K. K. Wagh Institute of Engineering Education and Research

Department of Production Engineering

Technical News Letter

<div align="right">January 2022 of AY 2021-22</div>

It's a great pleasure to present our newsletter for the January 2022 of AY 2021-22. Department of Production Engineering has been consistently endeavoring to upgrade the skills and performance of students and staff members through various ventures.

❖ Expert lectures attended by staff

01 expert lectures attended by the teaching and non- Teaching staff.

Sr. No.	Title of lecture	Name of Speaker	Name of Industry	Date	No. of Student Present
1	Artificial Intelligence in Robotics	Mr. Kaifali Bhojani,	SVR Enterprises, Pune	13-1-2022	35

❖ Online Training Completed by faculty

01 Online Training Completed by faculty

Sr. No.	Name of faculty	Designation	Training Name	Conducted By
1	A.S. Kamble	Assistant Professor	Robot Operating System (ROS) during 10/1/2022 to 14/1/2022	AICTE Training And Learning (ATAL) Academy at GSSS Institute of Engineering and Technology for women.Delhi

Online Webinar attended by the faculty

In the month of the January 2022 teaching and non- Teaching staff member attended various webinar on online platform to explore the new advancement in the technology.

❖ Student Achievement

04 students of 2021-2022 Batch were selected in Reliance Retail company with package of 3.5 lacs. Felicitation Program for these placed students was organized by Production Engineering Department on 20th Jan 2022. 31 students along with staff attended this program

❖ Staff Activities

Paper presentation

Dr. P. J. Pawar presented research paper at International Conference on Advanced Engineering Optimization through Intelligent Techniques" organized by SVNIT Surat during 28-30 Jan. 2022.

Trajectory Optimization of an Industrial Robot Using Teaching Learning Based Optimization

Abstract. In this work, a teaching learning-based optimization (TLBO) algorithm is applied to control the industrial robot arm trajectory based on inverse kinematics solution with minimization of energy consumption. The problem considers the minimization of energy consumption during the process sequence of six degrees of freedom industrial robot. The assessment of energy criterion includes the computational simulation of the robotic arm movement. The considered approach is compared and validated on the trajectory optimization of the industrial robot ABB IRB 1410.

Dr. P.J. Pawar
Head of the Department