



**KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)**

DEPARTMENT OF MATHEMATICS

ACTIVITIES CONDUCTED

UNDER

DBT STAR COLLEGE SCHEME

HANDS ON TRAINING 2024 - 2025



S. No.	Name of the event/ Activity	Date	Resource Person	Number of Beneficiaries	Outcome
1.	Hands on Training on “MATLAB - Programming for Beginners”	07.08.2024	Dr. P. Murali Krishna Assistant Professor, Department of Mathematics, Amrita Vishwa Vidyapeetham, Coimbatore.	Maths: 53 Computer: 9 Chemistry: 5	The Program helped the students to enhance their proficiency in MATLAB by covering key areas such as the basics of MATLAB, the use of functions and plotting graphs using MATLAB software
2.	One Day Hands on Training on “Power BI”	20.09.2024	Dr. V. Radhamani Assistant Professor Department of Mathematics J.K.K. Nataraja College of Arts and Science, Komarapalayam.	Maths: 49 Physics: 03 Chemistry: 05	Student developed their practical skills in data visualization and the training offered valuable insights into using Power BI as a powerful tool which facilitates connecting and transforming various data sources for large data set.

3.	Hands on Training on “R Programming”	21.01.2025	Dr. V. Parthiban, Associate Professor, Vellore Institute of Technology, Chennai.	44 Students	Students learned to install and use R programming effectively, which enhanced their knowledge in Statistical Analysis.
4.	Hands on Training on “Data Analysis using Python”	26.02.2025	Dr. Rajkumar Rajasekaran Professor, Data analytics, School of Computer Science and Engineering, Vellore Institute of Technology, Vellore.	50 Students	Students collected secondary data from resource persons and made use of Python packages to visualize the data and analyse the data.
5.	Hands on Training “Programme on Sage Mathematics”	10.03.2025	Dr. M. Gilbert Rani Assistant Professor Department of Mathematics Arul Anandar College Madurai.	37 Students	Students gained practical experience in using Sage Mathematics for Mathematical Computations including Algebra, Calculus, and Differential Equations.
6.	A Hands-on Training on “SCILAB Programming”	14.03.2025	Dr. C. Periyasamy, Assistant Professor Department of Mathematics, SRM Institute of Science & Technology Chennai.	59 Students	Students gained practical experience in SCILAB programming which enhanced their computational skills for Mathematical Modeling, Simulation and Problem-Solving

					techniques in Engineering and Scientific Applications.
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CONFERENCE/ SEMINARS / WORKSHOPS/ ORGANIZED

S. No.	Name of the event/Activity	Date	Resource Person	Beneficiaries	Outcome
1.	Awareness Programme on “Intellectual Property Rights”	16.08.2024	Dr. Parimelazhagan Thangaraj, Professor and Head, Department of Botany, Bharathiar University, Coimbatore.	Maths: 35 Computer: 5	Awareness Programme on Intellectual Property Rights provided students with valuable insights into the importance of protecting creative and innovative works.
2.	One day Seminar on “Modern Algebra: Its Essence and Impact on Real - Life Problems”	04.10.2024	- Dr. K. Kanagarajan, Assistant Professor and Head, Department of Mathematics, Sri Ramakrishna Mission Vidyalaya College of Arts and Science, Coimbatore. - Dr. P. Veeramani, Professor (Retd.), Department of Mathematics, IIT Madras, Chennai.	Students: 64	- Students gained a deeper insight into the relevance of algebra in various real-world scenarios. - The seminar highlighted how algebraic techniques are used to solve practical problems in fields such as Engineering, Economics, and Computer Science.

3.	One day Workshop on “SPSS”	16.12.2024	Dr. D. Sasikala, Assistant Professor in Mathematics, PSGR Krishnammal College for Women, Coimbatore.	Maths: 54 Chem: 5	• Students developed their skills on Data handling through the SPSS software. • Students gained knowledge about various tools and techniques used for Data analysis.
4.	One day workshop on “Vedic Mathematics for Science Students”	23.01.2025	• Dr. N. Mohanapriya, • Dr. A. Amuthalakshmi, • Dr. P. Sathishmohan, Assistant Professors, Department of Mathematics, Kongunadu Arts and Science College, Coimbatore.	Maths: 18 Physics: 23 Botany: 03 Biochem: 06 Zoology: 08 Computer: 08	• Students significantly improved their mental math speed and problem-solving efficiency. • By applying Sutras and participating in group exercises and they developed enhanced skills for performing well in group exams and boosting their overall mathematical proficiency.
5.	8 th International Conference on Current Scenario in Pure and Applied Mathematics (ICCSPAM - 2025)	17.02.2025 & 18.02.2025	• Prof. Dr. Ismail Naci Cangul Professor, Uludag University Faculty of Arts and Science, Department of Mathematics, Gorukle 16059 Bursa, Turkey. • Prof. Dr. Raúl M.	Participants: 102	• Exchange the views on the recent development of different topics of mathematics and also to bring together the leading experts from different countries and also from different parts of our country and other countries.

			Falcón, Associate Professor, Department of Applied Mathematics, University of Seville, Spain. • Prof. Dr. Dafik, Professor, Dean of FKIP the University of Jember, Combinatorics , Graph Theory and Network Topology Research Group, Department of Mathematics Education, Jember, Indonesia.		• It will stimulate the interest of young researchers in important research areas. • The conference will cover a number of research areas such as Algebra, Graph theory, Topology, Differential Equations and their Applications.
6.	A seminar on “Differential Equations and its Applications”	21.02.2025	Dr. K. Kaliraj Assistant professor, Ramanujam Institute for Advanced Study in Mathematics, University of Madras, Chepauk Campus, Chennai.	Students: 35	The seminar provided insights into the theory and solutions of Differential Equations by highlighting its applications in real-world problems across Physics, Engineering and Biology.

INVITED LECTURES

S. No.	Name of the event/Activity	Date	Resource Person	Beneficiaries	Outcome
1.	A Guest Lecture on Navigating Complexity: “Interdisciplinary Learning for Non-Mathematics Students”	02.08.2024	Dr. D. Gunasekaran, Assistant Professor, Department of Mathematics, PSG College of Arts & Science, Coimbatore.	B. Com A&F: 35 BBA CA: 40 B. Com PA: 04 Botany: 05 Chemistry: 12 Physics: 10 Computer: 20 Computer Tech: 20 B. Com IT: 10 156 Students	- Developed the ability to think critically and innovatively by applying interdisciplinary approaches to complex problems. - Gained skills in integrating various mathematical concepts in real-world situations.
2.	Lecture Series on Algebra & Analysis – I	30.08.2024	Dr. M. Sambath, Assistant Professor of Mathematics, Periyar University, Salem	Students: 45	The B. Sc Mathematics students understood the basic concepts of linear Algebra, Vector Algebra and its applications in the field of Differential Equations.
3.	A Guest Lecture on “Student Project Ideas- Interdisciplinary Approach”	23.09.2024	Dr. P. Jayaraman, Assistant Professor, Department of Applied Mathematics, Bharathiar University, Coimbatore.	Maths: 23 Physics: 06 Computer: 07 Chemistry: 01 Biochem: 02 39 Students	- Students gained insight into generating innovative project ideas through interdisciplinary approach. - Students enhanced their understanding of both academic theories and their practical applications in real- world scenarios.

4.	Lecture Series on Algebra & Analysis- II: Fractal Analysis and Its Applications	23.09.2024	Dr. R. Uthayakumar, Professor & Head, Department of Mathematics, The Gandhigram Rural Institute Dindigul	32 Students	Students acquired foundational knowledge of Fractal Analysis and understood the real- world applications of Fractals in Science and Technology which enhances analytical thinking and the ability to model various complex systems.
5.	Lecture Series on Algebra & Analysis – III	20.02.2025	Dr. S. Raja, Assistant Professor, Department of Mathematics, Amrita School of Computing, Amrita Vishwa Vidyapeetham, Nagercoil Campus.	Students: 42	The lecture series provided in-depth insights into advanced concepts of Algebra and analysis which fostered critical thinking and problem-solving skills through theoretical discussions and practical applications.
6.	National day celebration: A Lecture on “Technological Inventions by Indian scientists- An inspiration for future innovators”	24.02.2025	Mr. K. Leninbarathi, Science Communicator, Regional Science Centre, Coimbatore.	Participants: 40	It inspired students to explore innovation and research, fostering a spirit of scientific curiosity and motivating young minds to contribute to the nation's technological growth.

7.	Lecture Series on Algebra & Analysis – IV	03.03.2025	Dr. Shangerganesh Lingeshwaran, Assistant Professor of Mathematics, Department of Applied Sciences, National Institute of Technology, Goa.	Students: 56	Students deepened their understanding of advanced topics in Algebra and Analysis, focusing on abstract structures and their applications which Strengthened problem- solving skills and theoretical insight which enhances for higher-level Mathematical reasoning.
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EXHIBITION / COMPETITIONS CONDUCTED

S. No.	Name of the event/ Activity	Date	Beneficiaries	Outcome
1.	Inter School Mathematics Competitions.	08.10.2024	School Students: 601	Memorizing techniques were taught for the school students which helped them to ease the process of learning Mathematical formulae which creates interest towards the subject.
2.	Online quiz for school students	22.12.2024 - 31.12.2024	School Students: 1889	An online quiz helps assess school students' learning outcomes by testing their understanding and retention of concepts.
3.	Inter-school chess competitions chess carnival 2k25	09.01.2025	Students: 103	Decision making through logical thinking and the skill set to solve the problems were attained by the students

4.	MathExperia 2K25 Inter-Departmental Competitions	19.02.2025	Students: 120	Event provided a vibrant platform for students to demonstrate their mathematical abilities. A range of engaging activities encouraged teamwork, logic, and creativity.
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TRAINING COURSES CONDUCTED

S. No.	Name of the event/ Activity	Date	Resource Person	Beneficiaries	Outcome
1.	Five Days Virtual Faculty Development Programme on “Recent Frontiers in Pure and Applied Mathematics”	11.11.2024 to 15.11.2024	• Dr. G. Nagamani, Assistant Professor, Department of Mathematics, The Gandhigram Rural Institute-Deemed to be University, Dindigul • Dr. V. Parthiban, Associate Professor at Vellore Institute of Technology, Chennai. • Dr. K. Palpandi, Assistant Professor, Department of Mathematics, National Institute of Technology, Calicut. • Prof. Dr. R. Roopkumar, Professor, Department of Mathematics, Central University of Tamilnadu, Thiruvavarur.	618 Participants	• Faculty Development Programme served as a platform for the Faculty members by enriching the knowledge in various fields of mathematics and its application towards real-world problems. • It also served as a discussion forum to share the experience and knowledge to explore the basic dimensions of Mathematical research.

			• Dr. P. Veerasha, Assistant Professor, Department of Mathematics, Christ (Deemed to be University), Bangalore.		
2.	Five-day Winter Training Programme on Pure and Applied Mathematics	27.01.2025 to 31.01.2025	• Dr. P. Veeramani, Retired Professor Department of Mathematics, Indian Institute of Technology Madras, Chennai • Dr. M. Marudai, Honorary Professor, Department of Mathematics, Bharathidasan University, Thiruchirappalli. • Dr. G. Nagamani, Associate Professor, Department of Mathematics, Gandhigram Rural Institute, Dindigul. • Dr. K. Balachandran, Mentor Professor, Department of Mathematics, Bharathiar University, Coimbatore.	Maths: 29 Others: 9 Staffs: 11	• Students and Faculty enabled a deeper understanding The programme Kindled the students mind to know more about innovative applications in various Mathematical fields.

			Dr. R. Gnana Prakasam, Lecture in Department of Mathematics, Tamil Nadu Polytechnic College Madurai (Expert in CSIR- NET).		
3.	Two-day Faculty Training Programme on “LaTeX Quality Documentation-Easy with PC”	13.02.2025 to 14.02.2025	Assistant Professor of Mathematics, Anna University Regional Campus, Coimbatore.	English: 1 Maths: 17 B. Com CA: 2 B.Com IT: 4 Physics: 6 Chemistry: 3 B. Com PA: 3 B. Com: 5 Biotech: 1 Psychology: 5 B. Com A&F: 1	- Enhance participants skills in creating high-quality academic and technical documents using LaTeX. - The sessions focused on simplifying LaTeX usage through practical demonstrations and hands-on experience.

OUTREACH / EXTENSION ACTIVITIES

S. No.	Name of the event/Activity	Date	Beneficiaries of the activity	Outcome
1.	Activity based learning (Yuva public school)	24.12.2024	School Students: 135	Our UG students exhibited their teaching skills and helped the school students to learn mathematics in easy, fun-filled ways and created interest towards the subject.
2.	An Awareness Programme on “Thoughts on Stress Management and Happiness” (For Supporting Staff)	28.10.2024.	Non-teaching Staffs: 20	The awareness programme provided valuable insights on effective stress management techniques and ways to enhance personal happiness.

				Supporting staff gained practical strategies to cope with workplace pressure, improve emotional well-being, and maintain a positive work-life balance.
3.	Awareness Programme on “Pitching Idea for Staggering Genius” for Science Students	15.07.2024	Students: 76	Students gained valuable insights into idea validation, communication strategies and entrepreneurial thinking which enhanced their confidence to pitch creative concepts in future platforms.

INDUSTRIAL VISITS

S. No.	Name of the event/Activity	Place of Visit	Date	Beneficiaries	Outcome
1.	I B.Sc. Mathematics II B.Sc. Mathematics III B.Sc. Mathematics	Radio Astronomy Centre Tata Fundamental Research Centre, Ooty.	15.10.2024	Total: 45	- Students explored the practical applications of Mathematics at the Radio Astronomy Centre, where they learned about data analysis and signal processing in the field of Astronomy. - At the Tata Fundamental Research Centre, they gained insights into advanced concepts like Statistical Analysis and computational methods used in Mathematics. - These experiences deepened their understanding of how Mathematics drives solutions towards scientific research.
2.	I, II & III B.Sc. Mathematics	- Pilikula Regional Science Center. Karnataka - Golden Temple Karnataka - Harangi Dam, - War Memorial at Mangalore, Mangaluru, Karnataka.	21.12.2024 - 24.12.2024	Students: 25 Staffs :05	- Students developed a deeper understanding of Mathematical concepts through hands-on experiences, enhancing their ability to apply Algebra, Geometry, measurement, and data analysis in real-world contexts. - By exploring architectural symmetry, natural environments, engineering structures and scientific exhibits, strengthened their problem-solving skills and fostered a

					deeper appreciation for the practical applications of Mathematics.
3.	I B.Sc. Mathematics II B.Sc. Mathematics III B.Sc. Mathematics	Vijnan Sagar Science and Technology Park, Thrissur.State Museum-Thrissur	25.02.2025	I BSc: 17 II BSc: 16 III BSc: 16 Faculty: 5	• The visit provided the students with practical insights into how Mathematical principles are applied in Science and Technology. • They explored real-world examples of how Mathematics supports its advancements in various fields including Engineering, Physics and Biology.
4.	III B.Sc., II B.Sc., Mathematics	ISRO, Satish Dawan Space Center, Sriharikota.	28.03.2024	Students: 5 Faculty: 2	• Students understood how to work on developing models for various Space Missions and Satellite orbits. • The visit provided real-world application of Mathematics in optimization and scheduling Process.