

# O.P. Jindal University, Raigarh

## Annual Report [January-December 2022]

### Department of Mechanical Engineering

#### Major Activities

1. The Department of Mechanical Engineering in association with SAE Collegiate Club OPJU, IEEE OPJU student branch, and IIC OPJU organized a session on "Automotive Thermal System- Development and Challenges" on 13th Jan 2022. Mr. Vipin Jacob, Manager, Force Motors India Ltd., Pune discussed in detail the key aspects related to the design and development of thermal systems of automobiles. The session was attended by 100+ participants.



The image shows a webinar poster on the left and a screenshot of the webinar content on the right. The poster includes logos for OPJU, SAEINDIA COLLEGIATE CLUB, IEEE Student Branch, and IIC OPJU. It states the webinar is on "Automotive Thermal Systems Development and Challenges" by Mr. Vipin Jacob, Manager at Force Motors Limited, Pune, on January 13, 2022 (Thursday) at 7:00 PM. A registration link is provided: [bit.ly/32YaVoC](https://bit.ly/32YaVoC). The screenshot shows a slide titled "Thermal System Development Challenges and Trends" with a list of bullet points:
 

- Higher engine cooling demand with high power engines.
- Lesser front opening area due to styling and aerodynamic demand.
- Additional components in exhaust after treatment (DPF, SCR) due to increasing emission norms. Leading to requirement of heat shield insulation material.
- Electrification (thermostat, radiator fan) and control logics to improve the cooling system performance.
- New refrigerants (R134a to R1234yf) and systems (dual loop HVAC system with chiller to reduce use of refrigerant) to reduce GWP.
- Additional cooling loop for power electronic cooling and battery cooling.

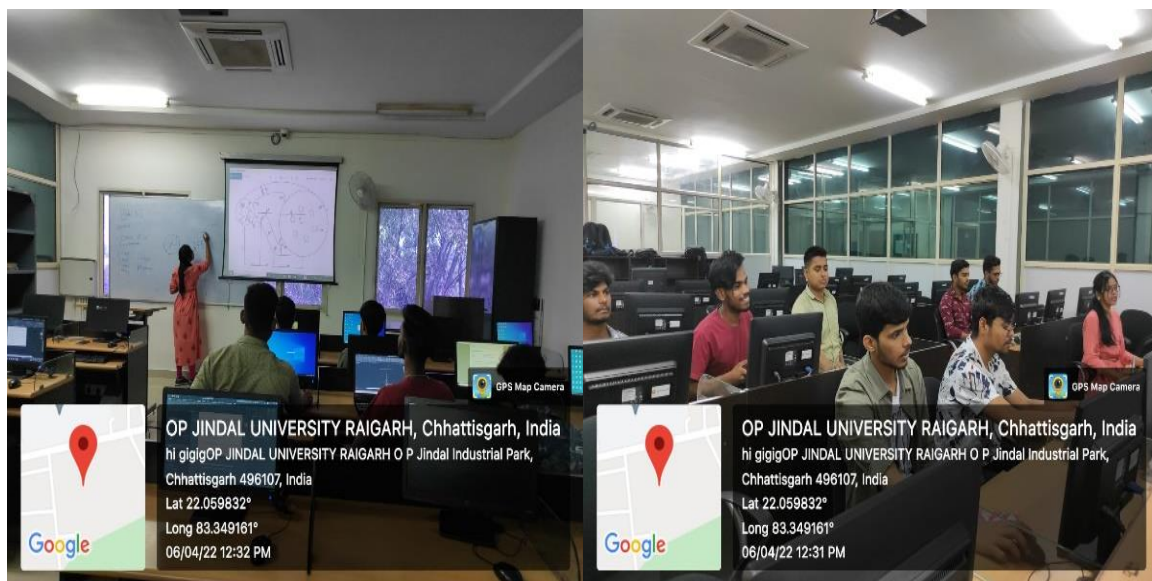
2. **Mr Jitesh Singh, Assistant Professor, and Mr. Narendra Deshmukh, Lab Assistant, Department of Mechanical Engineering** for completing a 2-weeks training program organized by the National Skill Development Corporation from 15th - 27th January 2022 on "Metal Inert Gas/ Metal Active Gas/ Gas Metal Arc Welder (MIG/MAG/GMAW) (CSC/Q0209)- v1.0" and becoming a certified trainer.
3. **Dr Umesh Vishwakarma, Associate Professor** chaired one of the technical sessions on Materials & Technologies at the International Conference on Advances in Materials and Mechanical Engineering (ICAMME 2022) organized by Ajay Kumar Garg Engineering College, Ghaziabad on the 18th and 19th of February 2022.

4. **Dr. Siddharth Chakrabarti, Professor & Head-Mechanical** chaired one of the technical sessions on the International Conference on Materials, Mechanics & Modelling (ICMMM-2021) at the National Institute of Technology, Jamshedpur from 4th -6th March 2022.
5. Mr Gyanesh K Rao, M Tech, second semester has participated and pitched his idea in India's biggest Defence Innovation Challenge organized on 19th Jan at Ahmedabad. He got a complimentary exhibition stall to showcase his products and ideas.

6. Department of Mechanical Engineering in association with IIC OP Jindal University and Rajiv Gandhi National Institute of Intellectual Property Management (RGNIIPM) organized an IPR awareness session on the “Intellectual Property Rights (IPR) - Patent & Designs Process” under National Intellectual Property Awareness Mission (NIPAM) on 25th Feb 2022. The speaker of the session **Mr. Pankaj P. Borkar, Dy. Controller of Patents & Designs, CGPDTM, DPIIT, Ministry of Commerce & Industry - Govt. of India** gave an excellent insight on the “patent and design process”. The session was arranged in hybrid mode and around 350+ participants benefited from the session.

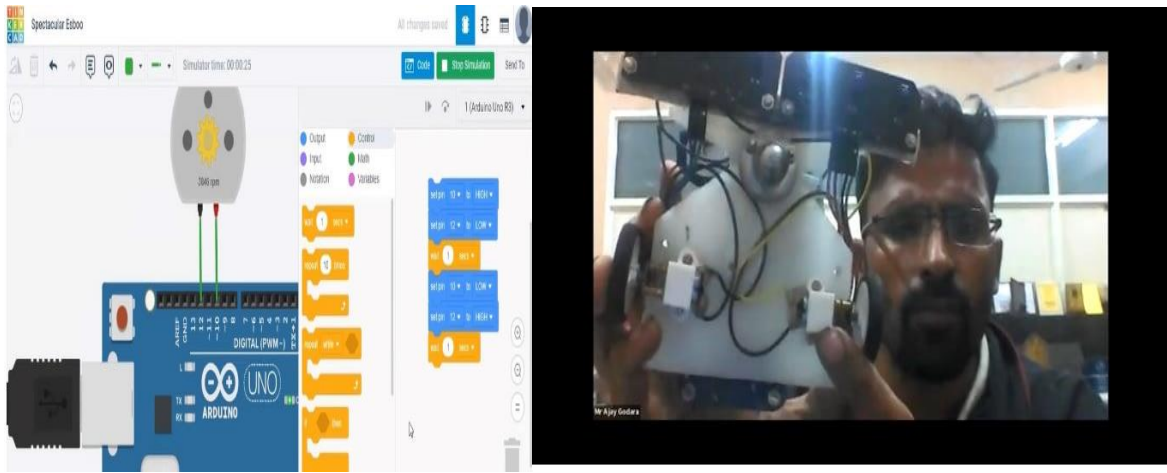


7. Dr. Mithilesh Sahu, Sr Assistant Professor became a life member of ISHMT society (LM1502).
8. One-month AUTOCAD hands-on training is organized for Diploma 4th semester Mechanical students from 15/03/2022 to 16/04/2022. The students are learning the 2D sketch as well as 3D modeling. This initiative was taken up to make students industry ready for positions like Draughtsman, etc.



9. Department of Mechanical Engineering organized an online one-day workshop on the “Design and Development of Robots” under the Workshop series of Technorollix 2K22 on 5th March 2022. The speaker of the workshop Mr Ajay Godara, Mentor of Change (NITI AYOJ G.O.I), Innovator, Founder & CEO @Enovate Skill, Robotics, Automation, IIoT discussed in detail the simulation of robot design using AUTODESK TINKERCAD, Arduino programming, battery management, motor selection, chassis design and others. Around 125+ participants were benefited from the workshop. The prepared robots took part in the different events of Robovision-TechnoRollix 2022

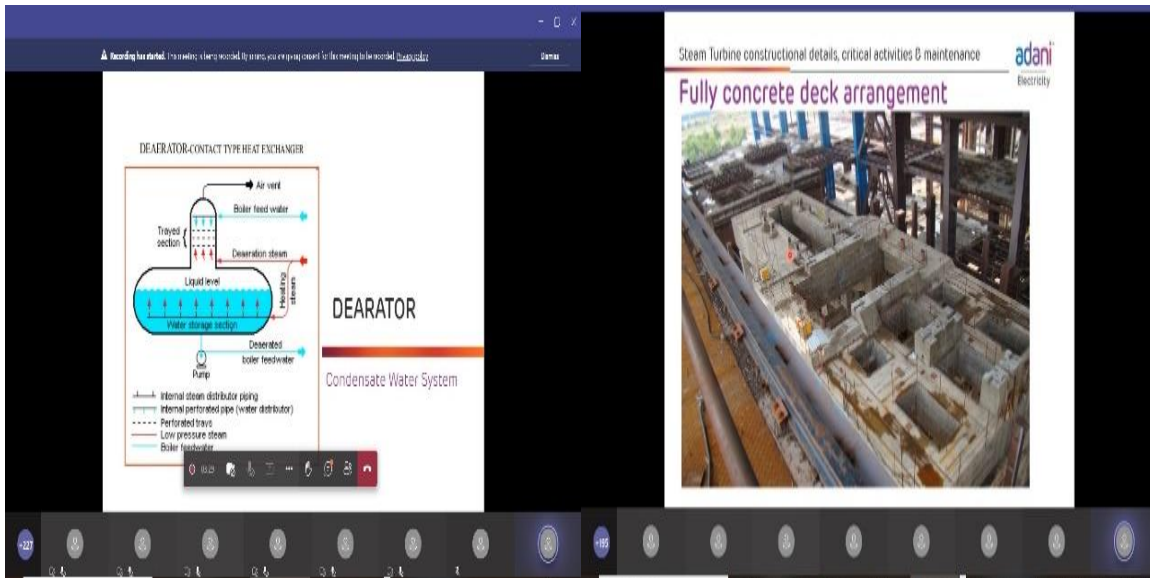




10. Department of Mechanical Engineering conducted mock GD and PI on 9<sup>th</sup> and 10<sup>th</sup> march for final year students to grab the placement opportunity.



11. Around 80+ students of the 6<sup>th</sup> and 8<sup>th</sup> semester of the Department of Mechanical engineering successfully completed a one-month online internship program in Large Scale Industry, organized by Adani Institute of Infrastructure Engineering in association with Adani Electricity Ltd., Mumbai during the period 14<sup>th</sup> February 2022 to 13<sup>th</sup> March 2022.



12. Two months of Industrial training was organized for Diploma final year students from 01/12/2021 to 31/01/2022 at Steel Structural division (SSD), JSPL Punjipatra.

13. Industry Visit of MTech 2nd Semester students was organized in the Water treatment plant of JPL, Tamnar, February 22, 2022, and in the CHP and Operation unit of JPL, Tamnar, March 12, 2022.

14. Department of Mechanical Engineering organized an exclusive one-day industrial visit on 12th March 2022 for the students of the 6th semester at Jindal Power Limited, Tamnar and for the students of the 4th semester at Nalwa Steel & Power Limited, Taraimal.



15. The Department of Mechanical Engineering, OP Jindal University in association with the Centre of Excellence in Welding Technology (CoEWT), Yaskawa India Pvt. Ltd. and Fronius India Pvt. Ltd. jointly organized a



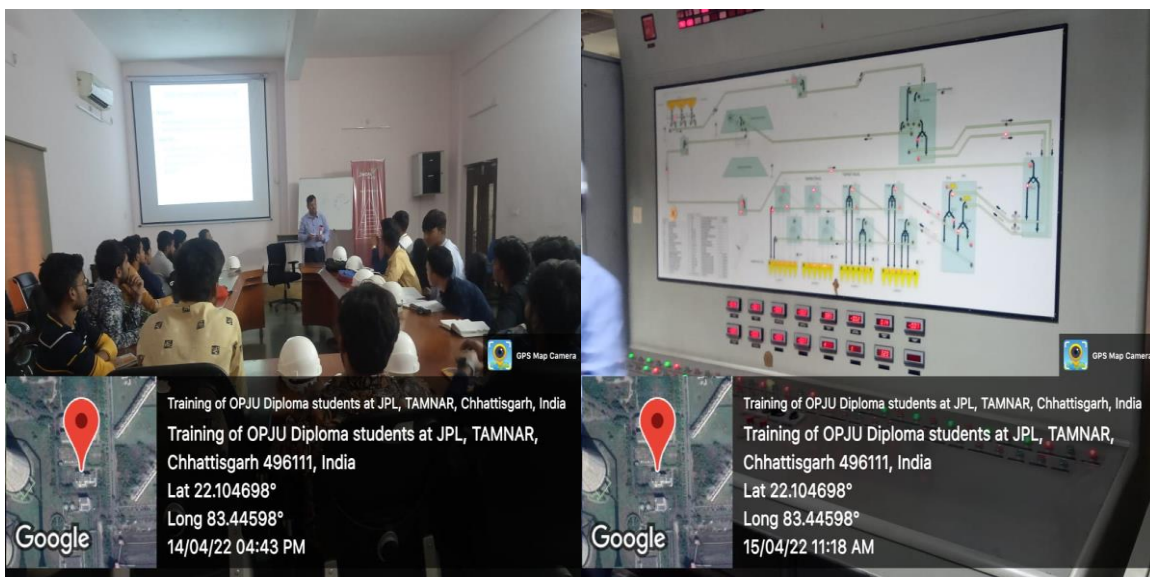
Training Programme on "Robotic Welding Technology" from 5th to 8th April 2022 at OPJU Campus.

The training program enabled the participant to program robotic welding set up to perform various welding operations. The robotic welding setup can further be utilized for Research. The participants were faculty, students and personnel from nearby industries and other esteemed organisations.



16. Mr A Gyanesh Kumar Rao, a fourth-semester M.Tech student of the Mechanical Engineering Department, got selected as a Research Intern in CSIR-Institute of Minerals & Materials Technology Ministry of Science and Technology, Bhubaneswar.

17. An exclusive 15 days (10<sup>th</sup> – 24<sup>th</sup> April 2022) of industrial training on "Power Plant Familiarization" was organised for the 6th-semester Diploma students of Mechanical Engineering department at Jindal Power Limited, Tamnar.



18. Department of Mechanical Engineering, in association with IIC OPJU, organized a five-day training Program on " ANSYS-Hands on Workshop" from 4<sup>th</sup> to 10<sup>th</sup> May 2022. The students got an exposure to the new technology and capabilities of the software that can be utilized to support their innovations in Engineering and perform the simulations.

Dr. R.D. Patidar, Honourable Vice-Chancellor, OPJU distributed the certificates to students and also motivated the students with his kind words.



19. Department of Mechanical Engineering, in association with the Centre of Excellence in Manufacturing and Automation conducted a value-added training on “Metal Joining Technology: Simulator Hands-On Session” from 16<sup>th</sup> May 2022 to 20<sup>th</sup> May 2022. The course was attended by B.Tech first year students.

This course provided the trainees with the necessary knowledge & skills required by B. Tech graduates to become competent welding engineers as per the need of the manufacturing and fabrication industries. It was an introductory course and 20 students attended the course. The course mainly included the basic introduction to metal joining technology, evaluation and selection of welding processes and rigorous practice on virtual welding simulator.





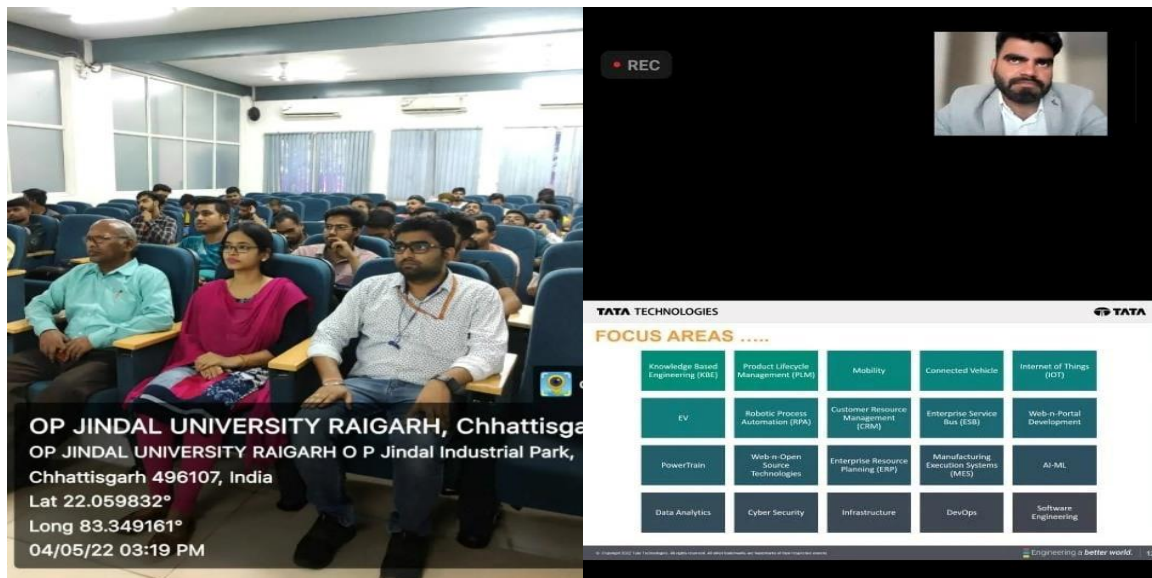
20. Department of Mechanical Engineering in association with the SAEINDIA OPJU collegiate Club organized a webinar on 06<sup>th</sup> May 2022 on the topic “STEEL: a word that changed the World”. The session was delivered by Mr. Malyaj Kaushal, Digital Learning Champion, JSW Steel Limited, also an OPJU alumnus - Mechanical (Batch 2014). Mr. Malyaj Kaushal is a supply chain specialist skilled in Production Planning, Strategic Planning, Warehouse and Inventory Management, OTIF, and Order Fulfilment. He gave an excellent overview of the role of the Iron and Steel Industry in Nation-building, the transformation journey of Indian steel, and discussed all the breakthrough technologies used in the steel sector.



21. Department of Mechanical Engineering, in association with the IIC OPJU and SAEINDIA Collegiate club of OPJU organised an online webinar on 04<sup>th</sup> May 2022 on the topic "Recent Trends and Innovations in Automotive Industry", with an objective of giving exposure to the students on recent technological developments taking place in Mobility Sector along with the key challenges faced by the automotive industry.



The talk was delivered by Mr Sushant Kumar, Campus Recruitment Head, TATA TECHNOLOGIES, which proved to be beneficial for the young budding engineers as they could understand the demands of the automotive industry.





22. Department of Mechanical Engineering in association with Centre of Excellence in Manufacturing and Automation (CoEMA) organised a full-time one-month Industrial Internship Program (Certificate Course) from 6<sup>th</sup> June 2022 to 5<sup>th</sup> July 2022. The internship was mainly focused on imparting practical knowledge of welding technology to the students by adopting the learning-by-doing approach and was attended by participants from various esteemed institutes of Chhattisgarh.

The internship included theory classes covering the basic to advanced welding technologies, sessions on weld quality, underwater welding, actuation technologies, robotic welding, programming and hands-on sessions in virtual welding simulators covering MAG, MMAW, and TIG in various positions of the workpiece. The participants also got the opportunity to work on CNC routers, Laser engravers, 3D printers of the OPJU innovation centre. The internship also included industrial visits to JPL, Tamnar, Nalwa Steel & power Ltd., and SSD Punjipathra.



23. **Weld talk series:** Department of Mechanical Engineering in association with Centre of Excellence in Manufacturing and Automation (CoEMA) organised a series of lectures on Advanced Technology in the month of June 2022. The session was fruitful for the students of 6<sup>th</sup> and 4<sup>th</sup> semester along with the students undergoing industrial internship.

| S.           | Date                       | Speaker                                      | Topic  | Industry                             | Photograph  |
|--------------|----------------------------|--|--|--------------------------------------|---|
| Weld Talks 1 | 9 <sup>th</sup> June 2022  | Mr. C. Raghvan                               | Robotic Arc Welding  | Fronius India Pvt. Ltd               |  |
| Weld Talks 2 | 13 <sup>th</sup> June 2022 | Mr Sudipto Banerjee and Mr Sudhir Kumar Lall | Repair & Maintenance Welding in Steel Industry                 | Wearresist Technology Pvt Ltd        |  |
| Weld Talks 3 | 13 <sup>th</sup> June 2022 | Mr Kamlesh Singh                             | New developments in Plasma Cutting Technology                  | Ador Welding Ltd                     |  |
| Weld Talks 4 | 14 <sup>th</sup> June 2022 | Mr Nimesh S Chinoy                           | Advances in TIG Welding from Semi-Automatic to Fully Automatic | Electronic Devices Worldwide Pvt Ltd |  |

|              |                            |                       |   |                                 |   |
|--------------|----------------------------|-----------------------|---|---------------------------------|---|
|              |                            |                       | Machines                                      |                                 |   |
| Weld Talks 5 | 14 <sup>th</sup> June 2022 | Mr N Sridhar          | New Trends in Maintenance and Repair Welding. | Ador Fontech Ltd                |  |
| Weld Talks 6 | 23 <sup>rd</sup> June 2022 | Mr. Rituraj Bose      | Occupational Health and Safety in Welding     | The Indian Institute of Welding |  |
| Weld Talks 7 | 28 <sup>th</sup> June 2022 | Mr. Dhanesh Narayanan | Trends in Industrial robotics                 | Yaskawa India                   |  |
| Weld Talks 8 | 29 <sup>th</sup> June 2022 | Mr. Dhanesh Narayanan | Application of industrial robots              | Yaskawa India                   |   |

24. Prof. L.R. Bhandarkar, Associate Professor, Mechanical Engineering Department, fetched a project from Unnat Bharat Abhiyan (UBA) an initiative of MHRD, Govt. of India under “Rural Craft and Artisans Development”. The title of his project is “Filing Machine Tool”.

25. Dr. Mithilesh Kumar Sahu, Sr. Assistant Professor, Mechanical Engineering Department was awarded with the Best Presenter Award for his research work titled “Experimental Investigation of Blower Speed and Number of Nozzles Effect on Cooling Tower Performance” during the International Conference on Advances in Steel, Power & Construction Technology, organised by OPJU during 5<sup>th</sup> – 07<sup>th</sup> June 2022.

26. The Department of Mechanical Engineering organised an awareness session for the proposed Siemens integrated B Tech program in Mechanical Engineering with specialization in Automotive Design (BIW, Plastic Trims, and Electric Vehicle Design)/Digital Manufacturing for the first-year students. The course may start in the second year. Further, the department is also planning to collaborate with Bosch Rexroth for courses in emerging areas like Robotics, Mechatronics, and Automation, to enhance the employability skills of students.

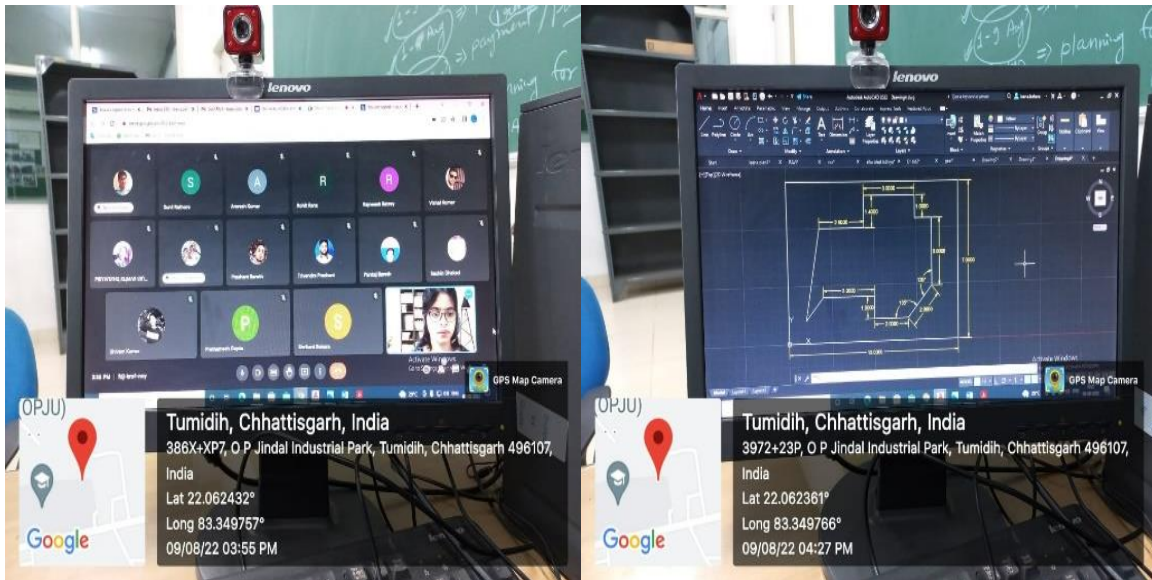




27. Mr. A. Gyanesh Rao, M.Tech 4th-semester student of the Department of Mechanical Engineering successfully completed 1.5 months of internship at CSIR- Institute of Minerals and Materials Technology, Bhubaneswar. During the internship, he worked on a project titled "Optimized Way to Achieve Net Zero in Thermal Power Plants".



28. Department of Mechanical Engineering Organized a one-week online workshop on "Auto CAD - 2D & 3D" for Diploma students. 60 plus participants from various institutes of Chhattisgarh and Odisha participated in this workshop.



29. The Department of Mechanical Engineering, OP Jindal University organized its 2<sup>nd</sup> National Level Online Quiz Competition on "Green Technology" on 28<sup>th</sup> August 2022 in association with SESI, SAE India Collegiate Club, ZYPP, CREDA, and IEEE OPJU Chapter for the B.Tech students of all branches and industry professionals. The 1<sup>st</sup> quiz was organised last year in the month of May 2021. 250+ participants from various states of India participated in the quiz.

organized by  
 Dept. of Mechanical Engineering  
**National Level Quiz Competition** on  
**Green Technology**  
 28/08/2022  
 10 AM to 11 AM  
 Who can participate :  
 B.Tech students from all the branches  
 and industry professionals  
 Scan the QR Code  
 to Register  
 Win Exciting Prizes  
 Registration is free  
 For queries contact: 9109977048, 8319793351  
 Participation certificate will be sent to the participant's registered email id within 3 days.

30. All 66 students of the 7<sup>th</sup> semester of the Department of Mechanical Engineering have been selected for long-term internships in renowned companies like - Bajaj Auto, Mahindra & Mahindra, Metalman Auto Pvt. Ltd.,

Simplex Casting, TRL Krosaki, BHEL, JPL, JSPL, JSW Coatings, and MSP Raigarh.



31. Department of Mechanical Engineering organized a 5 Days Online Faculty Development Program on “Energy Management in Power Plants” in association with IEEE Chapter, Chhattisgarh state Renewable Energy Development Agency (CREDA), Institutional Innovation Council and Jindal Power Limited, Tamnar from September 05-09, 2022 in online mode. The FDP was organised with an aim to familiarize the participants with latest energy conversion technologies and understand the energy management concepts in power plants. 15 speakers from IIT’s, NIT’s and renowned industries shared their knowledge and experience with 114 participants during the program.





**Speakers**  
**Inauguration 10:00 to 11:15**  
 Dr. R. S. Puri, Prof. K. S. Datta, Dr. Anil K. Gupta, Dr. Manoj Kumar, Udit Mohan Srivastava

**FDP Sessions**

|                |                |                |
|----------------|----------------|----------------|
| 05:00 to 05:30 | 11:00 to 12:00 | 03:00 to 04:00 |
| 06:00 to 06:30 | 05:00 to 11:00 | 04:00 to 04:30 |
| 07:00 to 07:30 | 10:00 to 11:00 | 05:00 to 06:00 |
| 08:00 to 08:30 | 09:00 to 11:00 | 05:00 to 06:00 |
| 09:00 to 09:30 | 10:00 to 11:00 | 05:00 to 06:00 |
| 09:00 to 11:00 | 10:00 to 11:00 | 05:00 to 06:00 |
|                |                | 05:00 to 06:00 |

**Valedictory 04:00 to 05:00**  
 Mr. Sandeep Jain, Dr. N. Sandesh Kumar, Mr. Subrata Kumar Singh

Registration Link : [bit.ly/3vLEVID](http://bit.ly/3vLEVID)  
 Organized By: Dept. of Mechanical Engineering, OP Jindal University Raigarh  
 E-Certificates will be issued to all the participants. Contact: mechdept@opju.ac.in

32. Every year, September 15 is observed as Engineers Day, to honour the hard work and efforts that engineer put in to make our daily lives easier, the Department of Mechanical Engineering in association with Centre of Excellence in Manufacturing and Automation organized an Extempore and Welding Competition at OPJU Campus for the students of 3<sup>rd</sup> and 5<sup>th</sup> semester. The event witnessed wide participation from all corners. More than 120 students took part in the competition. Exciting prizes were distributed at the end to the winners.



33. The Graduate Aptitude Test in Engineering (GATE) is an examination that primarily evaluates the comprehensive understanding of various concepts, relevant to the engineering and science. A good GATE score helps students in taking admission into the master's program and is also used for recruitment by renowned Public Sector Undertakings (PSU) Companies and government organizations. With an aim, to strengthen the GATE preparedness, Department of Mechanical Engineering has conducted the screening test for final year students and the shortlisted students will get an opportunity to appear in free GATE Mock Test Series 2022-2023, along with the doubt clearing sessions. Moreover, the department is also organizing special GATE Preparatory classes for prefinal year students.



34. Regular industrial visits are a part of curriculum at OP Jindal University. To give an exposure of the industrial environment to the newly inducted first year students, the Department of Mechanical Engineering organized industrial visits on 14<sup>th</sup> September 2022 at Jindal Power Limited Tamnar, Jindal Steel and Power SSD Punipathra, and Nalwa Steel and Power Limited Taraimal. The industrial visits were a part of the induction program.



### **35. OP Jindal University receives the prestigious AICTE-CII award 2021 for best industry connect**

OP Jindal University emerged as winner for best industry-academia linkage at the AICTE-CII survey of industry-linked 'Technical Institutes 2021' awards. The results of the 10<sup>th</sup> edition of AICTE-CII Survey of Top Industry-Linked Technical Institutes 2021 were announced at the AICTE headquarters, New Delhi on 01<sup>st</sup> September 2022 and OP Jindal University bagged the two prestigious awards - Best Industry-Linked Emerging Engineering Institute (Degree) and Best Industry-Linked Mechanical & Allied Engineering Institute (Degree). Awards were given under four different categories – Engineering, Management, Pharmacy and Architecture & Planning. In the engineering category, there were seven awards at degree level and OP Jindal University won two awards, the first prize of Emerging Institute and first prize in Mechanical Engineering for having best industry linkages. A total of 1800 institutions from 28 states of the country participated in this survey and OP Jindal University stood first in Engineering category. On behalf of OP Jindal University, Dr RD Patidar, Hon. Vice Chancellor and Dr Siddharth Chakrabarti, Director- Centre for Industry Academia Collaboration & HoD Department of Mechanical Engineering received the award. As part of the award assessment, the AICTE-CII survey assesses the current status of partnership between technical institutions and industry on six basic parameters, such as curriculum, faculty, governance, infrastructure, placements, research and projects, and skill development. Every year this award is conferred to the institutes having best industry linkages that help to produce manpower which can meet industry expectations and improve the efficiency and productivity of industries.





36. The Department of Mechanical Engineering at OPJU believes in experiential learning and hence continuously provides opportunities to its students to showcase their talent in the National arena. Moving in the same line, this year also the student team "VIDYUT" as a part of the SAE Collegiate Club designed and fabricated their "Formula One Car" under the guidance of Faculties & Staff of Department of Mechanical Engineering and Centre of Excellence in manufacturing & Automation. They participated in the SAE-SUPRA Formula contest, organised between 22nd - 25th August 2022 at Buddh International Circuit, Greater Noida. OPJU was the only University from Chhattisgarh to participate in this event.



37. The students of Diploma 3<sup>rd</sup> Semester of the Department of Mechanical Engineering are undergoing a hands-on session on "Advanced Welding Technology" at Centre of Excellence in Manufacturing and Automation from

19<sup>th</sup> September 2022 to 28<sup>th</sup> October 2022. During the session the students will explore the advanced welding technology and will do the practical jobs on SMAW, GMAW and GTAW technology. This training will enhance their technical knowledge and skills in the related area.



38. Dr Siddharth S Chakrabarti, Professor & Head- Mechanical delivered a talk at IEEE R10 Industry-Academia Workshop on “Research and Innovation on Reduction of Carbon Footprint” organized by M/S Jindal Power Limited (JPL), Tamnar, and OPJU, Raigarh on 20<sup>th</sup> September 2022. The session was attended by industry professionals and academicians.



39. Dr. Mukesh Desai, Associate Professor, Department of Mechanical Engineering successfully completed second “International Faculty Development Program on Qualitative, Quantitative and Mixed Method Research Design” Organized by: Eudoxia Research Centre and Eudoxia Research University – USA during 19<sup>th</sup> July to 27<sup>th</sup> July, 2022.





40. Prof. Jitesh Singh, Assistant professor, Department of Mechanical Engineering Successfully completed “Two Weeks Industrial Training on Composite Materials for Industrial Applications” organised by The National Small Industries Corporation Ltd. – Technical Services Centre, during 01<sup>st</sup> – 15<sup>th</sup> August 2022.



41. Prof. Akash Pandey, Assistant professor (Sr. Grade), attended SERB-Sponsored High-end workshop (KARYASHALA) on “Slurry Flow Characteristics and Transportation in Mineral Processing – Principle & Practices” from 25th to 30th September 2022 organised by NIT Jamshedpur.

42. Welding is an essential component of many industries such as the automotive industry, the construction industry, the aviation industry, and many more. To enhance the welding skills of students, Department of Mechanical Engineering in association with the Center of Excellence in Manufacturing and Automation organised a 6 weeks value added course on



“Welding Technology” for Diploma 3<sup>rd</sup> semester students. The course was conducted during 19<sup>th</sup> September 2022 – 28<sup>th</sup> October 2022. Dr. Umesh Vishwakarma, Mr. Prashant Padhi, and Mr. Narendra Deshmukh conducted the course.



### Awards & Recognitions

43. Dr. Mahesh Bhiwapurkar, Professor, Department of Mechanical Engineering attended a one week Online National Level Faculty Development Program on “Research: Vision to solve problems through different angles” organised by Applied Sciences and Humanities Department, Parul Polytechnic Institute, Faculty of Engineering & Technology, Parul University, Limda under Department of Science & Technology, Gujarat Council of Science & Technology (Govt. of Gujarat) during 15<sup>th</sup> October, 2022 to 20<sup>th</sup> October 2022.



44. Prof. Dharmendra Singh Saini, Assistant professor, Department of Mechanical Engineering attended a 5 days Online Faculty Development Program on “Research Publications and Intellectual Property Rights in Academics” organised by Shri Shankaracharya Institute of Professional Management & Technology, Raipur during 10<sup>th</sup>– 14<sup>th</sup> October 2022.



**Shri Shankaracharya Institute of Professional Management & Technology  
Raipur (C.G.)**

Old Dhamtari Road, Sejbahar, P.O.- Mujgahan, Raipur, Chhattisgarh 492015 |info@SSIPMT.com

**Department of Mechanical Engineering  
Faculty Development Programme**

On  
**Research Publications and Intellectual Property Rights in Academics**  
10th to 14th October 2022

***Certificate of Participation***

This Certificate is awarded to **Dharmender Singh Saini** from **OP Jindal University Raigarh** for successfully attending the **Faculty Development Programme** organised by **SSIPMT Raipur**.

Dr. Rityuj Singh Parihar  
Programme Coordinator

Mr. Aakash Soni  
HOD (Mechanical)

Dr. Alok Kumar Jain  
Principal (SSIPMT, RAIPUR)

45. The Department of Mechanical Engineering in Association with the Center of Industry-Academia Collaboration & IIC@OPJU organized an online session on “Autonomous Driving - Trends, Transformation, and Opportunities” on 6th Nov, 2022. Mr. Badari Kotejoshyer, Associate Vice President, KPIT Bengaluru was the speaker for the session, he gave an excellent insight into current trends, autonomous technology, and business transformation models. The speaker discussed the six levels of driving automation defined by the Society of Automotive Engineers (SAE) and the way the automotive industry is undergoing transformation. He stressed on different aspects that will attract the attention of multiple disciplines to work on vehicle design & testing, algorithm development, software coding, integration and validation, system modelling

**OP Jindal University, Raigarh**  
Department of Mechanical Engineering  
In Association with  
Centre for Industry-Academia Collaboration (CIAC)  
Presents

Online Session on  
**Autonomous Driving**  
Trends, Transformation, and Opportunities

**Speaker**  
Mr. Badari Kotejoshyer  
Associate Vice President  
KPIT, Bengaluru

06.11.2022  
11:00 AM

**Facilitator**  
Dr. Siddharth S Chakrabarti  
Director - CIAC  
Prof & Head- Dept of Mechanical Engineering

**Moderator**  
Prof. L. R. Bhandarkar  
Associate Professor  
Dept of Mechanical Engineering, OPJU

Zoom Meeting  
This meeting is being recorded.

**Autonomous Technology**

Participants: Dr. Siddharth S Chakrabarti, Mr. Badari Kotejoshyer, Mr. Chandra Mohan, OP Jindal University

Chat: All the participants can see their question

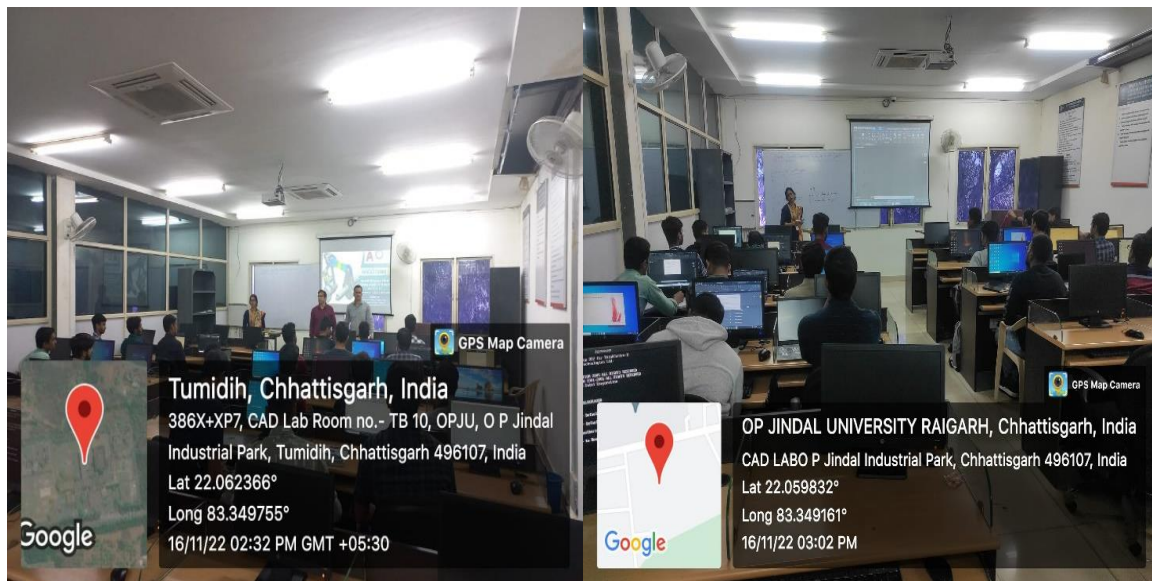
Autonomous Technology Components:

- Sensors
- Onboarding Computing Units
- Onboard Computing Units
- Programmable Interface for Actuators

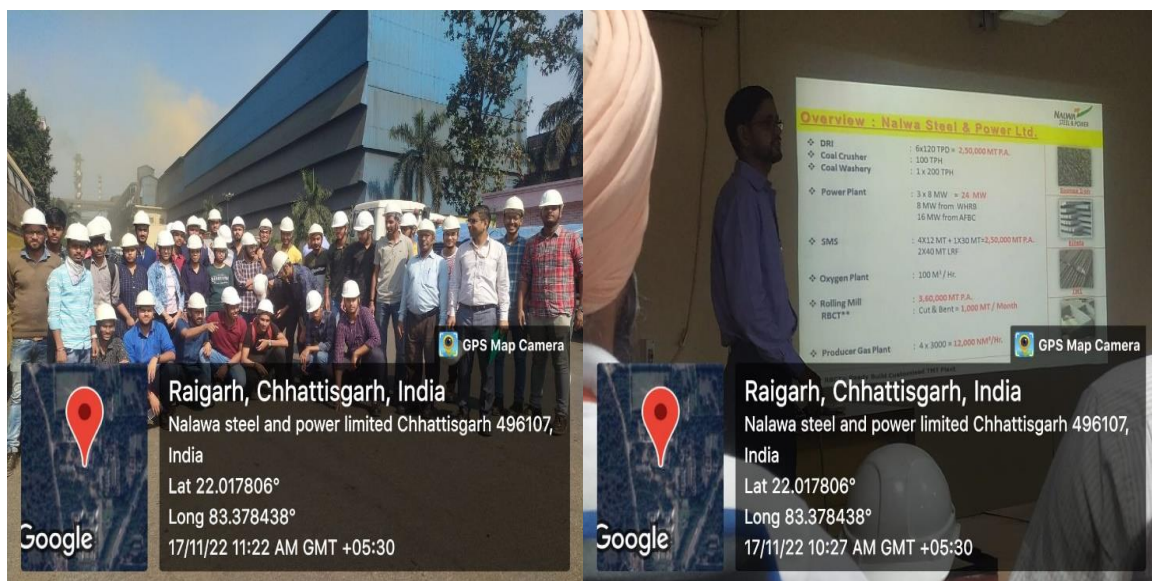
46. Mechanical engineers use AutoCAD for sketching and analyzing ideas to determine the best solution for a problem at the early stages of a design



project. To give the students an exposure to the software, Department of Mechanical Engineering organized a 25 hours training program for the pre-final year students between 16<sup>th</sup> Nov to 2<sup>nd</sup> Dec, 2022

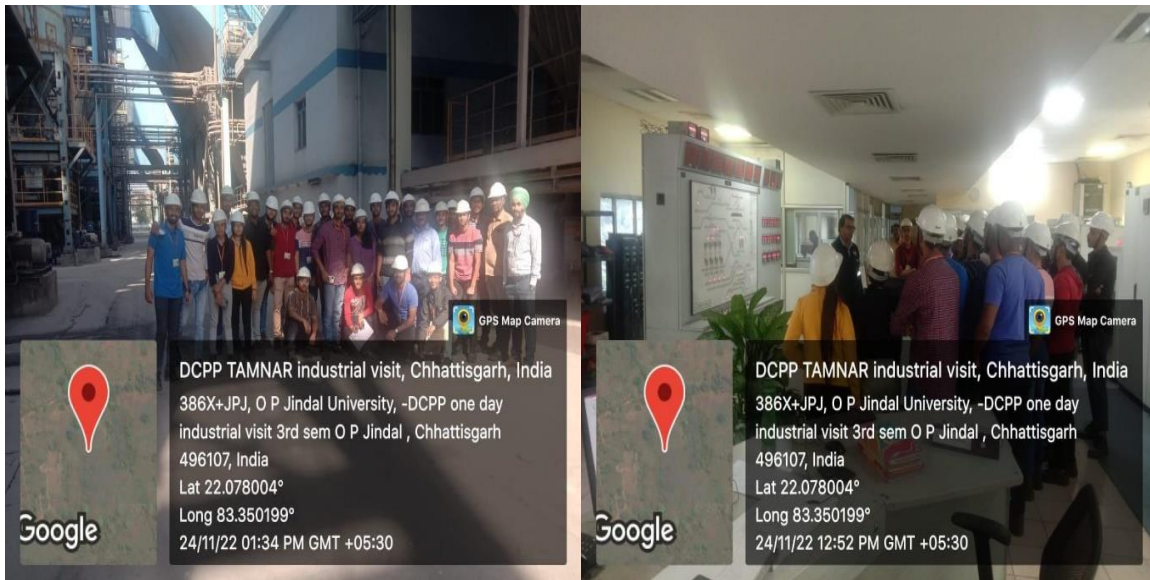


The Department of Mechanical Engineering organized industrial visit at Nalwa Steel and Power Limited for the 3<sup>rd</sup> semester students on 17<sup>th</sup> November 2022. Students got an exposure to the basic operations performed in a steel plant.



47. The Department of Mechanical Engineering organized industrial visit at Dongamahua Captive Power Plant, Tamnar for the 3<sup>rd</sup> semester students on 24<sup>th</sup> November 2022. Students understood in detail the working of a Thermal Power Plant and visited its key units.





48. The Department of Mechanical Engineering in association with the Centre of Excellence in Manufacturing and Automation (CoEMA) proudly announces its participation in the National Skill Competition for Best of the Best Welders 2022 (An Associate Event of the International Institute of Welding) to be held at CV Raman Global University Odisha.

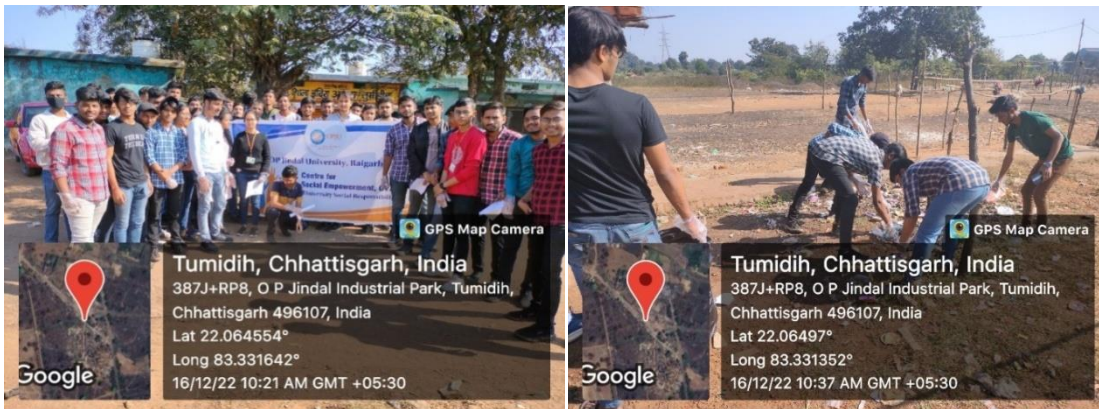
Our three students from Diploma in Mechanical Engineering have been selected for competition under various categories. The event has more than 45 registered participants from various parts of the country and we are the only participants from the State of Chhattisgarh



49. The Department of Mechanical Engineering in Association with the Center of Excellence in Manufacturing & Automation organized a five-days training program on “CNC Machines” during 05<sup>th</sup> – 09<sup>th</sup> December 2022 for ITI students. The training program was organised with an aim to upgrade the skills of students of nearby ITI colleges. This phase-wise training benefited participants in the area of conventional machining and provided an exposure of the latest advancements in the machining technologies like NC, CNC, and Metrology.



50. The Department of Mechanical Engineering (OPJU) in association with NSS (OPJU) has organized an Awareness campaign on “My Village, Clean Village”, “Importance of Voting” and “Save Soil” under the AICTE Activity Points Programme at Tumidih, Punjipathra. In the program, about 50 students from the third semester- of Mechanical actively participated and formed groups to interact with the people on technical aspects of saving soil and the voting awareness campaign.



51.OPJU team "Vikrant" comprising of the students of the Department Mechanical and Electrical Engineering, has successfully cleared the first Pre-Virtual Round (Rulebook Test) of SIEP E-Bike Challenge 2023. The event is organized at the national level by the Imperial Society of Innovative Engineers (ISIE INDIA - India's Biggest EV Skill & Research Platform) and Hero Electric.





52. OPJU congratulates Dr. Mukesh S. Desai, Associate Professor, Mechanical Engineering Department for successfully completing a two-2week online certification course on “Entrepreneurship”, organised by Turnip Innovations during 30<sup>th</sup> November – 13<sup>th</sup> December 2022.



53. OPJU congratulates Mr. Bhaskar Mahobiya, M.Tech 3<sup>rd</sup> semester student of the Department of Mechanical Engineering for successfully completing one-month online training on “Solid Works” from Learn Vern Pvt. Ltd.

