparation and Analysis for Soil and Water.</li> <li>2. Hands-on experience on UV-Visible Spectrophotometer.</li> <li>3. Hands-on experience on Nitrogen Analyzer.</li> <li>4. Hands-on experience on Flame Photometer.</li> </ol>

Pratik Uttam Gangavane

Name & Signature of Course Coordinator

Dr. Deepa Ramabhilash Verma

Name & Signature of HOD/ Coordinator