



CHAGARLAMUDI BABY RANI



Designation : Associate Professor & HOD
E-Mail ID : cbr@vrsiddhartha.ac.in
Contact at : S&H-II/107, Department of Mathematics,
Velagapudi Ramakrishna Siddhartha School of Engineering,
Kanuru, Vijayawada, Andhra Pradesh 520007.

Education

Ph. D (Fluid Dynamics)

2011, Acharya Nagarjuna University, Guntur.

M.Phil (Applied Mathematics)

1998, Andhra University Engineering Campus, Visakhapatnam

M.Sc (Applied Mathematics)

1991, Andhra University, Visakhapatnam.

B.Sc (MPC)

1988, Maris Stella College (Acharya Nagarajuna University), Vijayawada.

Experience

Period	Designation	Institution / Organization	Key Responsibilities
2024-Till Date	Associate Professor & HOD Mathematics & Incharge of I/IV B.Tech	Siddhartha University (SAHE)	Curriculum design, Ph.D. guidance, research publications, academic leadership, NBA/NAAC coordination, I/IV B.Tech (S&H-II) Block Incharge Key Responsibility, BOS Member, Subject Expert.
2012-2024	Associate Professor & HOD Mathematics & Incharge of I/IV B.Tech	Velagapudi Ramakrishna Siddhartha Engineering College	
2009-2012	Sr. Lecturer & HOD Mathematics	Velagapudi Ramakrishna Siddhartha Engineering College	
1998-2009	Lecturer	Velagapudi Ramakrishna Siddhartha Engineering College	
1991-1998	Lecturer	Gandhiji mahila Kalasala	

Research Interests

Broad Area of Research :

- Fluid Dynamics

Honors and Awards

-
-
-

Courses Taught

S.No	Course Name	Level (UG/PG)
1	Linear Algebra, Series and Calculus	UG
2	Differential Equations and Numerical Methods	UG
3	Probability and Statistics for Engineers	UG
4	Probability and Statistics	UG
5	Complex Analysis Transform Techniques and Statistics	UG
6	Discrete Mathematics	UG
7	Computer Applications in Numerical Analysis Lab	UG
8	Mathematics Foundation for Data Science	UG
9	Mathematics Foundation for Data Science Lab	UG
10	Optimization Techniques	PG
11	Fluid Dynamics	Pre Ph.D.(KU)
12	Numerical Methods	Pre Ph.D.(KU)

Research Profile

Publications

The recent publications and research contributions can be viewed from the following URLs

Google Scholar	https://scholar.google.com/citations?hl=en&user=4svMva4AAAAJ
Scopus	https://www.scopus.com/authid/detail.uri?authorId=57201653452
Orcid	0000-0001-5658-7144

Recognized Research Supervisor

S.No.	Department	University
01.	Mathematics	Siddhartha University (SAHE)
02.	Mathematics	Jawaharlal Nehru Technological University, Kakinada
03.	Mathematics	Krishna University

Funded Research Projects

S.No.	Type	Title	Status	Funding Agency	Amount (INR)	Duration
--	--	--	--	--	--	--

Administrative Roles

S.No.	Role	Institution	Duration	Responsibilities
1	HOD Mathematics	VRS School of Engineering	March 2024 to till date	Responsible for academic and administrative leadership of the department, including curriculum planning, faculty coordination, quality teaching, examinations, and student guidance.
		V R Siddhartha Engineering College	2009-2024	
2	In-charge of I/IV B.Tech(S&H II)	VRS School of Engineering	March 2024 to till date	Responsible for academic and administrative activities of first-year B.Tech, including class schedules, attendance, assessments, discipline, and student support.
		V R Siddhartha Engineering College	2020-2024	
3	Equal Opportunity Cell Chairperson	VRS School of Engineering		Ensures fairness and inclusivity by addressing grievances, supporting disadvantaged groups, and promoting equal opportunities for all students and staff.
4	ICC Chairperson	V R Siddhartha Engineering College	2012 to 2024	the Internal Complaints Committee to ensure safety, address complaints, conduct inquiries, and promote awareness on gender sensitization

Certifications/MOOC Courses Completed

S.No.	Title	Platform	Duration	Year
1.	Transform Calculus and its applications in Differential Equations	NPTEL	12 Weeks	2019
2.	Numerical Methods: Finite Difference Approach	NPTEL	4 Weeks	2018
3.	Probability and Statistics: To p or not to p?	Coursera	16 hours	2020
4.	Introduction to Statistics & Data Analysis in Public Health	Coursera	15 Hours	2020
5.	Linear Regression in R for Public Health	Coursera	15 hours	2020
6.	Introduction to Thermodynamics: Transferring Energy from Here to There	Coursera	15 hours	2020
7.	Electrodynamics: Electric and Magnetic Fields	Coursera	12 Hours	2020
8.	Fundamentals of Fluid-Solid Interactions	Coursera	9 Hours	2020
9.	Logic for Economists	Coursera	7 Hours	2020
10.	Fundamentals of Fluid Power	Coursera	19 Hours	2020
11.	Logistic Regression with NumPy and Python	Coursera	1 Hour	2020
12.	Linear Regression with Python	Coursera	1 Hour	2020
13.	Linear Regression with NumPy and Python	Coursera	1 Hour	2020
14.	Create Your First Python Program From UST	Coursera	2 Hours	2020
15.	Build a Data Science Web App with Streamlit and Python	Coursera	2 Hours	2020
16.	Matrix Algebra for Engineers	Coursera	19 Hours	2020
17.	Matrix Methods	Coursera	6 Hours	2020

18.	Differential Equations for Engineers	Coursera	26 Hours	2020
19.	Vector Calculus for Engineers	Coursera	29 Hours	2020
20.	Introduction to Calculus	Coursera	58 Hours	2020
21.	Learning How to Learn: Powerful mental tools to help you master tough subjects	Coursera	15 Hours	2020
22.	AI For Everyone	Coursera	6 Hours	2020

Consultancy / Industry Projects

Completed	00
On-going	00
Applied	03

Patents

S.No	Title	Status	Application No.	Year
1.	An Artificial intelligence and IOT based fabric defect detection and Method thereof	Granted	202341022907	05/05/2023
2.	Magneto hydrodynamic heat transfer using water –based nanofluids with solet and viscous dissipation effects	Granted	202141033308A	06/08/2021
3.	Under Water Pollution monitoring system to prevent fatalities of aqua echosystem	Granted	202041044264	03/07/2020

Ph.D

Awarded	01
Guiding	03

Invited Talks

No. of Invited Talks	05
-----------------------------	----

Professional Service / Reviewer

- Reviewer in Elsewhere

Professional Development Activities - Participations

Faculty Development and Training Programmes (at least 5 Days)	20
International / National Level Seminars	10 / 05
International / National Level Conferences	06 / 10
Workshops	20
Instructor Led / Self-Paced Courses	--
Webinars	--

Professional Bodies Membership Details

S.No.	Membership No.	Society Name
1.	LM 27304	The Indian Society for Technical Education

(Dr. Ch Baby Rani)
