

**Engineering A Better Tomorrow** 

An Autonomous Institution Affiliated to VTU, Belagavi, Approved by AICTE, New Delhi, Recognised by UGC with 2(f) & 12 (B)

## I BOARD OF GOVERNORS MEETING 1st April 2022

HEARTY WELCOME TO THE CHAIRMAN AND MEMBERS OF GOVERNING COUNCIL

**PROGRESS HIGHLIGHTS** 

### VTU Ranks for 2020-21

Our students have bagged 7 ranks including 3 gold medals in UG and 1 gold medal in PG, in the University Examinations held recently during the academic year 2020-21.

Sl.No.	USN	NAME	Branch	RANK
1	1MJ17AE104	SUSHMA.R.PATIL	B.E -AERO	1 Gold Medal
2	1MJ17AE105	SUSHMASRI.G	B.E-AERO	2
3	1MJ17CH037	SUHAS .G. PURANIK	B.E-CHEMICAL	8
4	1MJ17CH009	CHAVALI SRI SANNIHITA	B.E- CHEMICAL	9
5	1MJ17EC111	REVANTH.M	EC	2
6	1MJ17ML005	DIVYA N.T	ML	1 Gold Medal
7	1MJ17ML004	CHAITRA BHANTAWAR	ML	2

'Dr. M. V. Jayaraman Memorial Gold Medal' to student of B.E. in Aeronautical Engineering who secured highest marks, is awarded to Sushma R Patil, 1MJ17AE104. CGPA Scored: 9.19



#### **Students Achievements:**

- Team Falcon Cruisers headed by Shivalinga N of VII semester Mechanical Engineering won awards in four categories (Best Design & Aesthetics, Best Hill Climb Test, Best Speed Limiter and Future Award) in SIEP-Hero E-bike Challenge, organized by Chandigarh University, Punjab, from 24/12/2021 to 30/12/2021.
- Gokul Kumar M, Deepak P, Abhijith Shetty secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost Power bank", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.
- Venkata Pavithra S, Spoorthy, Sri Lakshmi R secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost USB Charger", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.
- G Hariharan, Aishwarya V, secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost Smart Light System with Power Calculation", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.



### Student's Achievements:

- Vinutha P Hiremath, Rakshitha S, Raksha Hegde secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost Digital Radio", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.
- Bhumika B, Dhanya N B, Gagan Deep J secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost Bluetooth/ USB Headset", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.
- Shravan Kumar Hiremath, Pavan Kumar M, Yashwanth M Y, Raksha Hegde secured 3rd place in Grand Challenge Contest-2021 for the project titled "Design a Low Cost Smart Light System with IoT", organized by CDAC Noida and India Cellular & Electronics Association (ICEA) on 31/01/2022.



### **Industrial Visits:**

- In order to get an exposure to the latest training aids and practical aspects, the department of Aerospace Engineering organized an Industrial visit on 03/12/2021 to Air Force Technical College, Jalahalli for V semester students of Aerospace Engineering.
- Department of Electrical and Electronics Engineering organized two Industrial visits on 31/12/21 and 05/01/22 to Vijaya Power Control Systems for V and VII semester students respectively.

#### **Certification Courses by Students:**

- Adithya M S of III Semester Aeronautical Engineering has completed the online course on the title of "Geo-informatics for Biodiversity Conservation Planning" at Indian Institute of remote sensing (IIRS), Dehradun from 06/12/2021 to 17/12/2021.
- Adithya M S, Arshiya Ahmed K and Izhan Wajahat of III Semester Aeronautical Engineering have completed the online course in the title of "Overview of Geo processing using Python" at Indian Institute of remote sensing (IIRS), Dehradun from 17/01/2022 to 28/01/2022.
- Arshiya Ahmed. K of III Semester Aeronautical Engineering has completed the online course in the title of "Global Navigation satellite systems and location based services" at Indian Institute of remote sensing (IIRS), Dehradun from 21/02/2022 to 4/03/2022.



### **Department of Aeronautical Engineering:**

- Manikandan P, Elayaperumal A, Franklin Issac R, Vijay R and Padmanabham G,"Impact of spark plasma sintering process on tribo surface of Al composites", Surface Topography: Metrology and Properties, Vol. 9, No.4, pp.1-12, 2021, ISSN: 2051-672X, Published on 01/11/2021 (SCI Indexed).
- Tamilselvam Nallusamy and Vijayakumar. S, "Thermal stability of n-TiB2 reinforced SiC-based nanocomposite sintered at 1600°C using TG controlled atmosphere", Journal of Engineering Research, Vol.9, No.4B, pp-396-409, 2021, ISSN: 2307-1885, Published on 04/12/2021 (SCI Indexed)
- Md Helal Miah , Dharmahinder Singh Chand, B. Rahul, Gurmail Singh Malhi, "Mechanical behavior of unsaturated polyester toughened epoxy hybrid polymer network reinforced with glass fibre", Materials Today: Proceedings, ISSN: 2214-7853, Published on 19/01/2022 (Scopus Indexed)



### **Department of Aeronautical Engineering:**

- Surekha D., Rajasekar R, "Study of wake characteristics behind an oscillating NACA 0012 airfoil in deep dynamic stall regime", Aircraft Engineering and Aerospace Technology, ISSN: 0002-2667, Emerald Publishing Ltd., Published on 01/02/2022 (SCI Indexed)
- M. Bhaskar, G. Anand, Tamilselvam Nalluswamy & P. Suresh, "Die Life in Aluminium High-Pressure Die Casting Industries", Journal of the Institution of Engineers (India): Series D, ISSN:2250-2130, Published on 09/02/2022 (Scopus Indexed)



### **Department of Chemical Engineering:**

- Venkata Ratnam, M., Senthil Kumar, K., Samraj, S., Abdulkadir, M., & Nagamalleswara Rao, K. "Effective Leaching Strategies for a Closed-Loop Spent Lithium-Ion Battery Recycling Process", Journal of Hazardous, Toxic, and Radioactive Waste, 2022, Vol. 26 Issue No.2, ISSN (print): 2153-5493 | ISSN (online): 2153-5515, pp: 1-8). (Scopus Indexed, IF:1.44).
- Senthilkumar, K., Naveenkumar, M., Ratnam, M. V., Samraj, S. "A review on scaling-up of microbial fuel cell: Challenges and opportunities. In Scaling Up of Microbial Electrochemical Systems", 2022 pp. 13-28, Book chapter, Elsevier, Scopus. <a href="https://doi.org/10.1016/B978-0-323-90765-1.00002-2">https://doi.org/10.1016/B978-0-323-90765-1.00002-2</a>



#### Department of CSE, AI&ML:

V. V. Kumar, K. M. Karthick Raghunath, V. Muthukumaran, R. B. Joseph, I. S. and A. K. Uday, "Aspect based sentiment analysis and smart classification in uncertain feedback pool," International Journal of System Assurance Engineering and Management, Nov. 2021. DOI: 10.1007/s13198-021-01379-2

- V. V. Kumar, K. M. Karthick Raghunath, N. Rajesh, M. Venkatesan, and R. B. Joseph, "Paddy Plant Disease Recognition, Risk Analysis, and Classification Using Deep Convolution Neuro-Fuzzy Network," Journal of Mobile Multimedia, Nov. 2021. DOI: 10.13052/jmm1550-4646.1829
- Dr.Dhanalakshmi.M., Dr.H.Shaheen, A Systematic Approach on Reducing the Energy Consumption in Green Computing, Design Engineering, Issue 9, 14878 – 14891, Dec, 2021 ISSN 0011-9342.



#### Department of CSE, AI&ML:

- K. M. Karthick Raghunath, M. S. Koti, R. Sivakami, V. Vinoth Kumar, G. NagaJyothi, and V. Muthukumaran, "Utilization of IoT-assisted computational strategies in wireless sensor networks for smart infrastructure management," International Journal of System Assurance Engineering and Management, Jan. 2022, DOI:10.1007/s13198-021-01585-y.
- G. Harshika, U. Haani, P. Bhuvaneshwari, and K. R. Venkatesh, "Smart Pet Insights System Based on IoT and ML," Lecture Notes on Data Engineering and Communications Technologies, pp. 725–738, Jan. 2022.
- Vinay Raj.A.S "Inside Clinical Arena Automated Evaluation Using Selenium testing framework," YMER Digital, vol. 21, no. 01, pp. 453–463, Jan. 2022.



### Department of CSE, AI&ML:

- K. Balamurugan, S. Umamaheswaran, S. Nagarajan, and L. Rao, "Roadmap for machine learning based network-on-chip (M/L NoC) technology and its analysis for researchers," Journal of Physics Communications, vol. 6, no. 2, p. 022001, Feb. 2022.
- M. B. Sudhan, M. Sinthuja, S. Pravinth Raja, J. Amutharaj, G. Pushpa Latha, S. Sheeba Rachel, T. Anitha, T. Rajendran, and Y. A. Waji, "Segmentation and Classification of Glaucoma Using U-Net with Deep Learning Model," Journal of Healthcare Engineering, vol. 2022, pp. 1–10, Feb. 2022.

P. Bhuvaneshwari, A. N. Rao, Y. H. Robinson, and M. N. Thippeswamy, "Sentiment analysis for user reviews using Bi-LSTM self-attention based CNN model," Multimedia Tools and Applications, Feb. 2022. https://doi.org/10.1007/s11042-022-12410-4



### Department of Electronics and Communication Engineering:

- Dr. S. Kanithan, "Negative Capacitance Ferroelectric FET Based on Short Channel Effect for Low Power Applications" in Silicon-Springer, ISSN:1876-990X on 03/02/2022, https://doi.org/10.1007/s12633-021-01625-z. (SCI).
- Dr.S Kanithan, "Implementation and Performance Evaluation of Ferroelectric Negative Capacitance FET" in Silicon-Springer, ISSN:1876-990X on 22/02/2022. https://doi.org/10.1007/s12633-022-01722-7
- Dr. S Kanithan, "Design and analysis of Junction less Fin FET with Gaussian doped for non-polar Structure" in Silicon –Springer ISSN:1876-990X on 05/01/2022, https://doi.org/10.1007/s12633-021-01626-y
- Dr. U. Banerjee, "A Compact Dielectric Resonator Based Dual Port Circularly Polarized MIMO Antenna for Wideband Applications" in Progress in Electromagnetics Research M, Vol. 107, 51 - 63, ISSN: 1937-8726 on 04/01/2022;doi:10.2528/PIERM21091402



### Department of Electrical and Electronics Engineering:

 Bini Babu, H. Sathish Kumar, R. Manjunatha, and S. S. Parthasarathy, "Optimal selection of materials for high performance of carbon-aerogel super capacitors", AIP Conference Proceedings, ISSN 0094-243X (print) 1551-7616 (web), January 2022.

- Atik Mubarak Kazi, Ramasastry D. V. A., Sunil Waddar "Characterization of interwoven roselle/sisal fiber reinforced epoxy composites" Polymer Composites. <a href="https://doi.org/10.1002/pc.26462">https://doi.org/10.1002/pc.26462</a> (Wiley, SCI, IF= 3.171). Vol. -43, Issue-3, March 2022, Pages 1421-1428. Online ISSN: 1548-0569.
- NiranjanHugar, Prashanth, Sridhar GurudasHegde, B Venkata Narayana, Mohan Kumar, and Sunil Waddar, "Fabrication and Characterization of High-Performance Aluminium Composites for Automotive Components" AIP Conference Proceedings. Vol. 2421, Pages. 040006 (2022); <a href="https://doi.org/10.1063/5.0076769">https://doi.org/10.1063/5.0076769</a> (Scopus). ISSN 0094-243X (print) 1551-761



- Santhosh N, HV Harish, GS Sunil, Vivekanand B Huddar, Ashwin C Gowda, N Manjunath, Asif Afzal, Abdul Razak, BA Praveena, Stalling angle predictions of symmetric aero foil by flow analysis, AIP Conference Proceedings, Volume-2421, Issue 1, Pages 050002, <a href="https://doi.org/10.1063/5.0076724">https://doi.org/10.1063/5.0076724</a> (Scopus). ISSN:0094-243X (print) 1551-7616 (web)
- Lijjin P Issac, S Shivakumar, V Umesh, S Sasidhar, N Santhosh, G Shankar, BA Praveena, The design and analysis of helical cross–Axis wind turbine, AIP Conference Proceedings, Volume-2421, Issue1, Pages020004, <a href="https://doi.org/10.1063/5.0076863">https://doi.org/10.1063/5.0076863</a> (SCOPUS). ISSN:0094-243X (print) 1551-7616 (web)
- K. Ramesha, P. D. Sudersanan, Prem Kumar, Shaikh Mohammed Ismail, Ashwin C. Gowda, N. Santhosh and V. Umesh, Influence of heat treatment on the tensile and hardness characteristics of friction stir weld joints of dissimilar aluminium alloys, AIP Conference Proceedings Vol. 2421, Issue -1, Pages 030001 (2022); <a href="https://doi.org/10.1063/5.0076766">https://doi.org/10.1063/5.0076766</a> (SCOPUS). ISSN: 0094-243X (print) 1551-7616 (web)



- Kuriakose Joseph, Sasidhar, K. Ramesha, V. Umesh, G. Vijay Kumar, N. Santhosh, G. Shankar, Abdul Razak, Asif Afzal and B. A. Praveena, Design and optimization of the process parameters for fusion deposition modelling by experimental and finite element approach, AIP Conference Proceedings Volume 2421, Pages 040004 (2022); <a href="https://doi.org/10.1063/5.0076809">https://doi.org/10.1063/5.0076809</a> (SCOPUS) ISSN: 0094-243X (print), 1551-7616 (web)
- Hadiya Pritesh Dulabhai, Anil Raj, Parag Ravindra Deshpande, Thejaraju R., Shivakumar S. and Santhosh N, A review of buoyancy driven underwater gliders, AIP Conference Proceedings, Volume - 2421, Pages 050001 (2022); <a href="https://doi.org/10.1063/5.0079399">https://doi.org/10.1063/5.0079399</a> (SCOPUS) ISSN: 0094-243X (print), 1551-7616 (web)



- Francis, V. Umesh, Sasidhar, S. Shivakumar, N. Santhosh, G. Shankar, Abdul Razak and Asif Afzal, Modelling and CFD simulation of vortex bladeless wind turbine, AIP Conference Proceedings, Volume-2421, Pages 060002 (2022); <a href="https://doi.org/10.1063/5.0076790">https://doi.org/10.1063/5.0076790</a> (SCOPUS). ISSN: 0094-243X (print), 1551-7616 (web)
- M. Sadashiva, N.M. Siddesh kumar, J. Monica, M.R. Srinivasa, N. Santhosh, S. Praveen kumar, Hardness and Impact Strength Characteristics of Al based Hybrid Composite FSW Joints, 2022. Int. J. Vehicle Structures & Systems, Vol. 14 Issue 1, Pages 13-17, <a href="https://doi.org/10.4273/ijvss.14.1.04">https://doi.org/10.4273/ijvss.14.1.04</a> (SCOPUS). Print (ISSN 0975-3060) and Online (ISSN 0975-3540)
- N. Santhosh, H.V. Harish, G.S. Sunil, N. Manjunath, K. Manjunath, Ashwin C. Gowda and Vivekanand B. Huddar, Turbulent Flow in Forced Convection Heat Transfer Numerical Validation, 2022. Int. J. Vehicle Structures & Systems, Vol. 14, Issue 1, Pages 18-21, <a href="https://doi.org/10.4273/ijvss.14.1.05">https://doi.org/10.4273/ijvss.14.1.05</a> (SCOPUS). Print (ISSN 0975-3060) and Online (ISSN 0975-3540)



### **Department of Mechanical Engineering:**

- Praveena B. A, Lokesh N, Abdulrajak, Santhosh N, Praveena B L, Vignesh R,A comprehensive review of emerging additive manufacturing (3D printing technology): Methods, materials, applications, challenges, trends and future potential, Materials Today: Proceedings, Volume 52, Part 3,2022, Pages 1309-1313, ISSN 2214-7853, <a href="https://doi.org/10.1016/j.matpr.2021.11.059">https://doi.org/10.1016/j.matpr.2021.11.059</a>, <a href="https://www.sciencedirect.com/science/article/pii/S2214785321070632">https://www.sciencedirect.com/science/article/pii/S2214785321070632</a>
- Praveena B A, Abdulrajak, Santhosh N, Vikram K Vasu, Jaibheem Hatgundi, Huliya D, Study on characterization of mechanical, thermal properties, machinability and biodegradability of natural fiber reinforced polymer composites and its Applications, recent developments and future potentials: A comprehensive review, Materials Today: Proceedings, Volume 52, Part 3, 2022, Pages 1255-1259,

https://doi.org/10.1016/j.matpr.2021.11.049https://www.sciencedirect.com/science/article/pii/S2214785321070565



- P. Rajeshkumar, G. Shankar, K. Mohankumar, Rahul Patil, A. Pavankumar, P. Pappukumar, Fayaz Ahmed, Computational Analysis of Thermal Performance of Inline Pin Fins Over the Wedge Duct and Combustion Chamber Wall, Vol. 14 Issue No. 1, Pages 22 26, (2022) <a href="https://doi.org/10.4273/ijvss.14.1.06">https://doi.org/10.4273/ijvss.14.1.06</a> (SCOPUS)Print (ISSN 0975-3060) and Online (ISSN 0975-3540)
- VenkateshNaik, Mohan Kumar and VijayanandaKaup, A Review on Natural Fiber Composite Materials in Automotive Applications, Eng. Sci., 2022, Volume 18, Pages 1–10, <a href="https://dx.doi.org/10.30919/es8d589">https://dx.doi.org/10.30919/es8d589</a> (SCOPUS). ISSN: 2576-988X (Print Version) ISSN: 2576-9898 (Online Version).
- S. Santhosh, BhavanaveereshGhali, Bharath, H.S. Vandana, S. Sandeep, Conceptual Design and Calculations for Indi-wheel of E-mobility Vehicle, 2021. Int. J. Vehicle Structures & Systems, Vol. 13 Issue 5, Pages 647-650. <a href="https://doi.org/10.4273/ijvss.13.5.19">https://doi.org/10.4273/ijvss.13.5.19</a> (SCOPUS) Print (ISSN 0975-3060) and Online (ISSN 0975-3540)
- G.L. Chandrasekhar, Y. Vijayakumar, MadevaNagaral, C. Anilkumar, Microstructural Evaluation and Mechanical Behaviour of Nano B4C Reinforced Al7475 Alloy Metal Composites, 2021. Int. J. Vehicle Structures & Systems, Vol. 13, Issue 5, Pages 673-677. <a href="https://doi.org/10.4273/ijvss.13.5.24">https://doi.org/10.4273/ijvss.13.5.24</a> (SCOPUS) Print (ISSN 0975-3060) and Online (ISSN 0975-3540)



- Dr. S Anthoniraj from Dept of Information Science & Engineering has published a paper titled "Sign Language Interpreter Using Machine Learning", 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), DOI: 10.1109/ICAECA52838.2021.9675693, IEEE Explore, in 8-9 Oct. 2021Jan, 2022. (SCOPUS Indexed).
- Dr. S Anthoniraj from Dept of Information Science & Engineering has published a paper titled "Face Mask Detection with Computer Vision & Deep Learning", 2021 International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation (ICAECA), DOI: 10.1109/ICAECA52838.2021.9675478, IEEE Explore, in 8-9 Oct. 2021,Jan,2022. (SCOPUS Indexed).
- Dr. S Anthoniraj from Dept of Information Science & Engineering has published a paper titled, "Economic study and energy analysis of a thermal power plant for the generation of bio-disesel, Materials Today Proceeding, https://doi.org/10.1016/j.matpr.2021.12.598, Feb-2022.



### **Department of Physics:**

A.Muthuraja D. Bharath (2022), Nonlinear optical studies on bioperine crystals grown by vertical bridgeman technique for photonic applications, <u>Volume 149</u>, Page No.107639, ISSN: 0030-3992. Optics and Laser Technology, Science direct (Impact Factor-3.867) (Scopus Index)



### **Department of Aeronautical Engineering:**

- Ms Chandrika M B & Mr. Arun Kumar attended a one-week FDP offered by AICTE-VTU on the topic 'An Overview of Teaching Techniques in Innovation & Design Thinking' from 27/12/2021 to 31/12/2021
- Mr. Arun Kumar K attended a one-week FDP offered by AICTE-BIT on the topic 'Pedagogy and Assessment through Digital Learning' from 07/12/21 to 13/12/2021
- Ms. Ayesha Khan M attended two-day FDP offered by GTRE on the topic 'Aero Gas-Turbine Engine Development in India' on 28-29/01/2022



### **Department of Chemical Engineering:**

- Mrs Amruta S Shet attended a FDP on 'Recent Advances in Wastewater treatment and Recycle', organized by the Department of Chemical Engineering, SDM College of Engineering and Technology, Dharwad Karnataka from 16/11/2021 to 19/11/2021.
- Dr. Sakshi Batra attended a FDP on 'Myriad Regimes Possessing the Potentiality for Chemical Engineers', organized by the Department of Chemical Engineering, M S Ramaiah Institute of Technology, Bangalore, during 14/11/2021 to 19/11/2021.
- Dr. Sakshi Batra attended a FDP on "An Overview of Teaching Techniques in Mathematics Laboratory Using Python Programming, organized by VTU Human Resource Development Centre (VTU - HRDC), Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur, from 21/02/2022 to 25/02/2022.



### Department of Computer Science & Engineering:

- Dr. George Fernandez, Dr. M B Sudhan, Mr. A S Vinay Raj attended one-week AICTE-VTU joint Teachers Training Program on 'Universal Human Values an Overview', organized by VTU HRDC from 02/3/2022 to 06/02/2022.
- Dr. M B Sudhan participated & completed the AICTE Training and Learning (ATAL) Academy Online Elementary FDP on 'Futuristic Trends in Modern Machine Learning & Data Analytics' from 13/12/2021 to 17/12/2021.
- Dr. M B Sudhan attended 6 day AICTE- ISTE online Refresher Programme on 'Blockchain and IOT' from 30.12.2021 to 05.01.2022.
- Dr. M B Sudhan attended AICTE- ISTE approved Orientation/Refresher Programme on 'Outcome based Education: NBA Approach' organized by Gitarattan International Business School, New Delhi from 04/01/2022 to 10/01/2022.



### Department of Computer Science & Engineering:

- Dr. Bhuvaneshwari P, Mrs. Susmitha M N, Ms. Anusha S, Mrs. Kompally Manisha attended a one-week AICTE-VTU joint Teachers Training Program on 'An Overview of Teaching Techniques in Mathematics Laboratory Using Python Programming' organized by VTU HRDC from 21/02/2022 to 25/02/2022.
- Mrs. Navya V K, Mrs. Susmitha M N attended a one-week AICTE-VTU joint Teachers Training Program on 'An Overview of Teaching Techniques in Innovation and Design Thinking', organized by VTU HRDC from 27/12/2021 to 31/12/2021.
- Mrs. Susmitha M N P participated & completed the AICTE Training and Learning (ATAL) Academy
   Online Elementary FDP on 'Applications of Blockchain Technology and AI in Service Sector' from 15/11/2021 to 19/11/2021 at Acharya Bangalore B School.



### **Department of Computer Science & Engineering:**

- Mrs. Geetha Rani attended one week Research Development Program on 'Problem formulation, publication, proposal and Thesis writing' organized by Department of CSE, Alva's Institute of Engineering and Technology in association with IIIT Allahabad from 07/02/2022 to 12/02/2022.
- Ms. Thejashwini M participated & completed the AICTE Training and Learning (ATAL) Academy
  Online Elementary FDP on 'Recent Advancements in Social Internet of Things (SIoT) and
  Industrial Internet of Things (IIoT)' from 14/02/2022 to 18/02/2022 at National Institute of
  Technology, Puducherry.



### **Department of Civil Engineering:**

- Prof. Vidhya Carmel and Prof. Premalatha have attended FDP on 'Universal Human Values' conducted by AICTE from 28/02/2022 to 05/03/2022.
- Prof. Nisha, Prof. Leenu Paul, Prof. Sushma, Prof. Premalatha and Prof. Asra Fathima have attended a one-week 'AICTE – VTU Teacher Training Programme' from 02/03/2022 to 06/03/2022.
- Prof. T R Dakshayani, Prof. Leenu Paul, Prof. Shambhavi Tadkal, Prof. Apoorva Kiran and Prof. Asra Fathima have attended FDP on 'Universal Human Values' conducted by AICTE from 14/03/2022 to 18/03/2022.



### **Department of Electronics & Communication Engineering:**

Dr.Shima Ramesh Maniyath has attended a one Week AICTE QIP Short Term course on 'Cyber Security for Next Generation Technologies: Challenges and Solutions' organized by Department of Computer Science and Engineering (CSE), Indian Institute of Information Technology, Design and Manufacturing, Kanchipuram from 7/03/2022 to 12/03/2022.

 Mr.Vijay Kumar has attended an One Week AICTE QIP Short Term course on "Cyber Security for Next Generation Technologies: Challenges and Solutions' Organized by Department of Computer Science and Engineering (CSE), Indian Institute of Information Technology, Design and Manufacturing, Kanchipuram from 07/03/2022 to 12/03/2022.



### Department of Electronics & Communication Engineering:

- Ms. Minal K Deore has attended an ATAL FDP on 'Leadership and Excellence' organized by Department of Mechanical Engineering, CV Raman Global University, Odisha, Bhubaneshwar from 3/01/2022 to 07/01/2022.
- Dr. Utsab Banerjee has attended an ATAL FDP on 'Leadership and Excellence' organized by Department of Mechanical Engineering, CV Raman Global University, Odisha, Bhubaneshwar from 3/01/2022 to 07/01/2022.
- Dr Ajith A S has attended a One week FDP programme on 'Artificial Intelligence for IoT services in Cloud: Techniques and Applications' organised by Department of IT, NIT Jalandhar from 28/02/2022 to 04/03/2022.
- Mr. L David William Raj has attended Five day FDP programme on 'Robust AI: Building through data exploration, pre-processing and representation' organised by IIIT NAYA RAIPUR from 04/02/2022 to 8/02/2022.



### **Department of Electronics & Communication Engineering:**

- Mr. L David William Raj has attended Five days FDP programme on 'The Trends of Research and Development of Electronics and Communication Area' organised by National Institute of Technology, Manipur from 17/01/2022 to 21/01/2022.
- Mr. L David William Raj has attended Five days FDP programme on "Recent Advancements in Social Internet of Things(SIoT) and Industrial Internet of Things(IIoT) " organised by National Institute of Technology, Puducherry from 14/02/2022 to 18/02/2022.
- Mr. Jeeva. B has participated in an online ATAL FDP on 'Design Thinking Practical Perspective on Design making Education' from 3/1/2022 to 7/1/2022 at Bharati Vidyabhavan Sardar Patel institute of Technology.



### Department of Electronics & Communication Engineering:

- Mr. Vijaykumar S has participated and successfully completed one week online AICTE VTU Joint
  Teachers Training Programme on 'An Overview of Teaching Techniques in Mathematics Laboratory
  Using Python Programming' from 21/02/2022 to 25/02/2022 organized by VTU Human Resource
  Development Centre (VTU HRDC).
- Mr. Vijaykumar S, has participated & completed successfully AICTE Training and Learning (ATAL)
   Academy online elementary FDP on "Bio-Inspired Computing for Data Analytics" from 08/02/2022 to
   12/02/2022 at Lakireddy Bali Reddy College of Engineering (Autonomous).



### Department of Electrical and Electronics Engineering:

- Vaishali N B, Dr. Galiveeti Hemakumar Reddy, Gayathri R, Renukamba J N, Nikitha B N, and Bini Babu attended a 5-day faculty development program on 'Universal Human Values - An Overview' conducted by VTU from 2/3/2022 to 6/3/2022.
- Nikitha B N, attended an AICTE sponsored 5-day STTP on 'Condition Monitoring of Power Apparatus Adopting Multi Sensor Fusion Technique' conducted by IIT Madras from 28/2/2022 to 5/3/2022.
- Dr. Galiveeti Hemakumar Reddy, Vaishali N B attended a 5-day faculty development program on 'An Overview of Teaching Techniques in Innovation & Design Thinking" conducted by VTU from 27/12/2021 to 31/12/2021.
- Vaishali N B attended a one-week international workshop on 'Advanced Technologies in Electrical and Electronic Systems (ATEES-2022)' conducted by KLS Gogte Institute of Technology from 3/1/2022 to 7/1/2022



- Ms T Gayathri attended 10 days FDP on 'Advanced Bioinformatics' organized by E&ICT Academy,
   NIT Warangal, and University college of Engineering (BIT campus) Tiruchirappalli during
   18/11/2021to 27/112021.
- Ms T Gayathri attended 6 days FDP on 'Advanced Research Methodology: Tools and techniques'
  Institution's Innovation Council (IIC) and Department of Information technology, Bons secours
  college for Women, Thanjavur during 19/02/2022 to 24/02/2022.
- Mr. Rajan attended 2 weeks FDP on 'Collaboration with AR and VR' organized by AICTE –ISTE from 4/02/2022 to 19/02/2022.
- Dr.Muzammil Hussain Attended Seminar on" International Seminar on Artificial Intelligence and Applications" on 07/03/2022, organized by Aligarh Muslim University.



- Ms Ramakalyani has successfully completed "National Level e-shot on Info Arena" conducted by department of computer application and information technology, Sri Parashakthi college for Woman, courtallam on 28/02/2022.
- Ms RamaKalyani, has attended Three Days Online Faculty Development Program on "Recent Trends in Optimization Techniques For Engineering Problems", organized by Department of Mechanical Engineering, Kongunadu College of Engineering and Technology, Trichy from 07/3/2022 to 09/03/2022.
- Ms Ramakalyani, attended "Recent advances in Material design, manufacturing characterization, machining and applications" organized by AICTE and ISTE chapter of Oxford College of Engineering, Bangalore.



- Ms Ramakalyani and Ms Srilakshmi attended the Five Day Faculty Development Programme on "Advanced Research Methodology: Tools and Techniques" from 19.02.2022 to 24.02.2022 organized by Institution's Innovation Council (IIC) and Department of Information Technology, Bon Secours College for Women, Thanjavur.
- Ms Ramakalyani and Ms Srilakshmi has participated and completed One Week AICTE VTU
  Joint Teachers Training Programme on "Universal Human Values An Overview" between
  02/03/2022 and 06/03/202, organized by VTU Human Resource Development Centre (VTU HRDC), Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur.
- Ms. P Srilakshmi, attended FDP on "Robotics and Automation" from 20/12/2021 to 24/12/2021 at Government Engineering College, Modasa.



- Ms. P Srilakshmi, attended One Week AICTE VTU Joint Training Programme on "An Overview of Teaching Techniques in Innovation & Design Thinking" from 6th to 10th December 2021 Organised by VTU Human Resource Development Centre (VTU - HRDC).
- Ms. P Srilakshmi attended two day workshop on "Implementation of National Education Policy-2020" organised by Bapuji Institute of Engineering and Technology, Davanagere in association with VTU, Belagavi on 10th and 11th of December 2021.
- Ms. P Srilakshmi, attended FDP on "Advances in control systems and sensor technologies" from 27/11/2021 to 01/12/2021 organised by Indian Institute of Information Technology, Pune.
- Ms. P Srilakshmi attended one-month Industrial training on "IoT Project Development using Industry Grade Microcontroller" from 15/02/2022 to 15/03/2022 organised by Origin Tech, Maharashtra.



- Prof. Krishna Prasad R has attended National Webinar entitled "Preparedness for Electric Vehicles by Discom" on 06/02/2022, conducted by Indian Energy Congress (IEC), in collaboration with NIST (Autonomous), Berhampur, Odisha.
- Dr. Santhosh N, attended the AICTE-VTU Joint Teachers training Programme on "Universal Human Values", from 02/03/2022 to 06/03/2022.
- Dr. Santhosh N, attended the AICTE-VTU Joint Teachers training Programme on "An Overview of Teaching Techniques in Mathematics Laboratory Using Python Programming", from 21/02/2022 to 25/02/2022.



#### Department of Mechanical Engineering:

- Dr. Santhosh N, attended and presented the paper titled, 'Critical Studies on the Synthesis of AgNPs by Biological methods and its Characterization for Bio-Functional Applications' at the 1st International Virtual Conference on "Recent Advances in Material Science and Organic Synthesis (RAMSOS-2021) from 20/12/2021 to 21/12/2021.
- Prof. Vinoth Kumar G, has attended and completed the AICTE FDP on Universal Human Values (UHV) from 28/02/2022 to 04/03/2022.



#### **Department of Mathematics**

- Dr. Varalakshmi M completed one week AICTE VTU Joint Teachers Training Programme on 'An Overview of Teaching Techniques in Innovation & Design Thinking' from 27/12/2021 & 31/12/2021 Organized by VTU Human Resource Development Centre (VTU -HRDC), Centre for PG Studies, VIAT, Muddenahalli, Chikkaballapur.
- Mr B Sudhakar attended a teacher's enrichment workshop on "Real Analysis, Multivariable Calculus and Linear Algebra "hosted by Department of Mathematics, St. Joseph's college (Autonomous), Bangalore during 17/01/2021 to 05/02/2022



#### **Department of Physics**

 A.Muthuraja D. Bharath (2022), Nonlinear optical studies on bioperine crystals grown by vertical bridgeman technique for photonic applications, <u>Volume 149</u>, Page No.107639, ISSN: 0030-3992. Optics and Laser Technology, Science direct. (Impact Factor-3.867) (Scopus Index)



#### **Webinars Conducted:**

- A Webinar on "Galaxies and their Nuclear Reactions" was conducted by Aerospace Engineering
  Department on 01/12/2021. Dr Das Mousumi, Professor, Indian Institute of Astrophysics,
  Bangalore was the Resource Person.
- A Webinar on 'Transport Phenomena in Fluid Mechanics' was conducted by Aeronautical Engineering Department on 22/01/2022. Mr. Hero Hemaraj, Senior Data Scientist, General Electric (GE) Aviation, Bangalore was the Resource Person.
- Department of Electrical and Electronics Engineering had conducted a 3-day Short term training program on 'Application of Soft Computing Techniques in Electrical Engineering' from 28/12/2021 to 30/12/2021. The resource Persons were: Dr Ravishankar C, Vice Chairman, ISTE, Bangalore chapter, Dr S G Sravani, Assoc. Professor, RVCE, Bangalore and Dr. M. Premakumar, Assoc. Professor, Dayanada Sagar College of Engineering, Bangalore.



#### **Lectures / Sessions:**

- Department of Chemical Engineering has organized a guest lecture on 'Science and Engineering of Collective Phenomena' by Dr. Dany Raj M, Inspire Faculty, IISc., Bangalore on 13<sup>th</sup> November 2021.
- Department of Electrical and Electronics Engineering has organized a Motivational talk on 'Start-ups and Entrepreneurship' on 27/11/2021 by Mr. Lakshmanan, (Alumnus -2012) Technical Director, INDEFINE Bangalore.
- Department of Electrical and Electronics Engineering has organized a workshop on "Soft skills" on 27/12/2021 by Mr. Himanshu Sharma, Founder and Director, Quant Masters, Bangalore.
- Department of Mathematics organized a guest Lecture on 'Applications of Differential Calculus and Linear Algebra in Engineering science' on 19/01/2022. Resource Person was Dr. V.
   Senthilkumar (Principal Scientist) CSIR, Fourth Paradigm, Bangalore through CISCO Webex platform.

#### **Club/Special Lab Activities**

Department of Chemical Engineering, organized a club activity "Chemusement" on 10/12/2021.

• Department of Mathematics organized MATLITE club activity on 14/03/2022 on the occasion of International Pi day" at Dr. M V Jayaraman Auditorium.

 Department of Physics organized a Guest Lecture on 'Development of high quality unidirectional single crystal for photo voltaic devices' on 23/11/2021.



#### Workshop/Conference:

- Department of Chemical Engineering has conducted a one-day workshop on 'Career tracks for Chemical Engineers (Process control and Optimization)', on 29/12/2021 through which 42 students from final year Chemical engineering were benefited.
- Department of Civil Engineering had conducted a Workshop on 'Total Station and advanced survey lab equipment' under the banner of IQAC, MVJCE, from 28/12/2021 to 30/12/2021. This activity was conducted in association with M/s Lawrence & Mayo (I) Pvt Ltd. and MVJCE. 145 students and faculty members of the Department of Civil Engineering participated in this three day Workshop.
- "Department of Electronics and Communication had conducted a 2 day Workshop on CProg simulation software for Robots" on 1/12/2021 and 2/12/2021 with 20 participants.



#### Patents Filed:

#### **Department of Aeronautical Engineering:**

- Dr. P Suresh from Aeronautical Engineering filed a patent 'Intelligent charging station based on internet of things' on 07/03/2022 (File Application Number-202241012144).
- Dr. Shoaib Kamal, from Electronics & Communication Engineering published a Patent on Machine learning based facial and emotional identification techniques for pharma applications on 04/02/2022
- Dr. S.Anthoniraj from Information Science & Engineering published a complete patent titled "A System for Efficient Access and Resource Management in Vehicular Communication using Machine Learning in Fifth Generation Network" on 17/12/2021. (Application no: 202141058856)



#### **Department of Aeronautical Engineering:**

- Dr. P Suresh, Dr. R Rajasekar and Mr. N Tamilselvam submitted a Research Project proposal to ADE in the title of "Landing gear design optimization for medium weight UAVs using DFMA and DFE concepts" on 30/12/2021 with the amount of Rs.9, 97, 614/-
- Dr.John Baruch, Dr. R Vijaya Kumar and Prof. S C Gupta submitted a research Project proposal to ARDB titled "Design Development and Evaluation of complaint structures for aircraft applications" on 17/11/2021 with the amount of Rs.9, 80,000/-. It was presented to structures panel of ARDB on 03/03/2022, and has been accepted in principle.
- Dr P. Arunagiri, Dr P. Suresh, Dr L. Johnbaruch submitted a research Project Proposal to ARDB in the title of "Development of a Novel Jigless Manufacturing Process for Aircraft Structural Assembly" on 27/01/2022 with the amount of Rs 21, 00,000/.



#### **AICTE MODROBS Project first phase completed:**

• The first phase of the MODROBS project has been completed and Utilization Certificate submitted on 01/02/2022 for the project titled "Procurement and setting up of open Architecture Based flight simulator in flight simulation lab" The second phase of the project is under Progress by Prof. S C Gupta and Dr. P Arunagiri.



#### **Department of Chemical Engineering:**

• Dr. V S Ramakrishna Ganduri, Associate Professor submitted a Project Proposal under the scheme 'Awards for Research Publications (ARP)' vide Application No.:VRN/000029/21-22 to Vision Group on Science and Technology (VGST), Government of Karnataka, on 22/02/2022.

#### Department of CSE, AI&ML:

• K. M. Karthick Raghunath, S. Umamaheswaran, and Sudhan, M. B., submitted a Research proposal tilled 'Prediction of Paddy Crop Disease in Specific RoI (Region of Interest) Using Drones Technology and Machine Learning Strategies' National Council for Science & Technology Communication (NCSTC), Department of Science & Technology on 04-02-2022 for the amount Rs. 20,14,969.10/-.



#### Department of Electrical & Electronics Engineering:

• Dr. Soumya Mishra, Dr. Galivetti Hemakumar Reddy & Mr. Rajarajan R submitted a Research proposal titled "Design and development of a novel fast charger for electrical vehicles" to CPRI under Research Scheme on Power on 15/01/2022 for the amount Rs. 13,89000/-.

#### **Department of Mechanical Engineering:**

- Dr.Shankar G and Dr. Santhosh N have submitted a project proposal titled "Establishment of the facility for Laboratory spray drying of advanced materials for batteries, nanomaterials, and bioceramics" for CISEE: Centers of Innovative Science, Engineering and Education (CISEE), scheme of VGST for Rs. 40,00.000/- on 24/02/2022.
- Dr. Shankar G and Dr. Santhosh N have submitted a project proposal under Research Scheme on Power (RSOP) titled "Computational evaluation of new generation high performance conductors
  - High Temperature Low Sag (HTLS) under static and dynamic loading conditions and experimental validations "to CPRI for Rs. 10,00,000/- on 21/02/2022.



#### **Department of Computer Science & Engineering:**

- Dr. George Fernandez, Computer Science & Engineering contributed as a session chair for the technical presentation session in IEEE sponsored International Conference on Advances in Computing, Communication and Applied Informatics (ACCAO 2022) at St. Joseph's College of Engineering Chennai on 28/1/2022 and 29/1/2022.
- Dr. M B Sudhan, Artificial Intelligence & Machine Learning contributed as Program Committee Member and Reviewer in the International Conference on Cyber Technologies and Emerging Sciences (ICCTES 2021) organized by Graphic Era Hill University, Uttarakhand on 17/12/2021 and 18.12.2021.



- Dr. Bhuvaneshwari P Computer Science & Engineering contributed as member of the Reviewer Committee in "3rd International Conference on Information Management & Machine Intelligence (ICIMMI-2021)" held during 23/12/2022 24/12/2022 at Poornima Institute of Engineering & Technology, Jaipur, Rajasthan.
- Dr. Bhuvaneshwari P Computer Science & Engineering contributed as a Reviewer at the International Conference on Advanced Network Technologies and Intelligent Computing (ANTIC-2021) held online at Department of Computer Science, Banaras Hindu University, Varanasi, India during 17/01/2022 and 18/01/2021.
- Dr. Sunil Shankar Waddar, Mechanical Engineering has delivered expert talk on '3D Printing and Dynamic Testing of Lightweight Composites' at Faculty of Engineering and Technology, JAIN (Deemed to be University) on 05/02/2022.



- Dr. S. J. Sugumar, Electronics & Communication Engineering delivered a Webinar on 'Introduction to Internet of Things (IOT) enabled sensors and applications' on 29/12/2021 & 30/12/2021 at Bharathiar University, Coimbatore
- Mr.Sayantham Sarkar, Electronics & Communication Engineering delivered a Webinar on 'Real Time Image Processing Algorithm using VHDL for ASIC level implementation' on 4/03/2022 at SJC Institute of Technology, Bangalore.
- Dr. Muzammil Hussain, Information Science & Engineering completed UDEMY Certification course on "Ethical Hacking" in January 2022.
- Dr. C Pradeep, Mathematics Department cleared a crash course on Python by Coursera.



# Funds Received by Departments:

- Dr. Sunil G S and Prof. Mohan Kumar K have received Grass root project on Foldable trolley (Rs. 57, 000+GST) under FINP scheme of NIF, sanctioned by the NIAS, date of sanction 18/02/2022.
- Dr. Santhosh N has received Grass root project on Rapid Composting Machine (Rs. 1,42,500+GST)under FINP scheme of NIF, date of sanction 18/02/2022.
- Dr.Vivekanand B Huddar has received Grass root project on Maize Grinding Machine (Rs. 2,30,000+GST) under FINP scheme of NIF, date of sanction 18/02/2022.



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# Thank You

