



Department of Civil Engineering

Faculty Profile

Dr. (Mrs) Vidya Nitin Patil
Ph.D (Civil Engineering)
Professor

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ResearchAreas / Areas of Interest

❖ Geotechnical Engineering, Construction management, Innovation, Startup

Personal Details

Date of Birth : 18/05/1975

Domicile: Maharashtra

Gender : Female

Blood Group: A+ve

Contact Details: vnpatil@aiissmscoe.com

Academic Background

S. NO.	Qualification	Specialization	University	Class/Grade	Year of Passing
1	Ph.D.	Geotechnical Engineering	Mumbai University		2016
2	M E : Civil Engineering	Construction management	Pune University	First Class	2008
3	B E : Civil	Advanced	Shivaji	First Class	2000

	Engineering	Structural Design	University		
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Work Experience

4	Diploma in Civil Engineering	Water resource Engineering	Government Polytechnic Kolhapur	First Class	1996
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S. No.	Type of Experience	Years	Months
1	Teaching	23	
2	Research	9	
3	Industry	1	
4.	Others	--	--
Total		24	

Subjects / Courses Taught

S. No.	Subject	UG/ PG	Class (FE/SE/TE/BE/ME)	No of times Subject Taught
1	Engineering Mechanics	UG	FE	18
2	Basic Civil and Environmental Engineering	UG	FE	18
3	Structural Design & Drawing III	UG	BE	03
4	Dams & Hydraulic Structure	UG	BE	01
5	Hydrology and water resources Engineering	UG	TE	01
6	Project Management and Engineering Economics	UG	TE	01
7	Foundation Engineering	UG	TE	01

8	Engineering Economics and Financial Management	UG	TE	02
9	Remote sensing and Geographic Information System	UG	TE	01
10	Project Management	UG	SE	01

Research Publications

	National	International	State	SCI/ Scopus Indexed	UGC Approved
Journals	5	13		06	10
Conferences	15	10	-		--

Publication Details (Journals)

➤ A) Journal paper publications

1. **V.N. Patil, H.S.Chore and V.A.Sawant (2021) Bearing Capacity of Reinforced Embankment Slope Models of Fly Ash and Furnace Slag, Transportation Infrastructure Geotechnology,33 (1), 1-28.**
2. **V.N. Patil, H.S.Chore and V.A.Sawant (2020) Numerical analysis of reinforced embankment slopes made up of pozzolanic waste materials, International Journal of Geo-Engineering 11 (1), 1-25.**
3. **V.N. Patil and H.S.Chore: (2016): “Bearing capacity behaviour of a strip footing on model slopes made up of fly ash and furnace slag”, International Journal of Geotechnical Engineering, Taylor and Francis Publication , Vol. 11(5) pp. 431-440.**
4. **RitikShinde, Tejas Bang, BaktiPatil, V N Patil, (2023) Creation of Geographical Information System using Global Positioning System Data , The Indian Journal of Technical Education, ISTE Vol. 46 July 2023.**
5. **RiteshIngawale, VishwajeetDeshmukh, ShubhankarPurandare, Sampat Gore, Vidya N Patil(2023)Flood Assessment of Western Maharashtra Region using QGIS ,The Indian Journal of Technical Education, ISTE Vol. 46 July 2023.**

6. AtharvHarpale, MokshadaBhagat, PG Mushrif (Joshi), R RItkarkar, Vidya Nitin Patil(2023)Sand Wash Plant,The Indian Journal of Technical Education, ISTE Vol. 46 July 2023.
7. **Dr. Vidya Nitin Patil, Dr. DeepaliMilindUjalambkar, Dr. Ganesh C. Chikute, Prajwal Gaikwad, Pankaj R. Modak, Dr. Vivek S Chavhan (2023):** “Prediction of Compressive Strength of High Strength Concrete usingArtificial Intelligence and Machine Learning Techniques” MATERIAL SCIENCE AND TECHNOLOGY, Vol.22 No.10 Oct 2023.
8. **TanujaDhope, Rajneesh Tyagi, Vidya Nitin Patil, VeeramaniVijayaRaghavan, Tarun K. Sharma, Usha C. Pawar, (2022)** “Facial Recognition with the Super Pixel Entropy Estimation with the Virtual Assistance System “, International Journal Of Intelligent Systems And Applications In Engineering, VOL. 10 NO. 2S.
9. **V.N. Patil And Ms. Moholkar (2019), Productivity Analysis Of Building Construction Using Mivan Formwork, International Journal Of Innovative Research In Technology , 2019, 6(1) pp. 45-48.**
10. **Dr. Vidya Nitin Patil (2020) has published a research paper on, “Heavy Metal Removal by using Different Agricultural Waste Adsorbents” in Test Engineering & Management journal in March/April 2020.**
11. **Dr. Vidya Nitin Patil (2020) has published a research paper on, “Automatic Equal Quantity and Quality Water Distribution” in Test Engineering & Management journal in March/April 2020.**
12. **V.N. Patil, A R LamborAnd R B Lambor (2018) Alternative Vaporized Gasoline Fuel, Journal of Advances and Scholarly Researches in Allied Education, 15 (1), April 2018**
13. **V.N. Patil, Gaurav Dudhe(2018) Crack Detection for Civil Engineering Structures, Journal of Advances and Scholarly Researches in Allied Education), 15(12) Dec. 2018.**
14. **Dr. Vidya Nitin Patil and KalyaniChavane (2017) published a research paper Life Cycle Assessment towards Environment Friendly Building, Journal of Advances and Scholarly Researches in Allied Education, 14(1) Oct 2017.**
15. **V.N. Patil And H.S.Chore: (2016): “Bearing Capacity Of Embedded Strip Footing On Geogrid-Reinforced Fly Ash Emabnkment”, Open Journal Of Civil Engineering (Scientific Research Publishing),Vol. 6, Pp 179-187.**
16. **N. W. Ingole And V.N. Patil (2013): Cadmium Removal From Aqueous Solution By Modified Low Cost Adsorbent(S): A State Of The Art” Is Published In International Journal Of Civil, Structural, Environmental And Infrastructure Engineering Research And Development (Ijcsierd). Issn 2249-6866 Vol. 3, Issue 4, Oct 2013, 17-26.**
17. **V.N. Patil (2012): “Economic Evaluation: Life Cycle Of The National Games Road” Is Published In “International Journal Of Engineering Science And Technology”. Issn : 0975-5462, Vol. 4 No.03 March 2012, 1145-1152.**

➤ B) Book chapter/ paper in proceeding publications

S.No	Title	Author's Name	Publisher	Year of Publ

1	Bearing Capacity of Geocell Reinforced Model Fly Ash Slope	Dr. Patil V N , Dr. Chore H S, Dr. Sawant V A	Springer (Proceedings of Indian Geotechnical and Geoenvironmental Engineering Conference ,	2022 ISBN (978-981-19-4738-4, 523054_1)
2	Plaxis 2D Numerical Analysis of Encased Stone Column in Soft Clay	SanketMedhekar, Dr. Patil V N , Dr. Chore H S, Dr. Sawant V A	Springer (Proceedings of Indian Geotechnical and Geoenvironmental Engineering Conference ,	2022 ISBN (978-981-19-4738-4, 523054_1)
3	Role of Women in Science and Technology Research	Dr. R RItkarkar, Dr. V N Patil, Dr. D S Bormane	International Conference on Gender equality and women empowerment.	978-93-90753-85-7

PublicationDetails (Conferences)

B) Paper presentation in conference

Sr. No	Name of Paper	Conference Name , it's Level and organizers	Date
1.	Creation of Geo graphical Information System using Global Positioning System data	National conference NCIET 2023 AISSMSCOE Pune	(31 May 2023)
2.	Flood Assessment of Western Maharashtra Region using QGIS		
3.	Sand wash Plant		
4.	Plaxis 2D numerical analysis of Encasedstone column in soft clay	International conference, Indian Geotechnical and Geoenvironmental Engineering organized by NIT Jalandhar	19-20 Nov 2021
5.	Bearing capacity of Geocell Reinforced Model		
6.	CANAL WATER PRESERVATION WITH SOLAR ENERGY	North East Research Enclave 2022 organised by IIT Guwahati	20-22 May 2022
7.	RIVER BASINCROSSING ROAD PROFILE WITH RSGIS	2 ndInt.Conf. River Corridor, Research &Management , Jointly organized by IIT Guwahati and IIT Jammu	30th May, 2022 – 1 st June, 2022
8.	Role of Women in Science and Technology Research	International Conference on Gender equality and women empowerment. Organized by PVG and GK Pate Institute of Management	8 th March 2022
9.	Automatic Equal Quantity and Quality Water Distribution	in 4th International Conference on Science, Engineering and Technology (ICSET-20), , in Pune, Maharashtra.	6th –7th March, 2020

10.	Heavy Metal Removal by using Different Agricultural Waste Adsorbents	in 4th International Conference on Science, Engineering and Technology (ICSET-20), , in Pune, Maharashtra.	6th and 7th March, 2020
11.	Experimental Study Of Model Footings On Geogrid And Rubber-Grid Reinforced Fly Ash Embankment	International Conference Advances In Construction Materials And Structures (ACMS-2018) , Indian Institute of Technology Roorkee	March7-8 , 2018
12.	Presented paper on “Experimental Study of Model Footings on Geogrid and Rubber-Grid Reinforced Fly Ash Embankment”	Proceedings of the Conference on "Numerical Modeling in Geomechanics", Department of Civil Engineering, Indian Institute of Technology, Roorakee.	February 24-25, 2017
13.	Co- Author of Paper “Numerical Analysis of Fly Ash Embankment”	Proceedings of the Conference on "Numerical Modeling in Geomechanics", Department of Civil Engineering, Indian Institute of Technology, Roorakee.	February 24-25, 2017
14.	Reinforced Fly Ash Slope Using Different Geosynthetics	“SPPU-Innovation 2016” - RajarshiShahu College of Engineering, Tathawade, Pune	6th Oct, 2016
15.	Paper Presented on “Bearing Capacity of Embedded Strip Footing on Geogrid-Reinforced Fly Ash Embankment”	Proceedings of the National Conference on Advanced Structural Engineering, Department of Civil Engineering, Govt. College of Engineering, Karad	February 27-28, 2016
16.	Paper Presented on “Performance studies of model unreinforced fly ash embankment”	Proceedings of the National Conference on Smarter Cities-India: Smarter Solutions for a Better Tomorrow (SCI-2015), Department of Civil Engineering, Sinhgad College of Engineering, Pune, Maharashtra,	June 8-9, 2015
17.	Presented paper on “ Reinforced Fly Ash Embankments: Review”	Proceedings of the International Conference on Sustainable Civil Engineering Structures (ICSCE-2014), Department of Civil Engineering, Indian Institute of Technology, Hyderabad	October 17-18, 2014
18.	Presented paper on “Improvement in water supply in Pune city – A challenge”	45th Annual Convention Indian Water Works Association, (IWWA) Pune, 2013.	10/01/2013 to 12/01/2013
19.	Presented paper on“ An overview of construction and demolition waste”	Indo Italian Conference on emerging trends in Waste management technologies - 2009	03/12/09 to 04/12/09
20.	Presented paper on “Mechanized Construction of Cement Concrete Road Using Slip Form Technique”	International Conference on “Emerging Trends in Engineering” Pravara Rural Engineering College, Loni, India	20/12/08 to 22/12/08
21.	Presented paper on “Life Cycle Cost Analysis of Roads”		
22.	Participated as Co-author: paper on “EIA		

	of Irrigation Projects: Neglected Intangible Benefits”		
23.	Presented paper on “ Road pricing: The Economic Instrument For Sustainable Road transport”	In the four day International Conference on “Transportation Planning and implementation Methodologies for developing countries”. IIT Bombay, Mumbai, India.	03/12/08 to 06/12/08
24.	Presented paper on “Economic Analysis for a Proposed Flyover Scheme at Sancheti Hospital, Pune”.		
25.	Presented paper on “ Sustainable Road Asset Management” ISBN NO. 978-81-8424 -349-9	In the three-day International Conference on “Best Practices to Relieve Congestion on Mixed- Traffic Urban Streets in Developing Countries”. IIT Madras, Chennai, India.	12/09/08 to 14/09/08

➤ **Poster presentation in conference**

1	Reinforced Fly Ash Slope Using Different Geosynthetics	“SPPU-Innovation 2015”, at D Y Patil IEMR, Akurdi.	06/07/2015
2	Reinforced Fly Ash Slope Using Different Geosynthetics	“ SPPU - AVISHKAR 2016”, at	06/07/2015
3	POSTER - Model testing of Reinforced Fly Ash Slope Using Different Geosynthetics	SPPU - AVISHKAR 2017”, at AISSMS COE, Pune 19/12/2017	02/01/2018

PhD / ME / BE Student Guided for Project

Level	Ph.D.	M.E. (PG)	B.E. (UG)
No. of Student guided	4	1	38

Professional Memberships

Professional Body	Level (National/ International)	Type (Fellow/Life/Annual)
ISTE	National	Life time
Institution of Engineers (IEI)	National	Life time

International Association of Advanced Materials.	International - 785182914859	Life time
Computer Science Teachers Association	International	Life time
Institute For Engineering Research and Publication (IFERP)	National	Life time

Patents/IPR Filed/ Granted

Sr. No	Patent / IPR /	Title	Year
1.	Granted Design PATENT	Water Distribution Apparatus with inbuilt Flow Rate Control Mechanism	2023
2.	Granted PATENT	DEVICE FOR TESTING OPTIMUM BEARING CAPACITY OF GEOTECHNICAL MATERIALS WITH A SLIDING LOAD FRAME	2022
3.	PATENT	Regular Equal Water Distribution System	2022
4.	PATENT	Adjustable Stand For Mobile Display	2022
5.	Granted Design PATENT	Apparatus For Testing And Measuring Strength Of Embankment Material	2022
6.	Granted Design PATENT	Writing Board With Arrangement Of Projector And Camera	2021
7.	Granted Design PATENT	Rubbergrid For Reinforcement In Highway Construction	2021
8.	PATENT	ADVANCED ELECTROMAGNETIC FIELD DETECTOR	2020
9.	PATENT	PORTABLE INEXPENSIVE POTENTIOSTAT	2020

10.	PATENT	AUTOMATIC GATE OPERATING DEVICE	2018
11.	PATENT	VAPOURISED GASOLINE FUEL.	2018
12.	PATENT	TYRE GRID REINFORCED EMBANKMENT OF POZZOLANIC MATERIALS	2018
13.	PATENT	CROWD PULLER MOTOR	2018
14.	PATENT	TYREGRID EMBANKMENT REINFORCMENT	2018

Books Published

S. No	Title	Name of the Publisher	ISBN/ISSN Number
	-	-	-

Research Grants Received

S. No	Program	Duration	Funding Agency	Grant Amount
1	Title of Project: REINFORCED FLY ASH SLOPE USING DIFFERENT GEOSYNTHETICS	2014-16	SavitribaiPhule Pune University (SPPU) BCUD –R& D fund	Rs. 2,00,000.00
2	Title of STTP: Emerging applications in GIS (Three phases – Online : 30th Nov 2020 to 12th Dec 2020)	2020-21	AICTE - Short Term Training Program fund	Rs. 2,82,633.00

Details of Workshop / STTP / FDP / Seminar / Conferences Organized

1. AICTE sponsored STTP (2.82,663/-) organized on Emerging Trends in Geographic Information System in three phases from 30th November 2020 to 19th December 2020.

2. Online Webinar series organized on “Startup Innovation ” from 28th May 2020-3rd June 2020.
3. Open online “ Atmanirbharata Start up Competition 2020” organized from 1st June to 25th June 2020.
4. Ideathon 2020-21 : Inter-department Startup Idea competition
5. Technical Committee member in Swayansidha Hackathon Start up Competition 2020
6. Ideathon 2019-20 : Inter-department Startup Idea competition
7. SIH Internal 2019 : AICTE Drive participation as SPOC member coordinator
8. Coordinator, SPPU District level Avishkar Rural 2019-20
9. State level Workshop on “Eco Housing: Certification of Residential Buildings -2010”, in ALL INDIA SHRI SHIVAJI MEMORIAL SOCIETY’s Institute of Information of Technology, Pune 411001, on 5th October – 6th October, 2010.

Contribution as Resource Person

S. No.	Place/ Organization	Topic	Level(National/Int/ State/Regional)	Date
01	Dr. D YPatil Institute of Management &Research (DYPIMR)	ATAL Design Thinking to Nurture Creativity and Innovation Leading to Entrepreneurship (Advanced Level)	National	04.01.2022 to 08.01.2022
02	SVERI Pandharpur	Innovation and Startup	Regional	30 October 2019
03	Pratibha Institute of Business Management	IPR- Management	Regional	24 June 2022
04	SVERI Pandharpur	Finance Management in Construction Industry	Regional	27 July 2023

Details of Workshop / STTP / FDP / Conferences Attended

Sr.	(STTP) Program	Venue / organized and sponsored by	Period
1.	Online FDP on “ Building Start Up And Innovation Centre “	MHRD & UGC – HRDC & SPPU	26/10/2020-30/10/2020
2.	Chemistry and Engineering aspects of water remediation	COEP – TEQIP- III sponsored	1-5 July 2019
3.	FDP on Data Science	Shivaji University with AISSMS Coe Pune	17-22 June 2019
4.	FDP on Vision – Mission PEO PSO PO CO framing and mapping Assessment and attainment.	AISSMS Coe Pune	10-15 June 2019
5.	FDP on Entrepreneurship	DST sponsored Science & technological Park, SPPU	9/12/2019-20/12/2019
6.	Advances in Concrete and Concrete Technology	MIT Pune	28 Sept, 2018
7.	Reference management in Research using Mendeley	Vishwniketan Institute of Management , Kumbhiuvali	19 Sept 2018
8. 9.	STC on “Recent advances in the field of transportation and infrastructure development”	DattaMeghe College of Engineering, Airoli, Navi Mumbai	20/12/2016 to 24/12/2016
10.	Faculty development Programme	AISSMS COE, Pune	25 and 27/07/2016
11.	Spoken Tutorial Project on LaTeX	Indian Institute of Technology, Bombay	29 August 2015
12.	STC on “Structural Dynamics, Seismic Design of High Rise Building and Machine Foundation”	DattaMeghe College of Engineering, Airoli, Navi Mumbai	09/04/2015 to 13/04/2015
13.	One day workshop on “Revision of Syllabus- S. E. Civil- 2012 Course”	Dr. D Y Patil School of Engineering & Technology, Charholi, Lohgaon, Pune	23/02/2013

14.	One day workshop on “Engineering Mechanics-2012 Course”	AkhilBharatiya Maratha ShikshanParishad’s College of engineering & Research, Parvati, Pune	21/01/2013
15.	One day workshop on “Water distribution system- Problems and remedial measures”	AISSMS COE, Pune	21/09/2012
16.	STC on “Finite Element Method and It’s Application in Civil Engineering”	IIT Mumbai, Mumbai.	2/07/12 to 6/07/12
17.	STTP on “Mission 10 X – Wipro”	Government College of Engineering, Pune.	12/03/12 to 16/03/12
18.	STC on “Climate change and water management”	IIT Mumbai, Mumbai.	28/02/10 to 4/03/10
19.	STTP on “ Counseling and Motivation for teachers”	National Institute of Technical Teacher’s Training & Research(NITTTR), Pune.	26/10/09 to 30/10/09
20.	STTP on “Environment and Waste Management Technology”.	MIT college of Engineering, Pune,	08/12/08 to 12/12/08
21.	“Faculty Development Program” conducted by Summit Training & Management Solutions Pvt. Ltd.	AISSMS’s Institute of Information Technology, PUNE.	24/07/08 to 01/08/08

Major Professional Responsibilities Handled

S. No.	Role and Responsibilities
01	Convener Institutional Innovation Council
02	Coordinator Start up Innovation Cell
03	IQAC Member From 2020-21
04	Student research work innovation -Mentoring skills : Paper presentation, Start up activities, Smart India Hackathon, R & D funds, Academics, Practical, Problem solutions, social activity, cultural l activity, Sports, Every semester 20 students till Graduation.

Awards Received

Awards Received			
Sr. No	Name of award / Recognition	Year	Incentives
1.	MENTOR OF SIH 2022 WINNING TEAM	2022	Mentor Rs. 1 Lakh.
2.	Students received Job offer in KloudQ company as SPPU Hackathon winner	2021	Mentor
3.	Mentor Certificate - Students Received Gold medal in Overall and 1 st Rank in Engineering and Technology Anveshan 2020 National Level Student Research competition Students got Rs.75000.00 from AIU Delhi and Rs. 20,000.00 from SPPU on foundation Day	2020	Received Certificate
4.	State Level AVISHKAR 2019 and Innovation Project Arranged by University of Mumbai. (19-20 February) Won 1 st Rank in AVISHKAR 2019 : Best Innovation Project representing SPPU at State Level - Mentor of the Best Innovation Project “Automated railway crossing with auto train speed control and live tracking”	2020	Received Certificate
5.	Anveshan (2019-20) Rank 1 Certificate of Mentor Representing SavitribaiPhule Pune University (SPPU) And Maharashtra Team Guide of a Student Research Project “Automated railway crossing with auto train speed control and live tracking” Anvention (2019-20) West Zone Inter-University Student Research competition Arranged by Association of India Universities, New Delhi and Department of Students development at University of Mumbai. (19-20 February, 2020)	2020	Received Certificate
6.	Session Chair Person in International Conference on Science Engineering and Technology (ICSET-2020) Pune , Maharashtra	2020	Received Certificate
7.	Organizing Committee Member in International Conference on Science Engineering and Technology (ICSET-2020) Pune , Maharashtra	2020	Received Certificate
8.	Organizing Committee Member International Conference on Recent Development Trends In Engineering & Technology (ICRDTIET- 2020) Nagpur , Maharashtra	2020	Received Certificate
9.	Students Mentee Received award +Cash Prize Rs.50000/- Won 2 nd Prize , I2E Final Start up Competition Mentor : Start up – Trash to Cash SPPU 71 st Foundation Day	10 th Februry	Mentor

	Award Function,		
10.	Mentor - One team is shortlisted for semifinal IICDC 2019. For Automation Electronics Texas Instrument Kit is received as award (costing Rs. 20,00.00) Electronics Texas Instrument Kit MHRD , AICTE , IIM B Drive with DST- Texas Instruments	2019	Mentor
11.	Best Paper Award	2018	Certificate , Cash
12.	Mentor IICDC – Texas Instrument , DST, MHRD, AICTE, MyGovt	2018	Memento
13.	Mentor of Business Proposal - Different more than 30 teams are mentored IICDC - MHRD , AICTE , IIM B Drive with DST- Texas Instruments	2018	Certificate
14.	Elite Academician IICDC 2019	2019	Photo on MyGov Portal
15.	MY GOV IICDC 2019 : Jury Member Task – Online 15 Business different Proposal are evaluated : MHRD , AICTE , IIM B Drive with DST- Texas Instruments	2019	Gift as Remuneration
16.	Mentor SIH 2019	2019	Certificate , Memento
17.	Coordinator of Avishkar 2019 – District Level (Engineering Rural)	11 th Jan, 2020	SPPU
18.	Judge – Order with Thanks giving letter Jury member of Avishkar 2019 – District Level (Engineering Urban)	12 th Jan, 2020	SPPU with PCCOE, RAVET
19.	Awarded as Mentor of winning team - Won 2 nd Prize , I2E Final Start up Competition, SPPU “Start up – Trash to Cash”.	2020	Certificate
20.	Mentor of the Best Innovation Project “Automated railway crossing with auto train speed control and live tracking” Won 1 st Rank in AVISHKAR 2019 : Best Innovation Project representing SPPU at State Level. Arranged by University of Mumbai. (19-20 February).	2020	Certificate ,
21.	Mentor and Guide of a Student Research Project “Automated railway crossing with auto train speed control and live tracking” Anvention (2019-20), West Zone Inter-University Student Research competition Arranged by Association of India Universities, New Delhi and	2020	Certificate ,

	Department of Students development at University of Mumbai. (19-20 February).		
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- **Consultancy Work: -** Expert Panel Member in Eco Housing Certification Program in Pune Municipal Corporation, Science & Technology Park, Pune University, Pune.

Declaration: I hereby declare that all the statement made above are correct to the best of my knowledge and belief.

Dr. (Mrs) Vidya Nitin Patil