



**OmDayal Group
of Institutions**
ENGINEERING COLLEGE

Volume



Omcrafft 2022-23

Campus : Plot No. 38 (P), 38(A), 39(P) & 39(A) Uluberia Growth Centre,
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FROM THE DESK OF **THE PRINCIPAL**

Welcome to the latest edition of our college newsletter. It brings me immense joy to share with you the incredible stories, achievements, and talents within our college community.

This newsletter reflects the spirit of our institution - a place where knowledge flourishes, creativity is celebrated, and dreams are nurtured. I encourage you to explore the diverse range of articles, artwork, and thought-provoking content curated by our talented students and faculty.

Thank you to everyone involved in bringing this magazine to life. Your hard work and dedication have made it a true reflection of our vibrant college community.



Prof. (Dr.) Yogesh Kumar Sinha
Principal

FROM THE DESK OF **THE VICE PRINCIPAL**



Dr. Prosenjit Sen
Vice Principal

It is very satisfactory to see that the latest edition of the official Newsletter "OmCraft" Volume - 8 has been published. This is an immense pride as the Newsletter showcases the activities of the College for entirely of a year.

This year we have engaged in several activities and one such being the NAAC visit for the 2nd cycle of accreditation. Without the combined effect of all the Faculty members, Staff, Technical Assistants and all the members who are associated with the ODGI it would not have been possible to achieve a better score in the NAAC visit.

From the bottom of my heart I would like to congratulate all the team members associated with the publication of "OmCraft" best wishes.



MESSAGE FROM THE EDITORIAL BOARD

As our college continues to thrive towards excellence, we are excited to bring to you the latest edition of Om Craft, our college newsletter. Over the last year, OmDayal Group of Institutions (College of Engineering and Architecture), has crossed certain milestones in the path of higher education, thereby helping its students achieve their dreams and getting prepared for future success. One of the unique aspects that sets the institution apart from others, is its keen attention towards the holistic development of students. The method of teaching followed here is a perfect amalgamation of theory and practice - the students are initiated into theoretical understanding of core scientific concepts, as well as laboratory experiments. The achievements of the students and faculty members, delineated in this newsletter, are indicative of the passion for science and technology that the students and faculty members share with one another. We hope that this stands testament to the hard work that each and every member of the college put together to create indelible marks in the field of sustainable development.

Dr. Swarupa Ojha,
Editor

Rajlekha Sil,
Assistant Editor

COLLEGE EVENTS

CULTURAL FEST, ULLASH 2K23

The students of OmDayal Group of Institutions joined hands in organising Ullash 2k23 on 16.05.2023 and 17.05.2023. The two day long fest was laden with a myriad of academic and cultural events, including a coding competition, treasure hunt, break the pot, singing competition, dancing competition, fashion show competition, DJ music and dance by DJ Rukh SD and DJ Koyel, and a special performance by the esteemed Bengali band, Distorted Chromosomes, featuring the eminent singer, song-writer and composer Siddhartha Roy (Sidhu of Cactus fame). The event was an opportunity for students to learn organising, planning and decision-making, while embracing cultural values.

Some glimpses of the event





OmDayal Group of Institutions graciously welcomed a NAAC Peer Team for the second cycle of NAAC visit on 26.04.2023 and 27.04.2023. The esteemed three-member peer team, comprising eminent educationists, such as Dr. Vinayak Adane, Professor & Head, Department of Architecture and Planning, Visvesvaraya National Institute of Technology, Dr. Vinayak Adane, Professor & Head, Department of Architecture and Planning, Visvesvaraya National Institute of Technology, and Dr. Dharmendra Sharma, Professor, Department of Mechanical Engineering, The Maharaja Sayajirao University of Baroda, visited the institution and enriched every student, faculty, admin and other staff members with their valuable inputs and suggestions regarding the upliftment of the college. After visiting the respective departments and the laboratories, the peer team were also presented with a cultural programme on the evolution of Bengali Culture, by the students of BTech and BArch.

At the end of the NAAC Visit, the peer team addressed the college NAAC committee regarding their indispensable feedback. The college received an upgrade to Grade B+ in the final report. The visit was an enlightening one for the college, as it marked itself as a milestone in its path of excellence.

SOME GLIMPSES



FRESHER'S WELCOME PARICHAY, 2K23

The beginning of college life is one of the most paradigm-shifting, yet, auspicious occasions during the journey of a student. In order to mark this beginning, the senior students of the institution joined hands to organise Parichay, 2k23, the Fresher's Welcome on 28.02.2023. The planning and organisation of the event brought the newcomers closer to their seniors, therefore, creating pure bonds of collegiality and friendship. The event gave students the opportunity to showcase their talents in various fields, including dance, music, fashion show and elocution. Ivy Pal of CSE 1st Year and Pushpaksha Ghosh of CSE 1st Year were awarded the Miss and Mr Freshers' Trophies, while Ayan Sahu and Ananya Sinha Mahapatra of the same department were chosen as the runners-up. It was a delightful event for all.



Engineer's Day 2022



In order to commemorate the birthday of the legendary engineer Mokshagundam Visvesvaraya, Engineer's Day was celebrated on 15.09.2022. At the onset of the event, the respected principal and vice-principal enriched the audience with brief speeches on the role of engineers in today's world and the significance of celebrating this day. Following this, the respected HoD of Civil Engineering, Gautam Bondyopadhyay presented an article on "Role of Engineers in Emerging India". It was an enlightening event for all.

Annual Sports

KHELKUD, 2K23

-The connotation of the word 'sports' transcends its etymological meaning, ie., 'games' or 'recreation'. 'Sports' is an avenue to rejuvenate and reconnect with the self, and build a healthy relationship among peers and colleagues. Driven by such beliefs and ideals, OmDayal Group of Institutions organised a two-day Sports event called 'Khelkud, 2023' on 30.03.2023 and 31.03.2023. The event comprised 6 games, including Football, Cricket, Badminton, Chess, Carrom and Table Tennis. A perfect milieu of indoor and outdoor games, the event catered to an array of physical and mental attributes of students, including fitness, strategic thinking and sportsmanship spirit.

Some glimpses:



Technical Fest

VOYAGE 2022

Some Glimpses

Creativity, Innovation and Research lie at the heart of every scientific invention. Inventions, propelled by imaginative ideation and prudent execution, are manifestations of the talent possessed by students, and the education received by them. VOYAGE, 2022, technology fest, organised by the IQAC, OmDayal Group of Institutions, is a celebration of such unique talent, and a platform for students to showcase their inventions in front of an objective audience.

Apart from ten participating schools, including Delhi Public School, Ruby Park, Ruby Park Public School, Kolkata, Banibon Girls' High School, Belkulai CKAC, Mugkalyan High School, Bagnan High School, Bagnan Adarsha Balika Vidyalaya, Shibpur B.E College Model School, Howrah Vivekananda Institution, and Howrah Ramkrishna Shikshalaya, the fest also witnessed the presence of dignitaries from various engineering sectors and industries, who meticulously observed and analysed every project exhibited by students, and enlightened the students with valuable suggestions and feedback. Some of the most innovative models built by students were, the 'SHE Control Mouse' by the Computer Science and Engineering Department, the 'Wireless Charging Road', by the Civil Engineering Department, the 'Hybrid Cooling System' by the Mechanical Engineering Department, the 'Three Phase Fault Detection System' by the Electrical Engineering Department, and a 'Gas leakage detector' by the Department of Science and Humanities.





DEPARTMENTAL ACTIVITIES

DEPARTMENT OF CIVIL ENGINEERING

Participation of faculty members in seminars/ webinars/ workshops/ conferences/ FDPs

- ▶ Kamrul Alam attended a Webinar on Design and Detailing of 5 storey building using STAAD and RCDC-KHUSI CIVIL STRUCTURAL CONSULTANCY PVT. LTD. On 5th May'2023.
- ▶ Srijan Mukherjee participated in the Short Term Training Programme on "Recent Developments and Advancements in Transportation Engineering" organised Online by the Centre for Transportation Research, Department of Civil Engineering, National Institute of Technology Calicut from 13th to 18th March, 2023.
- ▶ Srijan Mukherjee attended a six day National Level Online Workshop on "Effective Filing of NAAC AQAR - Streamlining Institutional Performance" held on 13th to 18th March, 2023 organised by IQAC, Vardhaman College of Engineering, Hyderabad.

Research Publications

Journal Publications

- ▶ Dr. Roumi Bhattacharya, 2023. A Review on Production and Application of Activated Carbon from Discarded Plastics in the Context of 'Waste Treats Waste'. Journal of Environmental Management, 325, p. 116613. (IF: 8.91) (SCI Indexed)
- ▶ Dr. Roumi Bhattacharya, and Mazumder, D., 2023. Development of a simplistic mathematical model for simultaneous nitrification and denitrification in a moving bed bioreactor. Environmental Modelling and Assessment (SCI Indexed) (IF. 2.016) (accepted)
- ▶ Shanku Mandal, Dalui, S. K. and Bhattacharjya, S., Wind Induced Responses of Corner Modified Irregular Plan Shaped Tall Building, 12th Structural Engineering Convention (SEC 2022), Malaviya National Institute of Technology Jaipur, Jawahar Lal Nehru Marg, Malviya Nagar, Jaipur, Rajasthan, India, December 19-22, 2022.

Book Chapters

- ▶ Mandal, S., Dalui, S. K. and Bhattacharjya, S. (2023). Influence of Side Ratio on Wind Induced Responses of U Plan Shape Tall Building. In: Sil, A., N. Kontoni, DP., Pancharathi, R.K. (eds) Recent Trends in Civil Engineering. Lecture Notes in Civil Engineering, vol 274, pp. 345-355, Springer, Singapore. https://doi.org/10.1007/978-981-19-4055-2_28. (Book Chapter)
- ▶ Mandal, S., Dalui, S. K. and Bhattacharjya, S. (2023). Influence of Interfered Square Buildings on Wind Responses of U-Shaped Tall Building. In: Hau, K.K., Gupta, A.K., Chaudhary, S., Gupta, T. (eds) Recent Advances in Structural Engineering and Construction Management . Lecture Notes in Civil Engineering, vol 277, pp. 309-319, Springer, Singapore. https://doi.org/10.1007/978-981-19-4040-8_26. (Book Chapter)
- ▶ Bhattacharya, R., 2022. Role of Moving Bed Bioreactor (MBBR) in Dye Removal. In Biological Approaches in Dye-containing Wastewater: Volume 1. (pp. 155-199) Publisher: Springer, Singapore. (ISBN: 978-981-19-0544-5)

Participation of students in seminars/ webinars/ workshops/ conferences



- ▶ A webinar was organised by the department on "Sustainable Transportation Planning" on 3rd April, 2023. Dr. Harikrishna M. delivered the lecture on the topic.



- ▶ A webinar was organised by the department on "Insight into Tendering Process on Engineering, Procurement & Construction (EPC) Concept" on 27th February, 2023. Mr. Uttam Dutta delivered the lecture on the topic.



- ▶ A webinar was organised by the department on "Airport Planning & Development in India" on 26th September, 2022. Mr. Suddhasatwa Bhaduri delivered the lecture on the topic.



- ▶ A webinar was organised by the department on "Basics of Slip Form Technique" on 19th September, 2022. Mr. Debajyoti Pal delivered the lecture on the topic.



Workshop on Bentley MX Road

- The department organized a workshop on Bentley MX Road software in collaboration with CADD Center, Ultadanga from 23rd February to 30th March, 2023 for the betterment of the students. Ms Kakali Banerjee, the Center Head of the said organisation had conducted the workshop.

Workshop on GIS & Remote Sensing using Drone

- The department organized a workshop on GIS & Remote Sensing using Drone in collaboration with Geo Solutions from 13th August to 30th August, 2022 for the betterment of our students. Mr. Ayan Ghosh, a GIS Engineer at PHE, WB had conducted the workshop.



Participation of students in competitions

- Students belonging to the department actively participated in "VOYAGE 2022", the college tech fest organised by the institution from 23rd September to 24th September, 2022. They ideated and executed 3 innovative and futuristic projects, and were mentored by the experienced departmental faculty members.

Participation of students in industrial trainings/ internships etc

- ▶ Bodhisattwa Mahato and Mousumi Manna (4th year students) are currently pursuing a six month internship at "EN-SIMULATED SOLUTIONS.LLP"
- ▶ Students of 2nd, 3rd and 4th year were escorted on an industrial tour to Sarat Chandra Medical College & Hospital Construction Site, Uluberia on 17th February, 2023 maintained by Macintosh & Burn. They received the opportunity to explore the pile foundations which were under construction at the site during the time of visit and other important public building constructions. This trip helped them get a practical understanding of concepts taught in class.



Events (seminars/ webinars/ student activities)

- ▶ An Alumni Talk event was organized by our department on "Challenges & Opportunities in the Civil Engineering Industry" on 11th March, 2023 from 2:30 pm onward on a virtual platform. Many of our alumni participated in that event as well as all regular students and faculty members.

FUTURE PLANS OF THE DEPARTMENT

Field Visits

- ▶ The department plans to organise field visits during each semester and Survey camp in Even semester. This will help the student to get site exposure and field knowledge.

SEMINARS/WEBINARS

- ▶ The department will continue organising Seminar/Webinar/ lectures delivered by eminent speakers from Industry & Academic Sector in each semester to enrich the students in various topics and subjects. Students will be encouraged to participate in seminars and other programmes conducted by other colleges, institutions and organisations.
- ▶ Attempts will be made to organise one national seminar during the next year.
- ▶ Training is given to the students in technical paper writing and seminar presentations.
- ▶ Students will be mentored during tech fests to create innovative models and prototypes.
- ▶ ASSOCIATION ACTIVITIES: Meetings arranged once in a month.

RESEARCH AND CONSULTANCY ACTIVITIES

The department has started consultancy work and completed two 'Review of design & drawing for G+6 storied building'. Faculty members will be encouraged to take up research and consultancy works in their areas of specialisation. Students also will be involved in these activities in order to give them more confidence to take up such works in their professional life. Start Consultancy Works (testing facilities can be arranged especially for water quality test, cement test, concrete test, mix design reinforcement test)

Department of Electrical Engineering

Participation of faculty members in seminars/ webinars/ workshops/ conferences/ FDPs

- ▶ Swapan Kumar Majumder participated and presented a paper in 5th Regional Science and Technology Congress, 2022-23, organised by University of Gour Banga, Malda and Department of Science and Technology and Biotechnology, Government of West Bengal during 11th-12th January, 2023.
- ▶ Poulomi Das participated and presented a paper in 2022 IEEE Calcutta Conference (CALCON 2022) organized by IEEE Kolkata Section during 10th – 11th December, 2022.
- ▶ Dr. Swarupa Ojha participated in a 5 day FDP on “Designing and Modelling of IoT, AI & ML Systems” organized by AICTE, ATAL Academy, ST Microelectronics and Arm Education from 1st to 5th August, 2022.
- ▶ Poulomi Das participated in a one-week FDP on “Recent Advancement and Research Opportunities in Electrical Engineering” organized by Gargi Memorial Institute of Technology in collaboration with IEEE-SPS & IEEE-PES, Kolkata Section from 11th-15th July, 2022.

Research Publications

Journal Publications

- ▶ Jiban Ghosh, Anwesha Sengupta, Prolay Halder, Swarupa Ojha, Goutam Kr Panda, Sanjib Bhattacharya, “Single polaron hopping in Fe doped glassy semiconductors: Structure–electrical transport relationship”, Journal of Applied Physics, AIP Publishing LLC, 132, 20, 205108, 2022
- ▶ Anil Chamuah, Swarupa Ojha, Koyel Bhattacharya, Chandan Kumar Ghosh, Sanjib Bhattacharya, “AC conductivity and electrical relaxation of a promising Ag₂S-Ge-Te-Se chalcogenide glassy system”, Journal of Physics and Chemistry of Solids, 166, 110695, 2022, ELSEVIER
- ▶ Swarupa Ojha, Shayeri Das, Anil Chamuah, Madhab Roy, Koyel Bhattacharya, Sanjib Bhattacharya, “Highly conducting nanophases of Ag₂S–Se-Ge chalcogenide glassy systems: Explanations via computational descriptions”, Physica B: Condensed Matter, Elsevier, 2022

Conference Publication

- ▶ Swapan Kumar Majumder, “The Digital Frequency Divider (DFD)”, in the proceeding of 5th Regional Science and Technology Congress, 2022-23, organised by University of Gour Banga, Malda and Department of Science and Technology and Biotechnology, Government of West Bengal during 11th-12th January, 2023.
- ▶ Poulomi Das and Arpita Das, "Interlayer Textural Variabilities to Study the Benignancy/Malignancy of Brain Tumors using MR Modalities Images," 2022 IEEE Calcutta Conference (CALCON), Kolkata, India, 2022, pp. 180-184, doi:10.1109/CALCON56258.2022.10060844.

Book Chapter

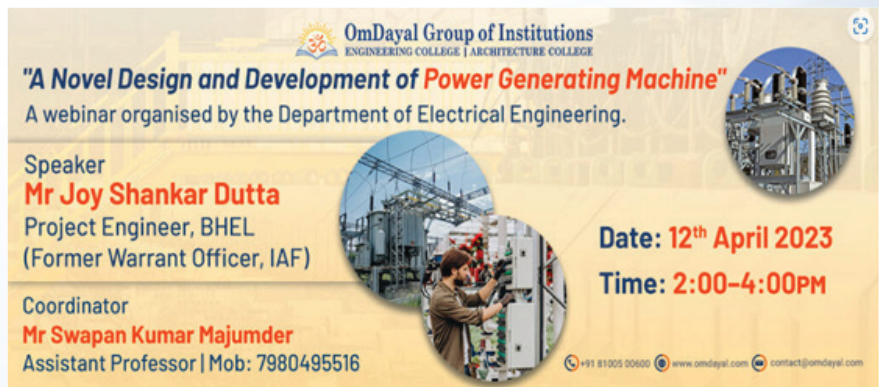
- ▶ Swarupa Ojha, Madhab Roy, Sanjib Bhattacharya, “Photonic Glass Ceramics”, Springer, Singapore, 147-157, 2022, ISBN Number 978-981-19-3269-4

Participation of students in seminars/ webinars/ workshops/ conferences/quiz competition

- ▶ Krishnapada Kar, student of 2nd year participated in "C & C++ Programming Language Quiz" organised by Pitsonix Solutions on 15th January, 2023.
- ▶ Subhadip Paul and Srikanta Manna, students of 2nd year participated in Online Quiz competition on "Constitution of India" organized by Government of India 14th January, 2023.
- ▶ Manabesh Malakar, student of 4th year participated in "Online Aptitude Test of Entrepreneurship and Digital Innovation" organised by Lingayas Lalita Devi Institute of Management and Science on 13th January, 2023.
- ▶ Arnab Roy, student of 2nd year participated in National level- online Quiz on "Engineering Workshop" organised by Bharat Institute of Engineering and Technology, Hyderabad on 7th January, 2023
- ▶ Partha Roy, student of 2nd year participated in National level- online Quiz on "Engineering Workshop" organised by Bharat Institute of Engineering and Technology, Hyderabad on 10th December, 2022.
- ▶ Anik Chakraborty, student of 2nd year became the winner of Quiz Contest organised by Reliance Life Insurance on 10th December, 2022.
- ▶ Sougata Adak, student of 4th year was the winner of virtual quiz competition on "Corruption Free India for a Developed Nation" organised by OmDayal Group of Institutions on 3rd November, 2022
- ▶ Sourav Dhali, student of 3rd year participated in a webinar on "Entrepreneurship and Innovation" as career opportunity" organised by Maulana Abul Kalam Azad University of Technology, West Bengal on 22nd October, 2022.
- ▶ Sourav Dhali, student of 3rd year participated in a webinar on "National Innovation Day 2022" organised by Maulana Abul Kalam Azad University of Technology, West Bengal on 15th October, 2022.
- ▶ Sourav Dhali, student of 3rd year participated in webinar on "GREAT ICONS - A LECTURE SERIES BY DR. SANKAR NATH KADAMBINI GANGULY"organised by Maulana Abul Kalam Azad University of Technology, West Bengal on 9th July, 2022.

Seminars/Workshops/ other events organised by the Department

- ▶ The department of Electrical Engineering organized a webinar on "A Novel Design and Development of Power Generating Machine" on 12th April, 2023. The speaker of the webinar was Mr. Joy Shankar Dutta, Project Engineer, BHEL.



OmDayal Group of Institutions
ENGINEERING COLLEGE | ARCHITECTURE COLLEGE

"A Novel Design and Development of Power Generating Machine"
A webinar organised by the Department of Electrical Engineering.

Speaker
Mr Joy Shankar Dutta
Project Engineer, BHEL
(Former Warrant Officer, IAF)

Coordinator
Mr Swapan Kumar Majumder
Assistant Professor | Mob: 7980495516

Date: 12th April 2023
Time: 2:00-4:00PM

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OmDayal Group of Institutions
ENGINEERING COLLEGE | ARCHITECTURE COLLEGE

"CAREER OPPORTUNITIES OF ELECTRICAL ENGINEERS IN RECENT GLOBAL TRENDS"
A webinar organised by the Department of Electrical Engineering

SPEAKERS

Sabina Yeasmin
(Batch: 2013-2017)
Associate, Global Advertisement Services Pvt. Ltd.

Ishita Chakraborty
(Batch: 2013-2017)
Associate Member of Technical Staff (AMTS), DXcorr Design Inc

25th March, 2023 | 8PM | Google Meet

Coordinator:
Mrs Poulomi Das, Assistant Professor | Mob: 9432157007

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- ▶ A webinar on "Career Opportunities of Electrical Engineers in Recent Global Trends" by our alumni was organised by the department on 25th March 2023. The alumni cum speakers of the event were Ms. Ishita Chakraborty, Associate Member of Technical Staff (AMTS), DXcorr Design Inc and Mrs. Sabina Yeasmin, Associate, Global Advertisement Services Pvt. Ltd.

- The department organized a seminar on “Dive into internships even if you are fresher but skilled” on 10th January, 2023 in Ground Floor Seminar Hall. Ms. Rajrajeswari Bag, student Internship Coordinator, IIC was the speaker of the event.



- The students of the department participated and presented various projects in Tech Fest “VOYAGE 2022” organised by the college on 23rd & 24th September, 2022.



- A lecture session titled “Role of teachers in developing innovation and entrepreneurship ecosystem” was organized by the department on 6th September, 2022. The speaker of the event was Prof. (Dr.) Arup Sinha, Professor, Department of Electrical Engineering.



OmDayal Group of Institutions
ENGINEERING COLLEGE | ARCHITECTURE COLLEGE

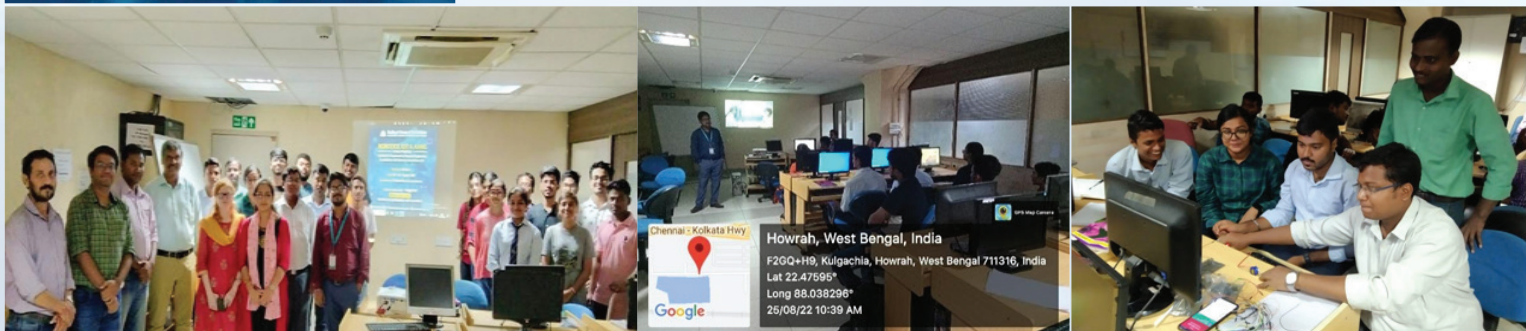
ROBOTICS, IOT & AI-ML
A 5-day Workshop
organised by Department of Electrical Engineering
in association with Qmansys Infosolutions LLP

Duration: 30 Hours
Time: 25th - 29th August 2022
Coordinator: Poulomi Das (Assistant Professor)

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- The department organised a 5-day Workshop on “Robotics, IoT and AI-ML” in association with Qmansys Infosolutions LLP (An ISO 9001:2015 certified company) during 25th – 29th August 2022. Mr. Shirshendu Pandit, Manager-Business Development (IoT, AI/ML, Automation) and Mr. Bijoy Pal, Assistant Manager were the instructors of the workshop.



Industrial visit, training and internship



- ▶ An industrial visit was organized for 3rd and 4th year students of the department at Pascal Switchcare India Pvt.Ltd. on 18th April 2023

- ▶ Souvik Mondal and Krishnendu Bar, student of 4th year successfully completed “Training on Rail Kaushal Vikas Yojna” organised by Multi-Disciplinary Workshop Training Centre, LLH C&W Workshop, ER during 5th -27th January, 2023.
- ▶ Rajrajeswari Bag, student of 4th year successfully completed internship program on “Product Management” by BNAO TECHNOLOGIES from 19th October, 2022–March, 2023.
- ▶ Souvik Mondal, Nepal Kal and Krishnendu Bar, students of 4th year successfully completed a 40 hrs training on AUTOCAD ELECTRICAL organised by Webflex Consultancy Service Pvt Ltd.
- ▶ Biswajit Bhattacharya, student of 4th year successfully completed two months summer training in Java programming from Engineer Core during September and October, 2022.
- ▶ Tehami Ahmed, student of 4th year successfully completed six weeks online training on AUTOCAD, organised by INTERNSHALA during August, 2022.
- ▶ Tehami Ahmed, student of 4th year undergone four weeks internship program by Electrical dept. of Noida Metro Rail Corporation Ltd. from 6th July– 23rd August, 2022

Future plans of the department

- ▶ The department is looking forward to conduct in house seminars on modern technologies, workshops, and guest lectures.
- ▶ To conduct quiz competition, poster presentation
- ▶ To conduct industrial visit for the students
- ▶ To arrange alumni lectures to make proactive to face the current challenges of competitive professional world

Department of Computer Science and Engineering

Participation of Faculty Members in Seminar/Workshop:-

- ▶ Indrani Mukherjee attended an STTP on “Topics on Algorithm”, organised by NITTTR, Kolkata on 13th -17th March, 2023.
- ▶ Indrani Mukherjee attended an STTP on “Introduction to Machine Learning and Deep Learning”, organised by NITTTR, Kolkata on 27th -31st March, 2023.
- ▶ Indrani Mukherjee attended the 3rd International conference on ‘Computational Intelligence’, organised by IIIT Pune and Soft Computing Research Society on 29-30th Dec.2022.
- ▶ Indrani Mukherjee attended an online workshop on Cyber Security, organised by Thapar Institute of Engineering & Technology on 16th Dec.2022.

Conference /presentation /publication of research paper :-

- ▶ Pahari, S., Pal, A. and Pal, R.K., have presented a paper titled “Community Detection in Large and Complex Networks Using Semi-Local Similarity Measure.” 2023 .
- ▶ Santosh Das, Ritam Dutta, Nikita Agarwal, Bhaskar Roy and Papri Ghosh., has presented a paper titled “A Machine Learning Approach to Predict NICU Units in Hospitals by Developing Smart e-Healthcare.” 2023 .
- ▶ Indrani Mukherjee, Pratik Bhattacharjee & Suparna Biswas have presented a paper titled “Evaluation of Hybrid Dataset for Risk Assessment of Heart Disease.” on 29-30th Dec.2022..

Achievements of Faculty Members

- ▶ Indrani Mukherjee has enrolled for Ph.D program in MAKAUT on 17th Feb.2023.
- ▶ Santosh Das acts as a reviewer of International Conference on Engineering Design & Computing(ICEDC) 2023- technically Co-sponsored by IEEE Kolkata section.
- ▶ Santosh Das awarded from MAKAUT for mentoring best student project in “Anweshan 2022”
- ▶ Santosh Das was awarded by the Govt of India as the SPOC for organizing Smart India Hackathon 2022.



Achievements of Students

- ▶ Amit Patra, Souryadip Ghosh and Tanishka Chakraborty- students of 2nd year, got 2nd prize at Students Innovation Festival (SIF) in the India International Science Festival (IISF) 2022 organised at Maulana Azad National Institute of Technology (MANIT), Bhopal, Madhya Pradesh on 22-23 January, 2023.
- ▶ Ayon Das of 3rd year secured the first position in 'Anweshan', the tech fest organised by MAKAUT.
- ▶ Pritam Paul, Soumili Dey and Mosammat Samma Yasmin of 4th Year have secured 3rd position in 'Anweshan', the tech fest organised by MAKAUT.
- ▶ Trisha Mondal of 4th Year has emerged as the first runners' up in Bengal Hackathon and Learning Challenge on Application Security, organised by the Cyber Security Centre for Excellence of West Bengal
- ▶ Shantanu Sahoo of 4th Year has secured a commendable 107 AIR in GATE CSE, 2023, and Subhendu Dey has secured a 7138 AIR in GATE CSE, 2023

Participation of Students in Various Training/Internships :-

- ▶ Shishir Jha, Subham Agarwal & Anirban Goswami, pre-final year students, has got selected for internship in Nrxxen IT Technologies from December.2022-June.2023.
- ▶ Ten pre-final year students trained for one month training by NSIC in the month of December,2022.
- ▶ Final year students participated in aptitude training by Myperfectice in the month of April.2023.
- ▶ Sayan Chakraborty, Sayantan Maity & Subhadip Das did internship in NITTTR Kolkata from July 2023-March.2023.

Events Organized by the Department :

- ▶ A Virtual workshop on "Network Security vs Ethical Hacking" was organised by the Computer Science & Engineering department on 17th February,2023. Sandipan kr. Mishra, Trainer, Network Bullstudy Pvt. Ltd, has delivered a lecture.
- ▶ A Webinar on "Understanding Cyber Security: A Comprehensive Approach" was organised by the Computer Science & Engineering department on 14th February,2023. Dr. Rajdeep Chakroborty, Chandigarh University has delivered his thoughts.
- ▶ Workshop on "Project building using Python" was organised by the Computer Science & Engineering department on 16th November-18th November & 22th November-23th November, 2022. Dr. Dhruvajyoti Ghosh, Assistant Professor Computer Science & Engineering, OmDayal Group of Institutions & Ardent Computech Private Limited has share their knowledge to the students and train them well.

Alumni Meet

- ▶ The third alumni meet was organised by the department on 3rd November, 2022 where three of the pass out students joined, who are successfully involved in different areas of interest in Computer Science & Engineering. The speakers are Oishik Sinha, now working as Automation Engineer at Allied Media Infotech Pvt. Ltd., Aritra Mukherjee, now working as Analyst in Capgemini India and Abir Sinha is now working as Performance Engineer in Ernst & Young.



- ▶ The fourth alumni meet was organised by the department on 18th March, 2023, where two of the pass out students are joined, who are successfully involved in different areas of interest in Computer Science & Engineering. The speakers are Kaphil Ahmed, now working as Management Trainee Business Analyst in Genpact and Megha Didwania, now working as Senior Associate Consultant in Infosys.

Future Plans

- ▶ Increase interaction with industry.
- ▶ To guide students in projects of the latest technologies.
- ▶ To involve students in paper presentation activities.
- ▶ Update laboratories for modern technologies.

Department of Mechanical Engineering

Participation of faculty members in seminars/ webinars/ workshops/ conferences/ FDPs

- ▶ Deepanjan Das participated in the National Webinar on “Non-Traditional Machining” organised by Mallabhum Institute of Technology, Bishnupur on 15th March, 2023.
- ▶ Sumit Bhowmik participated in STTP through ICT mode on “Introduction to SCILAB (CU02)” organised by NITTTR, Kolkata from 27th February 2023 to 3rd March 2023.
- ▶ Ranjit Barua participated in the “2nd International conference on “Recent Advances in Materials, Manufacturing and Machine”” organized by the Department of Mechanical Engineering, Yeshwantrao Chavan College of Engineering, Nagpur, from 2nd February to 4th February, 2023.
- ▶ Ranjit Barua attended the workshop on “Advanced Material Characterization” conducted by CMTI, Bangalore on 31st January, 2023.
- ▶ Ranjit Barua, Prof. Deepanjan Das, Prof. Sumit Bhowmik, Prof. Arindam Banerjee & Mr. Premchand De participated in the “11th National Seminar (Hybrid) on Ancient Indian Science, Technology, Engineering and Mathematics (STEM)” conducted by NITTTR, Kolkata on 15th October, 2022.
- ▶ Ranjit Barua and Prof. Sumit Bhowmik participated in the “2nd International Conference on Emergent Converging Technologies & Biomedical System 2022” organized by Jaypee University of Information Technology (H.P.) on 23rd & 24th September, 2022.
- ▶ Ranjit Barua completed the Online course “Mastercam CAD CAM and CNC Programming” conducted by Udemy from 29th July to 30th August, 2022.
- ▶ Arindam Banerjee attended the FDP on “Additive Manufacturing (3D Printing)” conducted by Webel Fujisoft Vara Centre of Excellence, Kolkata on 24th August, 2022.
- ▶ Ranjit Barua and Mr. Debasish Banerjee Attended a Seminar on “PTC CREO Simulation Driven Design” organized by RHS Engineering Service, Kolkata on 11th August, 2022.
- ▶ Ranjit Barua and Prof. Sumit Bhowmik attended the “22nd CII National Supervisory Skills Competition” organized by Confederation of Indian Industry (CII) on 30th July, 2022.

Research Work by Faculty Members (paper publications etc.)

- ▶ Barman, S., Das, T., Hazra, R., Banerjee, D., Barua, R. (2023), "Study and Analysis of the Advancement of CNC-Rapid Prototyping Application in Modern Automated Manufacturing". Journal of Mechanical Robotics, Vol. 08, No. 01, pp. 22-27.
- ▶ Kumar, A., Kar, S., Shee, P., Bhowmik, S., Barua, R. (2023), " Analysis of Advanced Welding Techniques' Sustainability in Green Manufacturing Systems". Journal of Advancements in Material Engineering, Vol. 05, No. 01, PP. 22-26.
- ▶ Barua, R. & Mondal, J. (2023). “Study of the Current Trends of CAD (Computer-Aided Detection) in Modern Medical Imaging”. In L. Panigrahi, S. Biswal, A. Bhoi, A. Kalam, & P. Barsocchi (Eds.), Machine Learning and AI Techniques in Interactive Medical Image Analysis (pp. 35-50).

- ▶ Barua, R., Das, S., & Mondal, J. (2023). "Emerging Applications of Artificial Intelligence (AI) and Machine Learning (ML) in Modern Urology". In R. Queirós, B. Cunha, & X. Fonseca (Eds.), Exploring the Convergence of Computer and Medical Science Through Cloud Healthcare (pp. 117-133).
- ▶ Rahaman, S., Shee, P., Kumar, A., Das, D., Bhowmik, S., Barua, R. (2022). "Analysis of Inverse Dynamics of 6-DOF Stanford Robotic Arm by Adaptive Neuro-Fuzzy Interference System (ANFIS)". Journal of Mechanical Robotics, Vol. 07, No. 03, pp 1-7.
- ▶ Barua, R., Bhowmik, S., Dey, A., Das, S., 2022, "Analysis of Robotically Controlled Percutaneous Needle Insertion in to ex-vivo Kidney Tissue mPCNL", 2nd Emergent Converging Technologies and Biomedical Systems (ETBS 2022), pp. 73-74.

Participation of students in seminars/ webinars/ workshops/ conferences

Students of the department have participated in:

- ▶ A Seminar on Lean Management - Basics organized by Toyota Kirloskar Motor Private Limited on 8th December, 2022.
- ▶ "Scan & Play Quiz" on National Education Day organized by The Library, OmDayal Group of Institutions, on 11th November, 2022.
- ▶ Industrial Training on Emerging Technology (3D Printing) conducted by Webel Fujisoft Vara - Centre of Excellence in Industry 4.0, Newtown, Kolkata (WB) from 23rd August to 24th August, 2022.
- ▶ SPARC online lecture series on Design, Fabrication and Application of Microsystems and Microfluidics organized by IIT Madras, NIT Karnataka and Concordia University, Canada from 12th to 16th August, 2022.

Participation of students in industrial trainings/ internships etc

- ▶ An Industrial Training on Additive Manufacturing & 3D Printing at Alfatek Systems, Kolkata, was organised for the students of the Department of Mechanical Engineering from 26th to 31st December, 2022.
- ▶ An Industrial Training on "Emerging Technology (3D Printing)" at Webel Fujisoft Vara - Centre of Excellence in Industry 4.0, Newtown, Kolkata (WB) was organised for the students of the Department of Mechanical Engineering on 23rd and 24th August 2022.

Events (seminars/ webinars/ student activities)

- ▶ A Lecture Session on Recent Advancement in Steel Industries & Its Impact on Indian Economy under Alumni Lecture Series was organized on 13th March, 2023. Mr. Prabuddha Sinha, Junior Engineer - C, Tata Steel, HMC Div. (West Bengal), was the Guest Speaker of the event.

ALUMNI LECTURE SERIES - ME
LECTURE SESSION - II


On

RECENT ADVANCEMENT IN STEEL INDUSTRIES & ITS IMPACT ON INDIAN ECONOMY

Organized by


Department of Mechanical Engineering
OMDAYAL GROUP OF INSTITUTIONS

Guest Speaker



Mr. Prabuddha Sinha
 Junior Engineer - C, 1st Steel, HMC Div. (West Bengal)

INFORMATION	CONTACT FOR DETAILS
Date: 13.03.2023 Time: 07:00 PM Venue: Hall 1 Address: Omdayal Group of Institutions, 701/101, Chhatrapati Shivaji Maharaj Road, Kolkata, India	Contact Person: Mr. P. Das Event Coordinator: Mr. P. Das Phone: 9830422000 Email: p.das@omdayalgroupofinstitutions.com



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- ▶ **VOYAGE 2022: Annual Technical Exhibition**, VOYAGE 2022 was organized by OmDayal Group of Institutions on 23rd & 24th September, 2022. Students from the Department of Mechanical Engineering exhibited the working models or prototypes of Four projects designed and built by them, which were highly appreciated by the visiting guests, Academicians and Industrialists

Notable achievements of faculty members

- ▶ Ranjit Barua received the Best Paper Award for his publication entitled “Analysis of robotically controlled percutaneous needle insertion into Ex-Vivo kidney tissue for minimally invasive percutaneous nephrolithotomy (PCNL) surgery” at the Conference on Emergent Converging Technologies and Biomedical Systems (ETBS 2022) organized by the Department of Electronics and Communication Engineering & Department of Physics and Materials Science, Jaypee University of Information Technology, Waknaghat, India 23rd and 24th September 2022.

Plans for next academic session

- ▶ To conduct Physical or Virtual Industry visits for the students of the Department of Mechanical Engineering.
- ▶ Online co-curricular activities like webinars and online quiz competitions, in addition to in-house seminars, workshops are to be conducted.
- ▶ To conduct online and in-house mock interviews and job-oriented skill training for the students.

DEPARTMENT OF SCIENCE AND HUMANITIES

Participation of faculty members in seminars/ webinars/ workshops/ conferences/ FDPs

- ▶ Dr. Sukanya Das Chandra attended a Seminar on “Open Educational Resources” sponsored by AICTE on 27.12.2022.
- ▶ Dr. Sukanya Das Chandra attended a Session on “NBA Accreditation” organized by MAKAUT on 12.08.2022.
- ▶ Mr. Arghya Dey participated and successfully completed 5-days “Faculty Development Program for Student Induction (FDP-SI) UHV-II” during 22nd August – 26th August 2022 at Heritage Institute of Technology, Kolkata, organized by All India Council for Technical Education (AICTE).
- ▶ Mr. Arghya Dey attended 2nd ICC EDTECH SUMMIT” Organized by Indian Chamber of Commerce at Taj Bengal (Venue) on 11th August 2022.
- ▶ Pradipta Biswas Participated in a workshop on ‘Digital Marketing’ organized by MAKAUT.
- ▶ Rajlekha Sil has attained a Duolingo Certification in Advanced English, securing 150 out of 160

Research Publications/ Presentations in conferences :

- ▶ S. Hazra, P. Sen and S. K. Datta, On the integrated moduli of logarithmic derivatives of order two of entire functions and their relative deficiencies, Bull. Cal. Math. Soc. 114 (3) (2022), 317-330
- ▶ S. Sarkar, P. Sen and S. K. Datta, Derivation of integrated moduli of second order logarithmic derivative of entire functions and relative deficiencies of their common roots, Bull. Cal. Math. Soc. 114 (3) (2022), 355-372
- ▶ J. Saha, P. Sen and S. K. Datta, A note on the ring of complex hyperbolic valued functions, Bull. Cal. Math. Soc. 114 (5) (2022), 617-632
- ▶ P. Sen, A. Maiti, and G.P. Samanta, Analysis of a predator-prey system with strong Allee effect and herd behaviour (Communicated)
- ▶ R. Sarkar, P. Sen and S. K. Datta, COMMON FIXED POINT THEOREMS UNDER RATIONAL INEQUALITY IN COMPLEX VALUED METRIC SPACES (Communicated)
- ▶ P. Sen, A. Maiti, and G.P. Samanta, Modelling herd behaviour of predator and prey: a predator-prey model with Allee (Communicated)
- ▶ Rajlekha Sil presented a paper titled “From Ruby Woo to Pillow Talk : Fashion Chromism and the Portrayal of Class in Made in Heaven” at a one-day National Conference on Popular Culture, at Salesian College, Siliguri

Book Chapters

R. Sil. From Gertrude to Ghazala : The Odyssey of Shakespearean Women from the ‘Inside’ to the ‘Outside’ ‘Changing Trends in Indian Cinema’. ISBN: 978-93-92189-39-5 (Accepted)

Achievements of Students

- ▶ Amit patra, Souryadip Ghosh and Tanishka Chakraborty of second year CSE got second best prize for their project model at Students' Innovation Festival, IISF 2022 Bhopal under the guidance of Mr.Arghya Dey



Achievements of Faculty Members

- ▶ Supervision and Guidance : Dr. Prosenjit Sen has been enlisted as the PhD. Supervisor of the MAKAUT. He is currently supervising three scholars - Jayanta Saha, Rakesh Sarkar and Surajit Hazra for their respective PhD research projects, at MAKAUT
- ▶ Dr. Sukanya Das Chandra is the member of Research Advisory Committee of two Ph.D scholars of MAKAUT, WB
- ▶ Gas Leakage Detector, a model guided by Mr.Arghya Dey has been selected for Physical Presentation at MANIT, Bhopal on 22nd-23rd January, 2023 during Student's Innovation Festival, India International Science Festival (IISF) 2022 Bhopal and it got second best prize in its category.
- ▶ Signing of MoU with the Dept. Of Mathematics, Uluberia College on 18.04.2023.

Events Organised by the Department



- ▶ A seminar was organised by the Science & Humanities department on "Mathematics and its application" on 16.12.2022, Dr. Soovoojeet Jana, Assistant Professor, Department of Mathematics, Ramsaday College, Howrah was present there as key speaker. Anoar Ali Mollah acted as Convenor of the program.

- ▶ Rajlekha Sil organised a profile building seminar and workshop on 15.09.2022 for B.Tech second and Third year students.



- ▶ The dept. of Sc & Hu presented a seminar on “Hybrid mode on Mathematics” on 24th april, 2023 jointly organised with the dept. of mathematics, Uluberia College. Dr. Tapas Kumar Samanta , HoD, dept. of Mathematics Uluberia College and Mr.Debojyoti Lahari, assistant Professor, dept. of Science & Hu, ODGI were the key speakers of the event.
- ▶ A poster presentation competition was organised on the occasion of National Science Day, February 28, 2023, Mr.Arghya Dey acted as the Coordinator of the program.
- ▶ National Mathematics Day was celebrated on 22nd December, 2022 to mark the birth anniversary of the great Indian mathematician, Srinivasa Ramanujan.



- ▶ A Swachh Bharat Abhiyan campaign outside the college premises on 2.09.2022 was organised by the dept. of Science & Hu.

- ▶ A cultural and awareness program was organised on the occasion of Women’s Day on 3.09.2023.

- ▶ A presentation on Electoral Literacy, by BTech first year students, was organised by the department of Sc and Hu, and the Electoral Literacy Club on 16.12.2023.



- ▶ On the Birth Anniversary of Sardar Vallabhbhai Patel from 25th October to 31st October 2022, 'Unity Day' was celebrated in the campus on 29.10.2022 , organised by the dept. of Sc & Hu.

Future Plans of the department :

- ▶ To promote departmental research
- ▶ To organise events, seminars and workshops for the holistic welfare of students
- ▶ To assist students in preparing mini- projects
- ▶ To help students improve their soft skills and communication skills through special classes

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Om Craft (Volume 8) 2023

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UPCOMING EVENT
Tech Fest – '**VOYAGE - 2023**'
Date: 15th & 16th Sept 2023



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