

Participative Learning

It includes following ways of learning. Proofs of the same are attached below.

1. Lab manual
2. Seminar presentations
3. Value added courses
4. NPTEL Courses
5. Guest lectures
6. Poster presentation
7. Think pair share and role play



Dr. Vasantrodada Patil Shetkari Shikshan Mandal's

Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon.


Department of Computer Science and Engineering

(Artificial Intelligence and Data Science)

Academic Year: 2023-2024

Guest Lecture

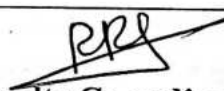
| Sr. No. | Title | Name of Resource Person | Date | Target Audience (No.) | Faculty Coordinator |
|---------|--|---|------------|--------------------------|---------------------------------------|
| 1 | Webinar on Generative AI Workshop Building own generative AI Model | Mr. Trivikrama | 01/09/2023 | 330 (All Branches) | Ms. R. R. Jagtap |
| 2 | Essential AI tools for current trends in Image Processing | Mr. Tahseen Mulla | 21/10/2023 | 85 (SY - TY AIDS) | Mrs. M. S. Patil |
| 3 | Deep Learning | Mr. P.M. Gavali DKTE, Ichalkaranji | 27/04/2024 | TY CSE (AIDS) | Mrs. P.V. Koli |
| 4 | Opportunities in Artificial Intelligence and recent trends in AI | Dr. Vijaykumar | 13/03/2024 | 111 (TY-CSE and TY-AIDS) | Ms.R. R. Jagtap Mrs. D. D. Dhokate |
| 5 | Technological Orientation seminar for Engineers | Mr. Tushar Jadhav Radical Technologies, Sangli | 28/03/2024 | 47 (SY -TY AIDS) | Mrs. T. S. Upadhye |
| 6 | Web Development- Angular JS, PHP | Mr. Shreyas G. Mane One Star Software Solution, Sangli | 14/05/2024 | TY CSE (AIDS) | Mrs. S.S. Patil |
| 7 | Guest lecture JAVA | Yogesh Patil | 24/6/2024 | SY CSE (AIDS) | Mrs. T. S. Upadhye |


(Ms) **HEAD**
Dept. of Computer
Science and Engineering
(Artificial Intelligence and
Data Science)



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon, Sangli.- 416304
Department of Computer Science Engineering
Department of Computer Science Engineering
(Artificial Intelligence and Data Science)

| | |
|--------------------------------|---|
| Title of the Activity | Webinar on Generative AI Workshop |
| Date | 1/9/2023 |
| Number of hours | 2 Hours 30 Minutes |
| Resource Person(s) | Mr. Trivikrama [AI Expert] |
| Organization details | NXT WAVE |
| Faculty co-ordinator(s) | Ms. Rupali R. Jagtap |
| Target Audience | CSE-AIDS and circuit branch students |
| No. of Students present | 330 |
| Contents | Introduction AI Future of AI Building own Generative AI Model |


Faculty Co-ordinator

Ms. R. R. Jagtap


HOD CSE-AIDS

Free
Webinar

NXT
WAVE™

AI for Students: Build Your Own Generative AI Model

- ✔ Get AI Mastery Certificate
- ✔ No previous coding knowledge needed



Trivikrama
AIR 93, IIT Delhi
AI Expert



1st Sept, 2:00PM

Register Now



🔊 Exclusive **Generative AI Workshop** for students of "Padmabhooshan Vasantraodada Patil Institute of Technology, Budhgaon, Sangli", (all branches) 🔊

When you graduate, it's extremely likely you won't work alone on your first job. Generative AI will be your partner🤖

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🚀 Students who have AI skills will be the trailblazers, the standouts, and yes, the coolest people in the room.

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📄 Get AI Mastery Certificate

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Free
Webinar

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AI for Students: Build Your Own Generative AI Model

- ✔ Get AI Mastery Certificate
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Trivikrama
AIR 93, IIT Delhi
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When you graduate, it's extremely likely you won't work alone on your first job. Generative AI will be your partner 🤖

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📁 Build your first Generative AI Model

📄 Get AI Mastery Certificate

👉 Register now for FREE: bit.ly/GenerativeAIworkshop_PVPIT

mail

Rupali Jagtap <rupajagtap@gmail.com>

Certificate of Appreciation - Padmabhooshan Vasanthaodada Patil Institute of Technology, Budhgaon(Sangli)

Sudhanshu Chouhan <sudhanshu.chouhan@nxtwave.tech>
<rupajagtap.cse@pv pitsangli.edu.in, Rupali Jagtap <rupajagtap@gmail.com>, Satyapriya Dash <satyapriya.dash@nxtwave.tech>

Fri, Sep 1, 2023 at 6:21 PM

Dear sir,

We are delighted to present you with the official **Certificate of Appreciation** for your outstanding contribution for the workshop on **"Generative AI"** conducted on **1st September,2023 at 2:30PM** for students of **Padmabhooshan Vasanthaodada Patil Institute of Technology, Budhgaon,Sangli.**

We look forward to collaborating with you on more exciting projects in the future! 🤝

Best Regards,



Sudhanshu Chouhan

Head- Learning & Development

+91-7051011998

sudhanshu.chouhan@nxtwave.tech

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Prof. Rupali Jagtap_Appreciation Letter_A4.pdf
893K



Dear

Prof. Rupali Jagtap

You Made a Significant Contribution to AI Education

Firstly, please accept our deepest gratitude.

Your support in organizing the AI workshop at your esteemed institution will open doors to many opportunities for your students. This workshop will inspire and encourage young minds to explore the vast potential of Artificial Intelligence (AI).

By adopting and advocating an unconventional outcome-focused workshop, you've accelerated a daring shift that not only redefines learning but also sets the stage for innovation.

Together, we are sparking a love for learning. Together, we are paving the way for a vibrant, technology-driven future.

Rahul A
Rahul Attuluri,
CEO, NxtWave



Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon, Sangli.- 416304
Department of Computer Science Engineering
Department of Computer Science Engineering
(Artificial Intelligence and Data Science)

Webinar on Generative AI
1st September 2023
Attendance Details

| Sr.No | Name of student | Department |
|-------|--------------------------------|---|
| 1 | Aditya Dhananjay Suryawanshi | Mechanical Engineering |
| 2 | Om Milind Ranade | Mechanical Engineering |
| 3 | Pawar Latika Pramod | Mechanical Engineering |
| 4 | Rajkumar Ramchandra Patil | Mechanical Engineering |
| 5 | Sanket Patil | Mechanical Engineering |
| 6 | Sanket hanamant patil | Mechanical Engineering |
| 7 | Yash | Mechanical Engineering |
| 8 | Aarya Shriram Vaidya | OTHERS / Artificial Intelligence & Data Science |
| 9 | Aashish Milind Gore. | OTHERS / Artificial Intelligence & Data Science |
| 10 | Aditya Jadhav | OTHERS / Artificial Intelligence & Data Science |
| 11 | Aishwarya sunil mane | OTHERS / Artificial Intelligence & Data Science |
| 12 | Akash sanjay pawaskar | OTHERS / Artificial Intelligence & Data Science |
| 13 | Akshata Hemant Kasar | OTHERS / Artificial Intelligence & Data Science |
| 14 | Akshay Balasaheb Patil | OTHERS / Artificial Intelligence & Data Science |
| 15 | Amol Vinod Jadhav | OTHERS / Artificial Intelligence & Data Science |
| 16 | Anam Babasaheb Vijapure | OTHERS / Artificial Intelligence & Data Science |
| 17 | Aniket kalekar | OTHERS / Artificial Intelligence & Data Science |
| 18 | Anisha Hanmant Sawant | OTHERS / Artificial Intelligence & Data Science |
| 19 | Anushri Sunil Kupade | OTHERS / Artificial Intelligence & Data Science |
| 20 | Archana sadashiv khandekar | OTHERS / Artificial Intelligence & Data Science |
| 21 | Arun Balaso Kumbhar | OTHERS / Artificial Intelligence & Data Science |
| 22 | Atul Shivaling Wale | OTHERS / Artificial Intelligence & Data Science |
| 23 | Avishkar Ramchandra Kirdat | OTHERS / Artificial Intelligence & Data Science |
| 24 | Ayush Kiran Patil | OTHERS / Artificial Intelligence & Data Science |
| 25 | Basaveshwar Vitthalrao Vanjire | OTHERS / Artificial Intelligence & Data Science |
| 26 | Chaitanya vijay kirdat | OTHERS / Artificial Intelligence & Data Science |
| 27 | Devyani Mahendra Ghatage | OTHERS / Artificial Intelligence & Data Science |
| 28 | Dhanshree suryakant pawar | OTHERS / Artificial Intelligence & Data Science |
| 29 | Dipali Appaso Lavate | OTHERS / Artificial Intelligence & Data Science |
| 30 | Dipti Ashok Sutar | OTHERS / Artificial Intelligence & Data Science |
| 31 | Divya Arun Irale | OTHERS / Artificial Intelligence & Data Science |
| 32 | Divya Rajaram Shinde | OTHERS / Artificial Intelligence & Data Science |
| 33 | Kaustubh Shankar patil | OTHERS / Artificial Intelligence & Data Science |
| 34 | Kirti Dnyandev Suryawanshi | OTHERS / Artificial Intelligence & Data Science |
| 35 | Kshitija Himmat Yadav | OTHERS / Artificial Intelligence & Data Science |
| 36 | Kshitija Shashikant Patil | OTHERS / Artificial Intelligence & Data Science |
| 37 | Kuldeep pramod shinde | OTHERS / Artificial Intelligence & Data Science |
| 38 | Manisha Sidu Nangare | OTHERS / Artificial Intelligence & Data Science |
| 39 | Manoj Dajindra Dorkar | OTHERS / Artificial Intelligence & Data Science |
| 40 | Mohammad Zaid Amin Golandaj | OTHERS / Artificial Intelligence & Data Science |
| 41 | Mohite Prachi Mahadev | OTHERS / Artificial Intelligence & Data Science |
| 42 | Nawab Rahim Shaikh | OTHERS / Artificial Intelligence & Data Science |
| 43 | Nikhil Arun Suryawanshi | OTHERS / Artificial Intelligence & Data Science |
| 44 | Nikita Popat Patil | OTHERS / Artificial Intelligence & Data Science |
| 45 | Nisarga Popat Patil | OTHERS / Artificial Intelligence & Data Science |
| 46 | Omkar Prakash Patil | OTHERS / Artificial Intelligence & Data Science |
| 47 | PRUTHVIRAJ ABHIMANYU ROTE | OTHERS / Artificial Intelligence & Data Science |
| 48 | Padmashri ShitalKumar Shetti | OTHERS / Artificial Intelligence & Data Science |
| 49 | Patil aniket anil | OTHERS / Artificial Intelligence & Data Science |
| 50 | Prachi Prasad Patil | OTHERS / Artificial Intelligence & Data Science |
| 51 | Praful Chidanand Birajdar | OTHERS / Artificial Intelligence & Data Science |

| Sr.No | Name of student | Department |
|-------|----------------------------|---|
| 52 | Pragati Bhaskar Gurav | OTHERS / Artificial Intelligence & Data Science |
| 53 | Prajit Parshuram Kolekar | OTHERS / Artificial Intelligence & Data Science |
| 54 | Prajwal Pandit Mali | OTHERS / Artificial Intelligence & Data Science |
| 55 | Pranali Prakash Kadam | OTHERS / Artificial Intelligence & Data Science |
| 56 | Pranjali Pratap Shirke | OTHERS / Artificial Intelligence & Data Science |
| 57 | Pranoti Mahesh Patil | OTHERS / Artificial Intelligence & Data Science |
| 58 | Prathmesh annaso sawant | OTHERS / Artificial Intelligence & Data Science |
| 59 | Pratik shahaji kure | OTHERS / Artificial Intelligence & Data Science |
| 60 | Prerana Pradip Shinde | OTHERS / Artificial Intelligence & Data Science |
| 61 | Priyanka aabaso patil | OTHERS / Artificial Intelligence & Data Science |
| 62 | Rohan Raju Bhopale | OTHERS / Artificial Intelligence & Data Science |
| 63 | Rutuja Chandrakant Jamdade | OTHERS / Artificial Intelligence & Data Science |
| 64 | Rutuja Dilip Mali. | OTHERS / Artificial Intelligence & Data Science |
| 65 | Rutuja Prakash Sutar | OTHERS / Artificial Intelligence & Data Science |
| 66 | Rutuja Rajkumar Buwa | OTHERS / Artificial Intelligence & Data Science |
| 67 | Sahil Ramesh pawar | OTHERS / Artificial Intelligence & Data Science |
| 68 | Sahil Somnath Sahane | OTHERS / Artificial Intelligence & Data Science |
| 69 | Sakshi Uttam Abdare | OTHERS / Artificial Intelligence & Data Science |
| 70 | Sakshi sachin magdum | OTHERS / Artificial Intelligence & Data Science |
| 71 | Sakshi shashikant kodag | OTHERS / Artificial Intelligence & Data Science |
| 72 | Samruddhi Rajendra Devkule | OTHERS / Artificial Intelligence & Data Science |
| 73 | Samruddhi Rajkumar kamble | OTHERS / Artificial Intelligence & Data Science |
| 74 | Sanika Santosh Mane | OTHERS / Artificial Intelligence & Data Science |
| 75 | Sanika Shankar Patil | OTHERS / Artificial Intelligence & Data Science |
| 76 | Sanika govind sherekar | OTHERS / Artificial Intelligence & Data Science |
| 77 | Saniya usman tamboli | OTHERS / Artificial Intelligence & Data Science |
| 78 | Sarfaraaj Pathan | OTHERS / Artificial Intelligence & Data Science |
| 79 | Sarth Sachin Sawant | OTHERS / Artificial Intelligence & Data Science |
| 80 | Sayali Manik Patil | OTHERS / Artificial Intelligence & Data Science |
| 81 | Shankarao patil | OTHERS / Artificial Intelligence & Data Science |
| 82 | Sharayu Umesh Jadhav | OTHERS / Artificial Intelligence & Data Science |
| 83 | Shravani Sachin Sawant | OTHERS / Artificial Intelligence & Data Science |
| 84 | Shravani Sampat Mane | OTHERS / Artificial Intelligence & Data Science |
| 85 | Shravani vasant patil | OTHERS / Artificial Intelligence & Data Science |
| 86 | Shreya Sanjay Patil | OTHERS / Artificial Intelligence & Data Science |
| 87 | Shrutika Narendra Vibhute | OTHERS / Artificial Intelligence & Data Science |
| 88 | Shubham Mohan Latthe | OTHERS / Artificial Intelligence & Data Science |
| 89 | Siddhi Dilip Sutar | OTHERS / Artificial Intelligence & Data Science |
| 90 | Smita Kishor Patil | OTHERS / Artificial Intelligence & Data Science |
| 91 | Srushti Gajanan kaware | OTHERS / Artificial Intelligence & Data Science |
| 92 | Suhana Javed Mulla | OTHERS / Artificial Intelligence & Data Science |
| 93 | Suhana Mahamud Magdum | OTHERS / Artificial Intelligence & Data Science |
| 94 | Sujit Sanjay Jayappa | OTHERS / Artificial Intelligence & Data Science |
| 95 | Sumaiyya Raju Shaikh | OTHERS / Artificial Intelligence & Data Science |
| 96 | Sushant suryakant shinde | OTHERS / Artificial Intelligence & Data Science |
| 97 | Swati Arun Koli | OTHERS / Artificial Intelligence & Data Science |
| 98 | Tanishka Balaso Kadam | OTHERS / Artificial Intelligence & Data Science |
| 99 | Uzma Miyalal Khatib | OTHERS / Artificial Intelligence & Data Science |
| 100 | Vaishnavi yuvraj samand | OTHERS / Artificial Intelligence & Data Science |
| 101 | Vedika Kadam | OTHERS / Artificial Intelligence & Data Science |
| 102 | Vighnaraj Dinkar Mohite | OTHERS / Artificial Intelligence & Data Science |
| 103 | Vishal Shankar wankar | OTHERS / Artificial Intelligence & Data Science |
| 104 | Vishal kadam | OTHERS / Artificial Intelligence & Data Science |
| 105 | Zaif Zakirhusen Nadaf | OTHERS / Artificial Intelligence & Data Science |
| 106 | Abhijit Santosh Kharat | Electronics and Telecommunication Engineering |
| 107 | Aditya wakade | Electronics and Telecommunication Engineering |
| 108 | Ishwari Sanjay Wali | Electronics and Telecommunication Engineering |
| 109 | Kavya Siddanna Madagyal | Electronics and Telecommunication Engineering |
| 110 | Kiran Dilip Hajare | Electronics and Telecommunication Engineering |
| 111 | Laxmi arjun gaikwad | Electronics and Telecommunication Engineering |
| 112 | Mahek Riyaj Attar | Electronics and Telecommunication Engineering |
| 113 | Omkar Nandkumar Patil | Electronics and Telecommunication Engineering |
| 114 | Payal maruti patil | Electronics and Telecommunication Engineering |
| 115 | Prachi Sanjay Shinde | Electronics and Telecommunication Engineering |

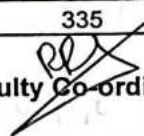
| Sr.No | Name of student | Department |
|-------|------------------------------|---|
| 116 | Pragati Basappa Arani | Electronics and Telecommunication Engineering |
| 117 | Prathamesh Prabhakar Mahajan | Electronics and Telecommunication Engineering |
| 118 | Pruthviraj Jaysing Patil | Electronics and Telecommunication Engineering |
| 119 | Rushikesh nikam | Electronics and Telecommunication Engineering |
| 120 | Shrawani Niranjan Tathe | Electronics and Telecommunication Engineering |
| 121 | Shreya pramod mane | Electronics and Telecommunication Engineering |
| 122 | Swaranjali bhauso zagade | Electronics and Telecommunication Engineering |
| 123 | Vivek Vijay Lavate | Electronics and Telecommunication Engineering |
| 124 | Vrushali | Electronics and Telecommunication Engineering |
| 125 | Group By Value | Electronics and Communication Engineering |
| 126 | Abhay Gajanan Nangare | Electronics and Communication Engineering |
| 127 | Chirayu Charudatta Jadhav | Electronics and Communication Engineering |
| 128 | Darshan Dattatray Gaikwad | Electronics and Communication Engineering |
| 129 | Gitanjalee Sitaram Gurav | Electronics and Communication Engineering |
| 130 | Guruprasad Suresh Pujari | Electronics and Communication Engineering |
| 131 | Neha Bhaskar Kharade | Electronics and Communication Engineering |
| 132 | Pallavi Parashuram Manugade | Electronics and Communication Engineering |
| 133 | Pranali Devkule | Electronics and Communication Engineering |
| 134 | Rohan Subhash fasale | Electronics and Communication Engineering |
| 135 | Shraddha Ravaso Chougule | Electronics and Communication Engineering |
| 136 | Shreya Yadav | Electronics and Communication Engineering |
| 137 | Shreya manik Sawant | Electronics and Communication Engineering |
| 138 | Shreyash kadam | Electronics and Communication Engineering |
| 139 | Sneha Dadaso Shinde | Electronics and Communication Engineering |
| 140 | Snehal Uday Mali | Electronics and Communication Engineering |
| 141 | Mansi Baban Bhosale | Mechatronics Engineering |
| 142 | Prerana shantanu Sawant | Mechatronics Engineering |
| 143 | AJAY BALASAHEB PATIL | Computer Science Engineering (CSE) |
| 144 | Aaditya sanjay kale | Computer Science Engineering (CSE) |
| 145 | Aarti patil | Computer Science Engineering (CSE) |
| 146 | Abhishek Bharat salunkhe | Computer Science Engineering (CSE) |
| 147 | Abhishek uday jadhav | Computer Science Engineering (CSE) |
| 148 | Aditya Kuldeep Patil | Computer Science Engineering (CSE) |
| 149 | Afroz Altaf Mujawar | Computer Science Engineering (CSE) |
| 150 | Aftab kalandar patharvat | Computer Science Engineering (CSE) |
| 151 | Ajay Tanaji Jadhav | Computer Science Engineering (CSE) |
| 152 | Akash Appasaheb Honrao | Computer Science Engineering (CSE) |
| 153 | Akshada Rajendra Bhosale | Computer Science Engineering (CSE) |
| 154 | Akshata chandrashekhar sutar | Computer Science Engineering (CSE) |
| 155 | Aniket Dharmendra Chorwade | Computer Science Engineering (CSE) |
| 156 | Anirudha Arvind Patil | Computer Science Engineering (CSE) |
| 157 | Ankita Anandarao Jadhav | Computer Science Engineering (CSE) |
| 158 | Ankita Anant Khade | Computer Science Engineering (CSE) |
| 159 | Ankita Hanmant patil | Computer Science Engineering (CSE) |
| 160 | Ankita Papat Jangam | Computer Science Engineering (CSE) |
| 161 | Ankush lakshman Bhairapagol | Computer Science Engineering (CSE) |
| 162 | Archana Siddhanath Nikam | Computer Science Engineering (CSE) |
| 163 | Arman Shaikh | Computer Science Engineering (CSE) |
| 164 | Arya Ganpatrao Patil | Computer Science Engineering (CSE) |
| 165 | Aryan Nagargoje | Computer Science Engineering (CSE) |
| 166 | Ashvee Gaikwad | Computer Science Engineering (CSE) |
| 167 | Atharv khot | Computer Science Engineering (CSE) |
| 168 | Atharv patankar | Computer Science Engineering (CSE) |
| 169 | Bhaktipriya Machhindra patil | Computer Science Engineering (CSE) |
| 170 | Blessy Ashish Waydande | Computer Science Engineering (CSE) |
| 171 | Deepak Tatyaso Patil | Computer Science Engineering (CSE) |
| 172 | Dhanashri Dhondiram Maske | Computer Science Engineering (CSE) |
| 173 | Dhanashri ramchandra hasabe | Computer Science Engineering (CSE) |
| 174 | Dhanraj sanjay Patil | Computer Science Engineering (CSE) |
| 175 | Digambar pravin patil | Computer Science Engineering (CSE) |
| 176 | Digvijay jadhav | Computer Science Engineering (CSE) |
| 177 | Diksha Dinkar Salunkhe | Computer Science Engineering (CSE) |
| 178 | Dipali Bhimrao Bhandare | Computer Science Engineering (CSE) |
| 179 | Dipti Tanaji Kale | Computer Science Engineering (CSE) |

| Sr.No | Name of student | Department |
|-------|----------------------------------|------------------------------------|
| 180 | Divya sadashiv Adure | Computer Science Engineering (CSE) |
| 181 | Falguni vinod khot | Computer Science Engineering (CSE) |
| 182 | Gadade Ashvini Bira | Computer Science Engineering (CSE) |
| 183 | Gautam Iyengar | Computer Science Engineering (CSE) |
| 184 | Gavade Rushikesh Baban | Computer Science Engineering (CSE) |
| 185 | Harshad Sanjay Onkare | Computer Science Engineering (CSE) |
| 186 | Kajal Bhimarao Gadade | Computer Science Engineering (CSE) |
| 187 | Kartikey Uttam Khot | Computer Science Engineering (CSE) |
| 188 | Khadija salim shaikh pinjari | Computer Science Engineering (CSE) |
| 189 | Komal Dhondiram shinde | Computer Science Engineering (CSE) |
| 190 | Kranti thorbole | Computer Science Engineering (CSE) |
| 191 | Lakade Manasi Maheshkumar | Computer Science Engineering (CSE) |
| 192 | MAHAMADJAKI MAHAMADFARUK KALANGA | Computer Science Engineering (CSE) |
| 193 | MOHINI S MANE | Computer Science Engineering (CSE) |
| 194 | Madhura Babu Yadav | Computer Science Engineering (CSE) |
| 195 | Mahesh Pravin Raut | Computer Science Engineering (CSE) |
| 196 | Mahesh chidanand konnur | Computer Science Engineering (CSE) |
| 197 | Manali Dilip Patil | Computer Science Engineering (CSE) |
| 198 | Manasvi Pandurang Bhosale | Computer Science Engineering (CSE) |
| 199 | Mansi Adhikrao suryawanshi | Computer Science Engineering (CSE) |
| 200 | Mayur Digambar Katre | Computer Science Engineering (CSE) |
| 201 | Mayuri Malhari Jadhav | Computer Science Engineering (CSE) |
| 202 | Mrs. Madhura | Computer Science Engineering (CSE) |
| 203 | Namrata Pravin Patil | Computer Science Engineering (CSE) |
| 204 | Nasreen Jamal Nadaf | Computer Science Engineering (CSE) |
| 205 | Navnath Dinkar Hattikar | Computer Science Engineering (CSE) |
| 206 | Nikita Dilip Pukale | Computer Science Engineering (CSE) |
| 207 | Nilofar R. Chaus | Computer Science Engineering (CSE) |
| 208 | Niranjan Prafull Kulkarni | Computer Science Engineering (CSE) |
| 209 | Nisha Suresh Bhosale | Computer Science Engineering (CSE) |
| 210 | Nyayanirgune Divya | Computer Science Engineering (CSE) |
| 211 | Om Nilesh Karande | Computer Science Engineering (CSE) |
| 212 | Om Raghvendra Waghmare | Computer Science Engineering (CSE) |
| 213 | Omkar prabhu Gawade | Computer Science Engineering (CSE) |
| 214 | Onkar M. Sonne | Computer Science Engineering (CSE) |
| 215 | POOJA | Computer Science Engineering (CSE) |
| 216 | Pandurang pralhad hade | Computer Science Engineering (CSE) |
| 217 | Paras Ashok Lalasure | Computer Science Engineering (CSE) |
| 218 | Patil Akash Popat | Computer Science Engineering (CSE) |
| 219 | Patil Harshvardhan Subhash | Computer Science Engineering (CSE) |
| 220 | Pavan shivaji gosavi | Computer Science Engineering (CSE) |
| 221 | Payal ramchandra jadhav | Computer Science Engineering (CSE) |
| 222 | Prachi Mahesh Patil | Computer Science Engineering (CSE) |
| 223 | Prachi vasant Suryawanshi | Computer Science Engineering (CSE) |
| 224 | Pradnya Khandagale | Computer Science Engineering (CSE) |
| 225 | Pragati Chandrakant Kamble | Computer Science Engineering (CSE) |
| 226 | Prajakta Suryakant Suryawanshi | Computer Science Engineering (CSE) |
| 227 | Prajval Ramesh Maharnur | Computer Science Engineering (CSE) |
| 228 | Pranali Ramesh Patil | Computer Science Engineering (CSE) |
| 229 | Pranav Pandurang Bhosale | Computer Science Engineering (CSE) |
| 230 | Pranav Popat shinde | Computer Science Engineering (CSE) |
| 231 | Pranav Sanjay kumbhar | Computer Science Engineering (CSE) |
| 232 | Pranav vijaykumar patil | Computer Science Engineering (CSE) |
| 233 | Pranjali Namdev Nemte | Computer Science Engineering (CSE) |
| 234 | Pratibha Arjun Nikam | Computer Science Engineering (CSE) |
| 235 | Pratiksha Pradeep Jadhav | Computer Science Engineering (CSE) |
| 236 | Pratiksha Prashant Patil | Computer Science Engineering (CSE) |
| 237 | Pravin Tanaji Patil | Computer Science Engineering (CSE) |
| 238 | Prerna Vaibhav Chougule | Computer Science Engineering (CSE) |
| 239 | Prithviraj Shivaji Chavan | Computer Science Engineering (CSE) |
| 240 | Priyanka Sunil Kognole | Computer Science Engineering (CSE) |
| 241 | Rameshwari vitthal kolekar | Computer Science Engineering (CSE) |
| 242 | Rasika Hanamantrao Shinde | Computer Science Engineering (CSE) |
| 243 | Rohan Patil | Computer Science Engineering (CSE) |

| Sr.No | Name of student | Department |
|-------|-----------------------------|------------------------------------|
| 244 | Rohan Prabhakar Shinde | Computer Science Engineering (CSE) |
| 245 | Rohini Ankush Vaddikar | Computer Science Engineering (CSE) |
| 246 | Rohit Hemraj Bawankar | Computer Science Engineering (CSE) |
| 247 | Rohit Rajendra Kadam-Bhore | Computer Science Engineering (CSE) |
| 248 | Rohit Rajesh ghalgir | Computer Science Engineering (CSE) |
| 249 | Rupali Ramesh Jagatp | Computer Science Engineering (CSE) |
| 250 | Rupali Tanaji Hankare | Computer Science Engineering (CSE) |
| 251 | Rushikesh Ananda kolape | Computer Science Engineering (CSE) |
| 252 | Rushikesh Arjun Desai | Computer Science Engineering (CSE) |
| 253 | Rushikesh Mukund Amane | Computer Science Engineering (CSE) |
| 254 | Rutuja | Computer Science Engineering (CSE) |
| 255 | Rutuja sandip upase | Computer Science Engineering (CSE) |
| 256 | Rutuja Balaso Patil | Computer Science Engineering (CSE) |
| 257 | Sable nikita dayanand | Computer Science Engineering (CSE) |
| 258 | Sai Pravin Sankpal | Computer Science Engineering (CSE) |
| 259 | Sakshi Arvind Patil | Computer Science Engineering (CSE) |
| 260 | Sakshi chougale | Computer Science Engineering (CSE) |
| 261 | Sakshi vaibhav Patil | Computer Science Engineering (CSE) |
| 262 | Samruddhi Vishwas Bhosale | Computer Science Engineering (CSE) |
| 263 | Sandesh Vinayak Joshi | Computer Science Engineering (CSE) |
| 264 | Sanika Ashok Jadhav | Computer Science Engineering (CSE) |
| 265 | Sanika Prakash Thonbare | Computer Science Engineering (CSE) |
| 266 | Sanika tukaram babar | Computer Science Engineering (CSE) |
| 267 | Sanjana Gurav | Computer Science Engineering (CSE) |
| 268 | Sanjana Rajendra Misal | Computer Science Engineering (CSE) |
| 269 | Sanket Sambhaji Chavan | Computer Science Engineering (CSE) |
| 270 | Sayali Ravindra Patil | Computer Science Engineering (CSE) |
| 271 | Shailaja Misal | Computer Science Engineering (CSE) |
| 272 | Shital Sutar | Computer Science Engineering (CSE) |
| 273 | Shraddha Anil Sarode | Computer Science Engineering (CSE) |
| 274 | Shravani Keshav patil | Computer Science Engineering (CSE) |
| 275 | Shreeyash Pratap Manugade | Computer Science Engineering (CSE) |
| 276 | Shreya satish dudhagave | Computer Science Engineering (CSE) |
| 277 | Shruti Abaso Bhosale | Computer Science Engineering (CSE) |
| 278 | Shruti Mahadev Pisal | Computer Science Engineering (CSE) |
| 279 | Shruti Rajshekhar Hosamani | Computer Science Engineering (CSE) |
| 280 | Shruti Sandip Gaikwad | Computer Science Engineering (CSE) |
| 281 | Siddhi Rajendra Patil | Computer Science Engineering (CSE) |
| 282 | Siddhi dinde | Computer Science Engineering (CSE) |
| 283 | Sneha Limbraj Satpute | Computer Science Engineering (CSE) |
| 284 | Snehal sanjay patil | Computer Science Engineering (CSE) |
| 285 | Soham Sunil Tangadi | Computer Science Engineering (CSE) |
| 286 | Srushti Sanjay Shirale | Computer Science Engineering (CSE) |
| 287 | Srushti Vijaykumar Maske | Computer Science Engineering (CSE) |
| 288 | Sudarshan Chandrakant Patil | Computer Science Engineering (CSE) |
| 289 | Sukanya Sanjay ghante | Computer Science Engineering (CSE) |
| 290 | Sumedh Gajanan Kamble | Computer Science Engineering (CSE) |
| 291 | Suyash Ashok Shinde | Computer Science Engineering (CSE) |
| 292 | Swapnali Shirgire | Computer Science Engineering (CSE) |
| 293 | Swarnali Surendra vhankade | Computer Science Engineering (CSE) |
| 294 | Tanvi Prabhakar Shinde | Computer Science Engineering (CSE) |
| 295 | Tavadar Ashish Vyankatrao | Computer Science Engineering (CSE) |
| 296 | Tejas Sahebrao Satpute | Computer Science Engineering (CSE) |
| 297 | Tulasi Dattatray Latane | Computer Science Engineering (CSE) |
| 298 | VISHAL HANMANT MARATHE | Computer Science Engineering (CSE) |
| 299 | Vaishnavi Anil Khilare | Computer Science Engineering (CSE) |
| 300 | Vaishnavi Dagadu Olékar | Computer Science Engineering (CSE) |
| 301 | Vaishnavi Vikas Deshmukhe | Computer Science Engineering (CSE) |
| 302 | Varad Vishwas Patil | Computer Science Engineering (CSE) |
| 303 | Vidyashri jivanna Sutar | Computer Science Engineering (CSE) |
| 304 | Vipul Vivek Kulkarni | Computer Science Engineering (CSE) |
| 305 | Vishwajeet Milind Chavan | Computer Science Engineering (CSE) |
| 306 | Vivek Dnyaneshwar kumbhar | Computer Science Engineering (CSE) |
| 307 | Vrushali Mahadev Magdum. | Computer Science Engineering (CSE) |

| Sr.No | Name of student | Department |
|-------|-------------------------------|------------------------------------|
| 308 | Yash Bhosale | Computer Science Engineering (CSE) |
| 309 | Yogita Ankush Takale | Computer Science Engineering (CSE) |
| 310 | Ysh Rajendra Ghorpade | Computer Science Engineering (CSE) |
| 311 | Zehra Bhojani | Computer Science Engineering (CSE) |
| 312 | parag ekanath patil | Computer Science Engineering (CSE) |
| 313 | pruthviraj popat patil | Computer Science Engineering (CSE) |
| 314 | roshniudaypawar8133@gmail.com | Computer Science Engineering (CSE) |
| 315 | sambodhi pradeep kamble | Computer Science Engineering (CSE) |
| 316 | shivam chandrashekhar savale | Computer Science Engineering (CSE) |
| 317 | shubham sarjerao Patil | Computer Science Engineering (CSE) |
| 318 | AARMAN JAFAR SANDI | Chemical Engineering |
| 319 | Abid Mulla | Chemical Engineering |
| 320 | Ajinkya Bhiva Shendage | Chemical Engineering |
| 321 | Atul Arjun Thorat | Chemical Engineering |
| 322 | Omkar Hanmant Patil | Chemical Engineering |
| 323 | Pranav rajendra patil | Chemical Engineering |
| 324 | Rohit Rajiv Joshi | Chemical Engineering |
| 325 | Sakshi Jayavant Jadhav | Chemical Engineering |
| 326 | Samadhan ghutukade | Chemical Engineering |
| 327 | Saurabh simran mail | Chemical Engineering |
| 328 | Sujay sudarshan Chougule | Chemical Engineering |
| 329 | Vaibhav Apparao Kamble | Chemical Engineering |
| 330 | Vedant Dhananjay Banchhade | Chemical Engineering |

| Department | Count of students attended |
|--|----------------------------|
| OTHERS / Artificial Intelligence & Data Scienc | 98 |
| Chemical Engineering | 13 |
| Computer Science Engineering (CSE) | 175 |
| Department | 5 |
| Electronics and Communication Engineeirng | 16 |
| Electronics and Telecommunication Engineeirng | 19 |
| Mechanical Engineering | 7 |
| Mechatronics Engineering | 2 |
| Grand Total | 335 |


Faculty Co-ordinator

NXT
WAVE™

Certificate of Participation

Issued to
Pranoti Mahesh Patil

for participating in the workshop 'AI for Students: Build Your Own Generative AI Model'
conducted by AI expert and IIT Delhi alumnus, Mr. Trivikrama. The workshop is designed
to equip students with skills essential in the AI era.



Rahul A
Rahul A
CEO, NxtWave

Issue Date: September 14, 2023

**NXT
WAVE™**

Certificate

of Completion

Pranoti Mahesh Patil

has successfully completed the hands-on project in the workshop 'AI for Students: Build Your Own Generative AI Model' conducted by AI expert and IIT Delhi alumnus, Mr. Trivikrama. The workshop is designed to equip students with skills essential in the AI era.



Issue Date: September 14, 2023

Rahul A

Rahul A
CEO, NxtWave



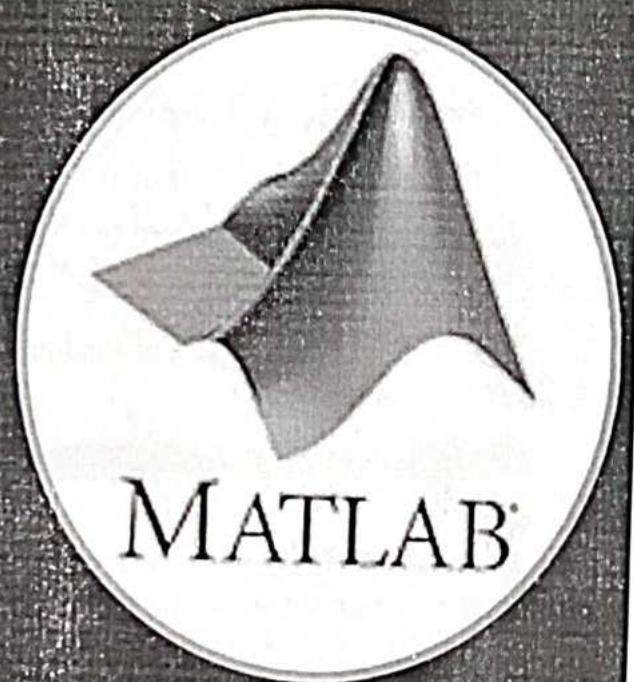
**PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY, BUDHGAON.**

**DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING**

ARTIFICIAL INTELLIGENCE AND DATA SCIENCE

**ORGANIZING
ADD ON COURSE ON**

**RESOURCE PERSON
MS. R. R. JAGTAP**



STARTING FROM

12 August, 2023

10 am onwards

MORE INFORMATION

 **+91 86006 00782**

 **CSE (AIDS)**





Value Added Course (30 Hrs)

Learn MATLAB by Examples

| | |
|--|--|
| Course Objectives: The course aims to | |
| 1 | Introduce concepts of MATLAB programming for solving engineering problems. |
| 2 | Develop the program debugging capabilities to generate an executable code. |
| 3 | Elaborate toolboxes to solve the real-world engineering problems using advanced features of the MATLAB. |

| | |
|---|--|
| Course Outcomes (COs): | |
| Upon successful completion of this course, the student will be able to: | |
| 1 | Practice simple programs in MATLAB and represent outputs in an appropriate form. (K3) |
| 2 | Demonstrate an ability to generate user friendly GUI. (K3) |
| 3 | Test the response of the systems using MATLAB tool like Simulink.(K4) |
| 4 | Demonstrate good programming & debugging skills using MATLAB script. (S2) |

Course Contents:

| | |
|---|---------------|
| Module -I Introduction and Basics of MATLAB: | 08 Hrs |
|---|---------------|

MATLAB Basics:

Variables, Arrays, Multidimensional Sub Arrays , Special Values, Displaying Output Data, Data Files, Scalar and Array Operations, Hierarchy of Operations ,Built-In MATLAB Functions, Introduction to Plotting

Flow Control:

Branching Statements, Conditional Statements, Looping Statements

| | |
|--|---------------|
| Module-II User Defined Functions: | 05 Hrs |
|--|---------------|

User-defined & I/O functions, Variable passing in MATLAB, Optional Arguments, Sharing Data using Global Memory, Function Functions, Sub Functions, Private Functions, Nested Functions, Complex data, String Functions

| | |
|---|---------------|
| Module-III Input / Output Functions: | 04 Hrs |
|---|---------------|

Text Read Function, Load and Save Commands, An Introduction to MATLAB File Processing, Formatted I/O Functions, Comparing Formatted and Binary I/O Function, File Positioning and Status Functions



Module-IV Graphical User Interface (GUI):**05 Hr**

Handle Graphics & GUI, The MATLAB Graphics System, Object Handles, Examining and Changing Object Properties, Using Set to List Possible Property Values, User-Defined Data, Finding Objects, Selecting Objects with The Mouse, Creating and Displaying a GUI, Object Properties, GUI Components, Dialog Box

Module-V SIMULINK:**04 Hr**

SIMULINK basics introduction, SIMULINK modeling, solvers, simulating model using variables from MATLAB, data import/export, state space modeling & simulation, creation of subsystems, & Mass subsystem

Module-VI Applications:**04 Hr**

Signals and Systems, Image Processing

The above contents are with hand-on practice as per the concepts /modules stated. Few experiments are stated below.

Experiment List:

| Expt. No. | Title |
|------------------|--|
| 1 | Perform program on Arrays and Matrices |
| 2 | Generation of basic Signals |
| 3 | Program based on flow control statements |
| 4 | Program using User-defined function. |
| 5 | Program for handling Complex data. |
| 6 | Program on File handling |
| 7 | Program for creating and displaying GUI. |
| 8 | Build a model / System using SIMULINK. |
| 9 | Examples of Signal and Systems, Image Processing |

Course contents are drafted and delivered by:

Prof. Rupali Ramesh Jagtap (ME Electronics, Ph.D pursuing)

Head Of Department

Department of Computer Science Engg.(AIDS)

PVPIT Budhgaon.



Schedule of Course MATLAB

| Day & Date | Time | No. of Hours |
|------------------------|------------------|--------------|
| Saturday 12/08/2023 | 10.00 am to 1 am | 3 |
| Saturday 26/08/2023 | 10.00 am to 1 am | 3 |
| Saturday 02/09/2023 | 10.00 am to 1 am | 3 |
| Saturday 09/09/2023 | 10.00 am to 1 am | 3 |
| Saturday 23/09/2023 | 10.00 am to 1 am | 3 |
| Saturday 14/10/2023 | 10.00 am to 1 am | 3 |
| Saturday 28/10/2023 | 10.00 am to 1 am | 3 |
| Saturday 11/11/2023 | 10.00 am to 1 am | 3 |
| Saturday 25/11/2023 | 10.00 am to 1 am | 3 |
| Saturday 09/12/2023 | 10.00 am to 1 am | 3 |





Class: T. Y. (CSE-AIDS)

Padma Bhushan Dr. Vasant Rao Dada Shetkari Shiksha Mandal's
 Padma Bhushan Vasant Rao Dada Patil Institute of Technology, Budhgaon(Sangli)
 Department of Computer Science and Engineering
 (Artificial Intelligence and Data Science)
 Add-on Course on NAITLAB
 Attendance Sheet
 Semester-VI

Academic Year-2023-2024

| SR. NO. | ROLL NO | NAME OF STUDENT | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Saturday | Total Lectures attended |
|---------|---------------|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------------------|
| | | | 10-02-2024 | 24-02-2024 | 09-03-2024 | 23-03-2024 | 30-03-2024 | 13-04-2024 | 27-04-2024 | 11-05-2024 | 25-05-2024 | 08-06-2024 | |
| 3001 | 2162691925010 | Soutrabh Arun Narale | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3002 | 2162691925026 | Akshata Hemant Kasar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3003 | 2162691925040 | Shreyash Prant Manugade | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3004 | 2162691925054 | Tamshika Balaso Kadam | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3005 | 2162691925012 | Sandip Shivaji Sawant | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3007 | 2162691925044 | Om Kojikewndra Waghmare | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3009 | 2162691925043 | Chirayu Charudatta Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3010 | 2162691925023 | Rushikesh Mukund Amane | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3011 | 2162691925017 | Rutuja Sanjay Dandavate | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3012 | 2162691925005 | Tejas Sahebrao Sarpute | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3013 | 2162691925055 | Zelra Shahar Bhogant | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3014 | 2162691925015 | Swati Arun Koli | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3015 | 2162691925045 | Girdhar Anil Sonawane | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3016 | 2162691925020 | Ankush Lakshman | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3017 | 2162691925049 | Abhishek Satunbhe | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3018 | 2162691925011 | Snehal Sanjay Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3019 | 2162691925008 | Samika Ashok Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3020 | 2162691925018 | Pranoti Mahesh Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3021 | 2162691925042 | Kranti Shiramdar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3022 | 2162691925021 | Samruth Sanjay Limkar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3023 | 2162691925021 | Samruth Sanjay Limkar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3024 | 2162691925037 | Samana Gurav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3025 | 2162691925050 | Pruthvika Abhinav Raut | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3026 | 2162691925013 | Archana Siddhanath Nikam | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3027 | 2162691925013 | Archana Siddhanath Nikam | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3028 | 2162691925022 | Shreya Mishra | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 18 |
| 3029 | 2162691925019 | Kshitiya Shashikant Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3030 | 2162691925032 | Prerna Vanhar Chougale | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3031 | 2162691925051 | Pragati Bhaskar Gurav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 10 |
| 3032 | 2162691925039 | Shreesh Kadam | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3033 | 2162691925034 | Anjali Vijay Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 3034 | 2162691925034 | Anjali Vijay Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 08 |
| 3035 | 2162691925035 | Tejash Ashish Vankar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |

Course Co-ordinator

[Signature]

HOD CSE(AIDS)


[Signature]





Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY,
BUDHGAON, SANGLI.- 416304
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
(Artificial Intelligence and Data Science)

| | |
|-------------------------|--|
| Title of the Activity | Add on course on MATLAB |
| Date | 10/02/2024 |
| Number of hours | 30 |
| Resource Person(s) | Ms. R. R. Jagtap. |
| Organization details | PVPIT, Budhgaon. |
| Faculty co-ordinator(s) | Ms. R. R. Jagtap. |
| Target Audience | TY (AIDS) |
| Contents | I-Introduction and Basics of MATLAB:ntroduction and Basics of MATLAB II-User Defined Functions III-Input / Output Functions IV-Graphical User Interface (GUI) V-SIMULINK VI-Applications |


Faculty Co-ordinator

Ms. R. R. Jagtap




HOD CSE-AIDS

Ms. R. R. Jagtap



**PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY, BUDHGAON.
DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING
(ARTIFICIAL INTELLIGENCE AND DATA
SCIENCE)**

**ORGANIZING
ADD ON COURSE ON**

PYTHON

**RESOURCE PERSON
MS. P. V. KOLI**

STARTING FROM

10 February, 2024

10 am onwards

MORE INFORMATION

 **+91 99607 77298**

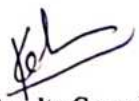
 **CSE (AIDS)**






Dr. Vasantrodada Patil Shetkari Shikshan Mandal's
PADMABHOOSHAN VASANTRODADA PATIL INSTITUTE OF
TECHNOLOGY,
BUDHGAON, SANGLI.- 416304
DEPARTMENT OF COMPUTER SCIENCE ENGINEERING
(Artificial Intelligence and Data Science)

| | |
|-------------------------|---|
| Title of the Activity | Add on course on Python |
| Date | 12/08/2023 |
| Number of hours | 30 |
| Resource Person(s) | Ms. P. V. Koli |
| Organization details | PVPIT, Budhgaon. |
| Faculty co-ordinator(s) | Ms. P. V. Koli |
| Target Audience | SY (AIDS) |
| Contents | Python programming: Section 1: Introduction to Programming Section 2: Introduction to Python Section 3: Sequence Data Types Section 4: File Processing Section 5: NumPy Basics Section 6: Algorithms and Flowcharts to Solve Problems Section 7: Operators, Expressions and Python Statements Section 8: Functions Section 9: Scope and Modules |


Faculty Co-ordinator
Ms. P. V. Koli




HOD CSE-AIDS
Ms. R. R. Jagtap

Course Contents:

Python programming: -(30hrs)

Section 1: Introduction to Programming

Section 2: Introduction to Python

Section 3: Sequence Data Types

Section 4: File Processing

Section 5: NumPy Basics

Section 6: Algorithms and Flowcharts to Solve Problems

Section 7: Operators, Expressions and Python Statements

Section 8: Functions

Section 9: Scope and Modules



Schedule of Course PYTHON

| Day & Date | Time | No. of Hours |
|------------------------|------------------|--------------|
| Saturday 10/02/2024 | 10.00 am to 1 am | 3 |
| Saturday 24/02/2024 | 10.00 am to 1 am | 3 |
| Saturday 09/03/2024 | 10.00 am to 1 am | 3 |
| Saturday 23/03/2024 | 10.00 am to 1 am | 3 |
| Saturday 30/03/2024 | 10.00 am to 1 am | 3 |
| Saturday 13/04/2024 | 10.00 am to 1 am | 3 |
| Saturday 27/04/2024 | 10.00 am to 1 am | 3 |
| Saturday 11/05/2024 | 10.00 am to 1 am | 3 |
| Saturday 25/05/2024 | 10.00 am to 1 am | 3 |
| Saturday 08/06/2024 | 10.00 am to 1 am | 3 |





Class: S. Y. (CSE-AIDS)

Academic Year-2023-2024

| SR. NO. | ROLL NO | NAME OF STUDENT | Saturday 12-08-2023 | Saturday 26-08-2023 | Saturday 02-09-2023 | Saturday 09-09-2023 | Saturday 23-09-2023 | Saturday 14-10-2023 | Saturday 28-10-2023 | Saturday 11-11-2023 | Saturday 25-11-2023 | Saturday 09-12-2023 | Total lectures attended |
|---------|---------------|----------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|----------------------------|
| 2001 | 2262691925001 | Om Nilesh Karande | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2002 | 2262691925002 | Swarali Prakash Zore | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2003 | 2262691925003 | Shraddha Anil Sarnole | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2004 | 2262691925004 | Jafin Sulama | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2005 | 2262691925005 | Atharv Jaju | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2006 | 2262691925006 | Sai Narenadra Yaratkar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2007 | 2262691925007 | Srushthi Ukhade | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2008 | 2262691925008 | Supal Sanrosh Hingmure | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2009 | 2262691925009 | Rutuja Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2010 | 2262691925010 | Prathmesh Pradip Mane | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2011 | 2262691925011 | Sheha Poyat Mahadhik | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2013 | 2262691925013 | Sakshi Sanish Pawar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2014 | 2262691925014 | Prachi Prasad Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2015 | 2262691925015 | Ankita Anant Khade | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2016 | 2262691925016 | Sanaya Amin Makandar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2017 | 2262691925017 | Onkar Mahadev Sonne | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2018 | 2262691925018 | Akshada Rajendra Bhosale | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2019 | 2262691925019 | Anket Kalekar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2020 | 2262691925020 | Dhyanji Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2021 | 2262691925021 | Sujal Gulab Sorate | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2022 | 2262691925022 | Makarand Vyas Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2023 | 2262691925023 | Shreya Shashikant Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2024 | 2262691925024 | Pranav viyakumar Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2025 | 2262691925025 | Isakshi Vanbhav Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2026 | 2262691925026 | Rashika Hanamantreo Shinde | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2027 | 2262691925027 | Vishakha Hanmani Sutar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2028 | 2262691925028 | Vishal Ashok Kadam | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2029 | 2262691925029 | Ankita Janjane | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2030 | 2262691925030 | Siravani Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2031 | 2262691925031 | Shraddha Ganesh Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2032 | 2262691925032 | Pratishtha Prashant Patil | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2033 | 2262691925033 | Shital Vishwanath Ban | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2034 | 2262691925034 | Shetal Jadhav | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2035 | 2262691925035 | Arjun Balasa Kumbhar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2036 | 2262691925036 | Sankeet Sadashiv Adhine | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2037 | 2262691925037 | Mayur Dnyanesh Karite | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2038 | 2262691925038 | Sandesh Vinayak Joshi | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2039 | 2262691925039 | Karish Kishor Jann | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2040 | 2262691925040 | Siddharth Nagesh Gaikwad | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2041 | 2262691925041 | Dyraj Dadaso Didwadhi | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2042 | 2262691925042 | Shital Nivritti Sutar | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2043 | 2262691925043 | Omkar Prabhur Gawade | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2044 | 2262691925044 | Paras Ashok Lalasure | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |
| 2045 | 2262691925045 | Sahane Kiran Anun | Present | Present | Present | Present | Present | Present | Present | Present | Present | Present | 09 |

Course Co-ordinator



HOD CSE(AIDS)



PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY , SANGLI(BUDHGAON)

CERTIFICATE OF COMPLETION

This is to certify that, Mr/Ms. Swarali Prakash Zore of class S.Y has completed a value added course of Python conducted during from 12/08/2023 to 09/12/2023 for 3 months organized by Department of Computer Science & Engineering(AIDS).


Event Co-ordinator

Ms. P. V. Koli


HOD

Ms. R. R. Jagtap


Principal

Dr. B. S. Patil





PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY , SANGLI(BUDHGAON)

CERTIFICATE of COMPLETION

This is to certify that, Mr/Ms. Mayur Digambar Katre of class S.Y_ has completed a value added course of Python conducted during from 12/08/2023 to 09/12/2023 for 3 months organized by Department of Computer Science & Engineering(AIDS).

Event Co-ordinator

Ms. P. V. Koli

HOD

Ms. R. R. Jagtap

Principal

Dr. B. S. Patil





PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY , SANGLI(BUDHGAON)

CERTIFICATE OF COMPLETION

This is to certify that, Mr/Ms. Sanmesh Sanjay Limkar of class T.Y_ has completed a value added course of MATLAB conducted during from 110/02/2024 to 08/06/2024 for 3 months organized by Department of Computer Science & Engineering(AIDS).

Event Co-ordinator

Ms. R. R. Jagtap

HOD

Ms. R. R. Jagtap

Principal

Dr. B. S. Patil





PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY, SANGLI (BUDHGAON)

CERTIFICATE OF COMPLETION

This is to certify that, Mr/Ms. Tanishka Balaso Kadam of class T.Y_ has completed a value added course of MATLAB, conducted during from 110/02/2024 to 08/06/2024 for 3 months organized by Department of Computer Science & Engineering(AIDS).

Event Co-ordinator

Ms. R. R. Jagtap

HOD

Ms. R. R. Jagtap

Principal

Dr. B. S. Patil






Dr. Vasantrodada Patil Shetkari Shikshan Mandal's
Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon(Sangli)
Department of Computer Science and Engineering
(Artificial Intelligence and Data Science)

Academic Year:2023-2024
Course Code: BTAIS307

Semester : III
Course:Seminar -I

| Roll No. | PRN | Name of the Student | Title of the Seminar |
|----------|----------------|----------------------------|-------------------------------------|
| 2001 | P2262691925001 | Om Nilesh Karande | 3D Bioprinting |
| 2002 | P2262691925002 | /Swarali Prakash Zore | Braingate technology |
| 2003 | P2262691925003 | /Shraddha Anil Sarode | Braingate technology |
| 2004 | P2262691925004 | /Jafrin Sultana | Generative AI |
| 2005 | P2262691925005 | Atharv Amit Jaju | Recommedation Engine |
| 2006 | P2262691925006 | Sai Narendra Yargattikar | Image recognition & Mind reading AI |
| 2007 | P2262691925007 | /Srushti Rajendra Ukirde | 3D Bioprinting |
| 2008 | P2262691925008 | Sujal Santosh Hingmire | Recommedation Engine |
| 2009 | P2262691925009 | /Rutuja Suhas Patil | Image recognition & Mind reading AI |
| 2010 | P2262691925010 | Prathamesh Pradip Mane | Image recognition & Mind reading AI |
| 2011 | P2262691925011 | /Sneha Popat Mahadik | Generative AI |
| 2012 | | | |
| 2013 | P2262691925013 | /Sakshi Satish Pawar | Deep Learning |
| 2014 | P2262691925014 | /Prachi Prasad Patil | Deep Learning |
| 2015 | P2262691925015 | /Ankita Anant Khade | Data Visualization |
| 2016 | P2262691925016 | /Makandar Saniya Amin | The robot-sophia |
| 2017 | P2262691925017 | Onkar Mahadev Sonne | Game development using AI |
| 2018 | P2262691925018 | /Akshada Rajendra Bhosale | Data Visualization |
| 2019 | P2262691925019 | Aniket Ramchandra Kalekar | Game development using AI |
| 2020 | P2262691925020 | Dhanaji Dynaneshwar Jadhav | Stock Market |
| 2021 | P2262691925021 | Sujal Gulab Sorate | Machine Learning |
| 2022 | P2262691925022 | Makarand Vijay Patil | Screenless Display |
| 2023 | P2262691925023 | /Shreya Shashikant Patil | Nano Robotics |
| 2024 | P2262691925024 | Pranav Vijaykumar Patil | Application of AI |
| 2025 | P2262691925025 | /Sakshi Vaibhav Patil | Virtual Reality |
| 2026 | P2262691925026 | /Rasika Hanamantrao Shinde | Nano Robotics |
| 2027 | P2262691925027 | /Vishakha Hanmant Sutar | Cyber Security |
| 2028 | P2262691925028 | Vishal Ashok Kadam | Deep Learning in Computer Vision |
| 2029 | P2262691925029 | /Ankita Popat Jangam | Virtual Reality |
| 2030 | P2262691925030 | /Shravani Mohan Patil | AI in Virtual Assistant |
| 2031 | P2262691925031 | /Shraddha Satish Patil | AI in Virtual Assistant |
| 2032 | P2262691925032 | /Pratiksha Prashant Patil | Banking Bot |
| 2033 | P2262691925033 | /Shital Vishvanath Ban | Banking Bot |
| 2034 | P2262691925034 | /Snehal Prakash Jakhale | Screenless Display |
| 2035 | P2262691925035 | Arun Balaso Kumbhar | Machine Learning |
| 2036 | P2262691925036 | Sanket Sadashiv Adling | Stock Market |
| 2037 | P2262691925037 | Mayur Digambar Katre | Cyber Security |
| 2038 | P2262691925038 | Sandesh Vinayak Joshi | Application of AI |
| 2039 | P2262691925039 | Kritar Kishor Jain | AI health engine |
| 2040 | P2262691925040 | Siddharth Nagesh Gaikwad | Stock market Strategies |
| 2041 | P2262691925041 | /Dipali Dadaso Didwagh | Machine Ethics |
| 2042 | P2262691925042 | /Shital Nivrutti Sutar | Brain get touch |
| 2043 | P2262691925043 | Omkar Prabhu Gawade | Deep learning |
| 2044 | P2262691925044 | Paras Ashok Lalasure | Self driving car |
| 2045 | P2262691925045 | Kiran Arun Sahane | 6th sence tech |
| 2046 | P2262691925046 | Sahil Somnath Sahane | 3D Bioprinting |
| 2047 | P2262691925047 | Danesh Balkrushna Sutar | Google Assistant |
| 2048 | P2262691925048 | /Pranjali Babasaheb Jadhav | NanoRobotics |
| 2049 | P2262691925049 | Sarth Sachin Sawant | Machine Learning |
| 2050 | P2262691925050 | Sourabh Tukaram Mali | AI in Space Research |
| 2051 | P2262691925051 | Prathmesh Prakash Salunkhe | Machine Learning |

| Roll No. | PRN | Name of the Student | Title of the Seminar |
|----------|-----------------|------------------------------|-----------------------------|
| 2052 | P2262691925052 | Shubham Sanjay Kale | Full Stack Development |
| 2053 | P2262691925053 | Shankar Sanjay Rathod | Computer Vision |
| 2054 | P2262691925054 | Ajinkya Gulabrao Bhosale | AI and its Works |
| 2055 | P2262691925055 | /Darshana Ramesh Hasabe | Sixth Sense Technology |
| 2056 | P2262691925056 | Yash Jogendra Sankhe | Google Assistant |
| 2057 | P2262691925057 | Safin Mubarak Bagwan | Full Stack Development |
| 2058 | P2262691925058 | Pramod Subhash Turture | AI in wildlife cinservation |
| 2059 | P2262691925059 | Prathmesh Arvind Dhavaleswar | AI in Space Research |
| 2060 | P2262691925060 | Tushar Hingmire | AI in wildlife cinservation |
| 2061 | P2262691925061 | Sahil Dattatray Sangar | AI in Defence |
| 2062 | P2262691925062 | Sudip Dilip Hajare | AI in Defence |
| 2063 | P2262691925063 | Prashant Bedage | AI in Defence |
| 2064 | P2262691925064 | Kaustubh Shankar Patil | Cyber Security |
| 2065 | P2262691925065 | Atharv Nitin Khot | Chat GPT |
| 2066 | P2262691925066 | Atharv Sunil Salunkhe | Chat GPT |
| 2067 | P2262691925067 | Ayush Kiran Patil | AI in Defence |
| 2068 | P2262691624004 | /Yogita Ankush Takale | Deep Learning |
| 2069 | P2262691624010 | /Kajal Bhimrao Gadade | Deep Learning |
| 2070 | P23062691925509 | Shivam Subhash Sawant | AI in Space Research |
| 2071 | P23062691925505 | /Prerana Prakash Malgave | Ethical Hacking |
| 2072 | P23062691925508 | /Snehalata Sanjay Ligade | Amazon Alexa |
| 2073 | P23062691925507 | /Neha Mahadev Dhale | Ethical Hacking |
| 2074 | P23062691925502 | /Sakshi Ashok Khade | AI in Healthcare |
| 2075 | P23062691925503 | /Sneha Dhananjay Farate | AI in Healthcare |
| 2076 | P23062691925506 | /Ashwini Ashok Patil | Amazon Alexa |
| 2077 | P23062691925504 | /Shruti Rajendra Pawar | Cyber Security |


HOD CSE(AIDS)
HEAD
Dept. of Computer
Science and Engineering
(Artificial Intelligence and
Data science)

**Dr. Vasantodada Patil Shetkari Shikshan Mandal's
Padmabhooshan Vasantodada Patil Institute of Technology**



Department of Computer Science Engineering (AIDS)

REPORT ON

“Deep Learning”

Under the guidance of

Mrs. S.S.Patil

Submitted by

| Roll no | Student Name |
|----------------|---------------------|
| 2013 | Sakshi Satish Pawar |
| 2014 | Prachi Prasad Patil |

Academic Year: – 2023-2024

Padmabhooshan Vasantrodada Patil Institute of Technology,

Budhgaon

Department of Computer Science Engineering (AI & DS)



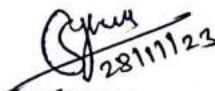
CERTIFICATE

This is to certify that have satisfactorily submitted a report on

“Deep Learning”

Submitted by: -

| Name | Class | Roll No | PRN No |
|---------------------|-------|---------|---------------|
| Sakshi Satish Pawar | SY | 2013 | 2262691925013 |
| Prachi Prasad Patil | SY | 2014 | 2262691925014 |


Incharge
Mrs. S.S. Patil


H.O.D
Mrs. R. R. Jagtap


Principal
Dr. B.S. Patil


External
Examiner.

ACKNOWLEDGEMENT

During the selection of a topic entitled as “Deep Learning” The help we received from our professors, family, and friends is invaluable and we are forever indebted to them.

We would first like to express our gratitude to our **Principal Dr.B.S.Patil**, Our **HOD Mrs. R.R.Jagtap** and our **Project Guide Mrs. S.S.Patil** for their immense support, suggestion, encouragement and interest in our micro project work. Without their invaluable suggestions our project selection would be incomplete.

Last but not least, we would like to thank our friends, parents and group members for their belief and patience in our endeavor.

| Roll No. | Name of students | PRN No. |
|----------|---------------------|---------------|
| 2013 | Sakshi Satish Pawar | 2262691925013 |
| 2014 | Prachi Prasad Patil | 2262691925014 |

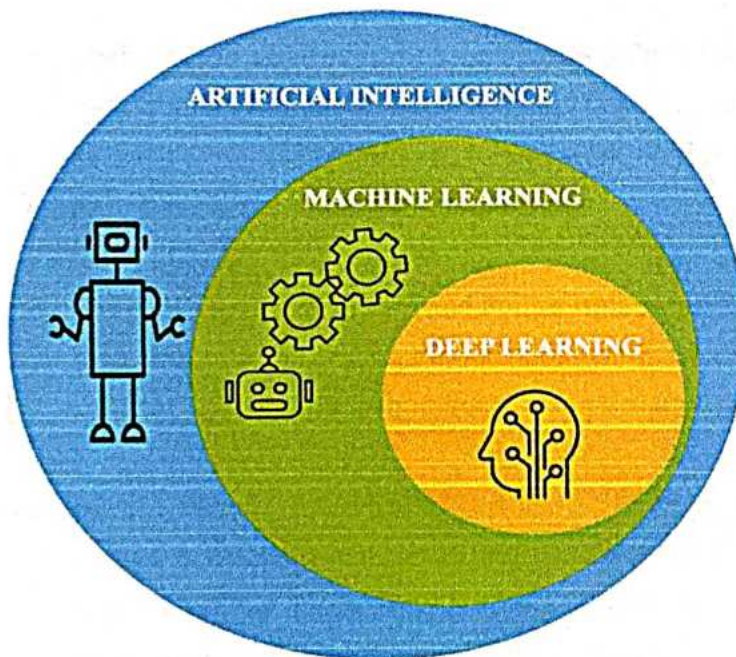
Date: - 11/12/2023

Place: -PVPIT, Budhgaon

Introduction:

In a word, accuracy. Deep learning achieves recognition accuracy at higher levels than ever before. This helps consumer electronics meet user expectations, and it is crucial for safety-critical applications like driverless cars. Recent advances in deep learning have improved to the point where deep learning outperforms humans in some tasks like classifying objects in images.

In an effort to create systems that learn similar to how humans learn, the underlying architecture for deep learning was inspired by the structure of a human brain. For this reason, quite a few fundamental terminologies within deep learning can be mapped back to neurology. Similar to how neurons form the fundamental building blocks of the brain, deep learning architecture contains a computational unit that allows modeling of nonlinear functions called *perceptron*.





Dr. Vasanturadada Patil Shetkari Shikshan Mandal's
Admabhooshan Vasanturadada Patil Institute of Technology, Budhgaon(Sangli)

Department of Computer Science and Engineering
(Artificial Intelligence and Data Science)


Academic Year:2023-2024
Course Code: BTAIS407

Semester : IV

Class: SY[CSE(AIDS)]
Course:Seminar -I

| Roll No. | PRN | Name of the Student | Title of the Seminar |
|----------|----------------|----------------------------|---------------------------------------|
| 2001 | P2262691925001 | Om Nilesh Karande | Bionic Limb Technology |
| 2002 | P2262691925002 | /Swarali Prakash Zore | Project Loon |
| 2003 | P2262691925003 | /Shraddha Anil Sarode | Project Loon |
| 2004 | P2262691925004 | /Jafrin Sultana | Cloud Computing |
| 2005 | P2262691925005 | Atharv Amit Jaju | Big Data |
| 2006 | P2262691925006 | Sai Narendra Yargattikar | Image Generating AI |
| 2007 | P2262691925007 | /Srushti Rajendra Ukirde | Touch-less Touch screen |
| 2008 | P2262691925008 | Sujal Santosh Hingmire | Big Data |
| 2009 | P2262691925009 | /Rutuja Suhas Patil | Image Generating AI |
| 2010 | P2262691925010 | Prathamesh Pradip Mane | Computer Vision |
| 2011 | P2262691925011 | /Sneha Popat Mahadik | Cloud Computing |
| 2013 | P2262691925013 | /Sakshi Satish Pawar | Virtual Reality |
| 2014 | P2262691925014 | /Prachi Prasad Patil | Virtual Reality |
| 2015 | P2262691925015 | /Ankita Anant Khade | Metamorphic Robot |
| 2016 | P2262691925016 | /Makandar Saniya Amin | IoT and Security concern |
| 2017 | P2262691925017 | Onkar Mahadev Sonne | Bionic Limb Technology |
| 2018 | P2262691925018 | /Akshada Rajendra Bhosale | Metamorphic Robot |
| 2019 | P2262691925019 | Aniket Ramchandra Kalekar | Touch-less Touch screen |
| 2020 | P2262691925020 | Dhanaji Dynaneshwar Jadhav | AI In Stock Market |
| 2021 | P2262691925021 | Sujal Gulab Sorate | AI In Stock Market |
| 2022 | P2262691925022 | Makarand Vijay Patil | AI In Education |
| 2023 | P2262691925023 | /Shreya Shashikant Patil | Genative Ai |
| 2024 | P2262691925024 | Pranav Vijaykumar Patil | Li-Fi Technology |
| 2025 | P2262691925025 | /Sakshi Vaibhav Patil | AI In Defence |
| 2026 | P2262691925026 | /Rasika Hanamantrao Shinde | Blue Brain |
| 2027 | P2262691925027 | /Vishakha Hanmant Sutar | Devin:First Software Engineer |
| 2028 | P2262691925028 | Vishal Ashok Kadam | Devops |
| 2029 | P2262691925029 | /Ankita Popat Jangam | IoT In Industry |
| 2030 | P2262691925030 | /Shravani Mohan Patil | Blue Brain |
| 2031 | P2262691925031 | /Shraddha Satish Patil | Chatbot In Healthcare |
| 2032 | P2262691925032 | /Pratiksha Prashant Patil | Chatbot In Healthcare |
| 2033 | P2262691925033 | /Shital Vishvanath Ban | Neuromorphic Computing |
| 2034 | P2262691925034 | /Snehal Prakash Jakhale | Neuromorphic Computing |
| 2035 | P2262691925035 | Arun Balaso Kumbhar | Devin:First Software Engineer |
| 2036 | P2262691925036 | Sanket Sadashiv Adling | AI In Education |
| 2037 | P2262691925037 | Mayur Digambar Katre | AI In Stock Market |
| 2038 | P2262691925038 | Sandesh Vinayak Joshi | Genative AI |
| 2039 | P2262691925039 | Kritar Kishor Jain | AI In Defence |
| 2040 | P2262691925040 | Siddharth Nagesh Gaikwad | Support Vector Machine Algorithm |
| 2041 | P2262691925041 | /Dipali Dadaso Didwagh | NanoRobotics |
| 2042 | P2262691925042 | /Shital Nivrutti Sutar | NanoRobotics |
| 2043 | P2262691925043 | Omkar Prabhu Gawade | Web Development |
| 2044 | P2262691925044 | Paras Ashok Lalasure | plant disease detection |
| 2045 | P2262691925045 | Kiran Arun Sahane | Angle Prediction |
| 2046 | P2262691925046 | Sahil Somnath Sahane | Angle Prediction |
| 2047 | P2262691925047 | Danesh Balkrushna Sutar | AI in Animation |
| 2048 | P2262691925048 | /Pranjali Babasaheb Jadhav | Student performance using data mining |
| 2049 | P2262691925049 | Sarth Sachin Sawant | AI in NPC behaviour |

| Roll No. | PRN | Name of the Student | Title of the Seminar |
|----------|-----------------|------------------------------|----------------------------------|
| 2050 | P2262691925050 | Sourabh Tukaram Mali | plant disease detection |
| 2051 | P2262691925051 | Prathmesh Prakash Salunkhe | AI in NPC behaviour |
| 2052 | P2262691925052 | Shubham Sanjay Kale | Support Vector Machine Algorithm |
| 2053 | P2262691925053 | Shankar Sanjay Rathod | Internet of Robotic Things |
| 2054 | P2262691925054 | Ajinkya Gulabrao Bhosale | AI in Animation |
| 2055 | P2262691925055 | /Darshana Ramesh Hasabe | ANN |
| 2056 | P2262691925056 | Yash Jogendra Sankhe | Internet of Robotic Things |
| 2057 | P2262691925057 | Safin Mubarak Bagwan | Web Development |
| 2058 | P2262691925058 | Pramod Subhash Turture | AI in Sports |
| 2059 | P2262691925059 | Prathmesh Arvind Dhavaleswar | VFX |
| 2060 | P2262691925060 | Tushar Hingmire | AI in Sports |
| 2061 | P2262691925061 | Sahil Dattatray Sangar | AI in fog computing |
| 2062 | P2262691925062 | Sudip Dilip Hajare | AI in fog computing |
| 2063 | P2262691925063 | Prashant Bedage | Learning |
| 2064 | P2262691925064 | Kaustubh Shankar Patil | Deep learning in health care |
| 2065 | P2262691925065 | Atharv Nitin Khot | Water monitoring system |
| 2066 | P2262691925066 | Atharv Sunil Salunkhe | Water monitoring system |
| 2067 | P2262691925067 | Ayush Kiran Patil | Learning |
| 2068 | P2262691624004 | /Yogita Ankush Takale | Mind reading computer |
| 2069 | P2262691624010 | /Kajal Bhimrao Gadade | Metaverse technology |
| 2070 | P23062691925509 | Shivam Subhash Sawant | VFX |
| 2071 | P23062691925505 | /Prerana Prakash Malgave | AI in Mass Mission |
| 2072 | P23062691925508 | /Snehalata Sanjay Ligade | AI in project management |
| 2073 | P23062691925507 | /Neha Mahadev Dhale | AI in project management |
| 2074 | P23062691925502 | /Sakshi Ashok Khade | Green Cloud Computing |
| 2075 | P23062691925503 | /Sneha Dhananjay Farate | Green Cloud Computing |
| 2076 | P23062691925506 | /Ashwini Ashok Patil | AI in Mass Mission |
| 2077 | P23062691925504 | /Shruti Rajendra Pawar | Prediction of Heart Disease |


 13/6/24
 HOD CSE(AIDS)
 Dept. of Computer
 Science and Engineering
 (Artificial Intelligence and
 Data Science)

A
Seminar Report
on
“NANOROBOTICS”

Submitted By

| Name of the Student | Roll No | PRN |
|-----------------------|---------|---------------|
| Dipali Dadaso Didwagh | 2041 | 2262691925041 |
| Shital Nivrutti Sutar | 2042 | 2262691925042 |

Class : S.Y. B.Tech [CSE(AIDS)]

Under the Guidance of

Mrs. M.S.Patil.



Department of Computer Science and Engineering
(Artificial Intelligence and Data Science)

Dr. Vasanttraodada Patil Shetkari Shikshan Mandal's

Padmabhooshan Vasanttraodada Patil Institute of Technology,
Budhgaon, Sangli - 416304

2023-2024

CERTIFICATE

This is to certify that the Seminar Report entitled "Nanorobotics", which is being submitted by, 1) Dipali Didwagh, 2) Shital Sutar of class S.Y [CSE(AIDS)] as partial fulfillment for the Degree of Bachelor of Technology [Computer Science and Engineering(Artificial Intelligence and Data Science)] of DBATU, Lonere. This is bonafide work carried under my supervision and guidance.

Place: PVPIT, Budhgaon

Date



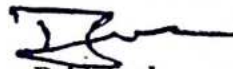
Mrs. M.S. Patil.

Guide



Prof. Ms. R. R. Jagtap

HOD



Principal

Dr. B.S. Patil

External Examiner

ACNOWLEDGEMENT

The satisfaction & euphoria that accompany the successful completion of any task would be incomplete without the mention of people who made it possible . So We acknowledge all those whose guidance and encouragement served as a beacon light & crowned my efforts with success.

We have immense pleasure in expressing thanks to the principal **Dr. B. S. Patil** for providing all the facilities for the successful completion of the project.

With due respect, We thank our H.O.D. **Prof.Ms. R.R. Jagtap** , Department **Computer Science and Engineering (Artificial Intelligence and Data Science)** for her motivating support, keen interest which kept my spirits alive all through.

We would like to express thanks to our guide **Mrs. M.S.Patil. Department Computer Science and Engineering (Artificial Intelligence and Data Science)** who has guided me throughout the completion of this project.

Finally, We would like to thank all the teaching and non-teaching staff and all our friends who have rendered their support in the completion of this report.

Name and Signature of student:

1. Dipali Dadaso Didwagh. *Dipali*

2. Shital Nivrutti Sutar. *Shital*

3. Structure of Nanorobotics

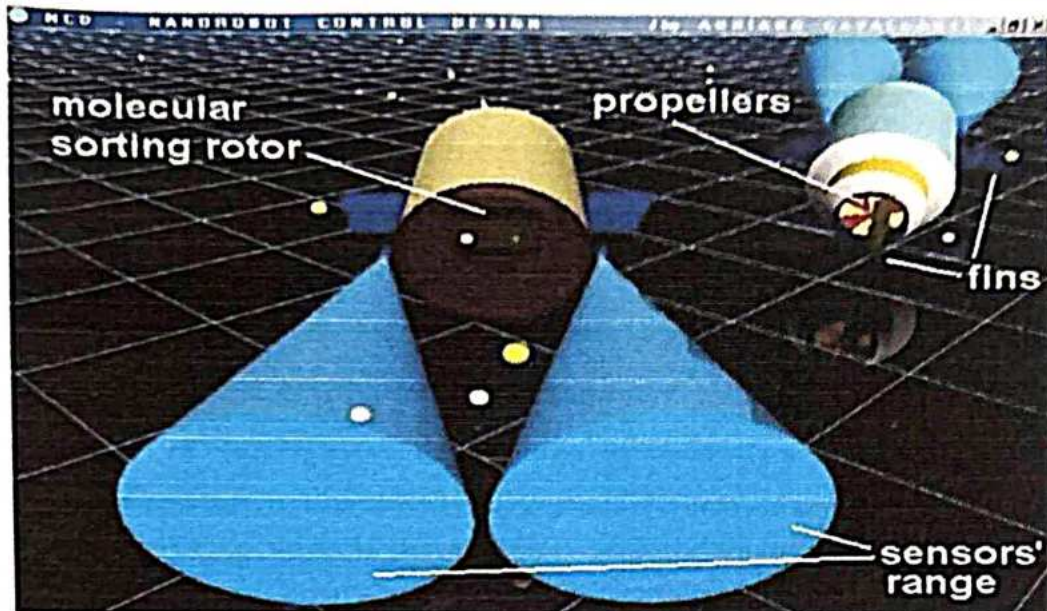


Fig3.1 molecular identification

The nanorobot design is derived from biological models and is comprised of components such as *molecular sorting rotors* and a robot arm (*telescoping manipulator*). The nanorobot exteriors considered in our design assumes a diamond like material to which may be attached an artificial glycocalyx surface that minimizes fibrinogen (and other blood protein) adsorption and bioactivity, thus ensuring sufficient biocompatibility for the nanorobot to avoid immune system attack

3.1 Molecular sorting rotors:

Molecular sorting rotors made up of carbon nanotubes. This nanotubes with nan-organs used for changing the direction of movement.

Propeller:

like that in nanorobots it is used to drive forward against the blood stream. In context of nanorobotics, propellers are tiny, often molecular -scale devices designed to facilitate movement through various mediums, such as liquids or



Dr. V. P. Shetkari Shikshan Mandal's
P. V. P. Institute of Technology, Budhgaon. (Sangli)
A/P:-Budhgaon, Tal:- Miraj, Dist. Sangli , Pin-416304, India
(Approved by AICTE, New Delhi, Government of Maharashtra and affiliated to DBATU, Lonere)



DEPARTMENT OF MECHANICAL ENGINEERING

NAAC Criteria 2.3.1 Participative Learning (A.Y 2023-24)

Following activities are covered under NAAC criteria 2.3.1 – Participative Learning

1. Practical Lab Manuals/ Journals (with Sample copies of Strength of Materials Lab)
2. Value added Certification course on “**Programming in C and CPP**” completed by students, in association with **IIT Bombay- Spoken Tutorials** (with sample certificates).
3. Participation & **Winning performance by students in “GO-KART Racing car competitions”** with **car building & racing teams – “TROJAN”** and “**ASHWAMEGH**”.

1. Practical Lab Manuals/ Journals:

Following is the List of Various Laboratory courses conducted at the Department, as a regular part of University syllabus. Sample copies of Strength of Materials Lab Manual/ Journal are provided for the proof.

| Lab Course Code | Name of Lab Course | Name of Lab course teacher |
|--|--|----------------------------|
| Mechanical Engineering Lab – I. (BTMCL306) S.Y. Sem - III | Materials Science and Metallurgy Lab | Mrs. S. P. Shinde |
| | Fluid Mechanics Lab | Mr. S. A. Wani |
| Machine Drawing and CAD Lab. (BTMCL305) S.Y. Sem –III | Machine Drawing and CAD Lab. | Mr. V. P. Patil |
| Mechanical Engineering Lab – II. (BTMCL406) S.Y. Sem - IV | Strength of Materials (SOM) Lab | Mr. V. P. Patil |
| | Theory of Machines-I (TOM-I) Lab | Dr. S. S. Kulkarni |
| | Manufacturing Processes-I (MP-I) Lab | Mrs. S. P. Shinde |
| Mechanical Engineering Lab – III. (BTMCL 507) T.Y. Sem - V | Heat Transfer Lab | Mr. S. M. Gheji |
| | Theory of Machines-II (TOM-II) Lab | Dr. S. S. Kulkarni |
| | Machine Design Practice-I (MD-I) Lab | Mr. V. P. Patil |
| Mechanical Engineering Lab – IV. (BTMCL 606) T.Y. Sem - VI | Manufacturing Processes-II (MP-II) Lab | Mrs. S. P. Shinde |
| | Machine Design Practice-II (MD-II) Lab | Mr. K. D. Ghatage |
| | Applied Thermodynamics Lab | Mr. S. J. Adsul |
| Mechanical Engineering Lab – V. (BTMCL 706) B.Tech. Sem - VII | Mechatronics Lab | Mr. K. D. Ghatage |
| | Non-Conventional Machining Lab | Dr. M. L. Harugade |
| | Design of AC systems Lab | Mr. S. M. Gheji |

DR. VASANTRAO DADA PATIL SHETKARI
Padmabhooshan Vasantrodada Patil
MECHANICAL ENGINEERING

- 1) Class S.Y. Mech.
- 2) Batch Incharge S.M.G.
- 3) Expt. No. 01.
- 4) Title Tensile test on Aluminium and M.S. rod.

OBSERVATION TABLE

| Total length of specimen | Before Test. | |
|--------------------------------|--------------|--------|
| | Aluminium | M.S. |
| | 400mm | 400mm |
| Gauge length (L ₀) | 200mm | 200mm |
| Gauge Dia (D ₀) | 8.26mm | 8.06mm |
| | After Test. | |
| Gauge length | 217mm | 205mm |
| Gauge Dia | 4.8mm | 5.84mm |

Name: Pratik A. Gaikwad
Roll No. 17196
A.G.



SHIKSHAN MANDAL SANGLI'S
Institute of Technology, Budhgaon, (Sangli)
DEPARTMENT (Degree)

Subject: S.O.M. Lab.
Date: 22/02/2024
Batch: A2

| Roll No. | Name of Students | Signature | Remarks |
|----------|--------------------|------------|---------|
| 121 | ← Absent → | | |
| 122 | Tushar M. Pawa. | Gmp | |
| 123 | ← Absent → | | |
| 124 | ← Absent → | | |
| 125 | Partham S. Gaikwad | Partham S. | |
| 126 | Pratik A. Gaikwad | Pratik | |
| 127 | Sumit S. Kamble | Sumit | |
| 128 | ← Absent → | | |
| 129 | ← Absent → | | |
| 130 | Swarnik Tapare | Swarnik | |
| 131 | Nikhil Todkar | Nikhil | |
| 132 | Omkar S. Mali | Omkar | |
| 133 | ← Absent → | | |
| 134 | ← Absent → | | |
| 135 | ← Absent → | | |
| 136 | ← Absent → | | |
| 37 | Nikhil S. Ramgode | Nikhil | |
| 38 | Vithal R. Chavan | Vithal | |
| 39 | Prasad R. Mali | Prasad | |
| 40 | Prasad A. Pawar | Prasad | |



Lab Assistant

Batch Incharge

H.O.D.

Mechanical Engineering (Degree)

DR. VASANTRAO DADA PATIL SHETKARI
Padmabhooshan Vasantrodada Patil
MECHANICAL ENGINEERING

- 1) Class 9.4. B.Tech
- 2) Batch Incharge Vishal P. Patil
- 3) Expt. No. 2
- 4) Title Compression Test

OBSERVATION TABLE

| Material | Initial height (h ₁) | Initial diameter (d ₁) | Final height (h ₂) | Final diameter (d ₂) |
|-------------------|-------------------------------------|---------------------------------------|-----------------------------------|-------------------------------------|
| 1) MS (large) | 25 | 12.2 | 19.3 | 14.7 |
| 2) MS (small) | 12.1 | 11.9 | 9.1 | 14.6 |
| 3) CT (small) | 16.2 | 15.9 | 13.1 | 19.1 |
| 4) CT (large) | 32.5 | 16.2 | 30.1 | 17.07 |
| 5) Timber (small) | 54.1 | 52.1 | 52.5 | 54.2 |
| 6) Timber (large) | 200.4 | 52.1 | 200.1 | 52.2 |

2109 - Jay. N. Karande - Karande

SHIKSHAN MANDAL SANGLI'S
Institute of Technology, Budhgaon, (Sangli)
DEPARTMENT (Degree)

Subject: SOM lab
Date: 06/03/2024
Batch: A1

| Roll No. | Name of Students | Signature | Remarks |
|----------|---------------------|------------------|---------|
| 01 | Kaish. S. Chougale | K.S.C. | |
| 2 | ← Absent → | | |
| 3 | Yadav Tommay. A. | <u>Tommay</u> | |
| 4 | Patil Pranav. P | <u>Patil</u> | |
| 5 | Ghard Shivaji Patil | <u>Patil</u> | |
| 6 | Mote. Amol. D. | <u>Mote A.D.</u> | |
| 7 | Axaxi Vaibhav. S. | <u>Vaibhav</u> | |
| 8 | Abhishek T. Hande | <u>Hande</u> | |
| 9 | Jay. N. Karande | <u>Karande</u> | |
| 10 | Sarthak. S. Patil | <u>Patil</u> | |
| 11 | Sayali. B. Pawar | <u>Pawar</u> | |
| 12 | Ashish Jayaram | <u>Ashish</u> | |
| 13 | Akhil Shendage | <u>Shendage</u> | |
| 14 | ← Absent → | | |
| 15 | Batik S. Trale | <u>Trale</u> | |
| 16 | ← Absent → | | |
| 17 | ← Absent → | | |
| 18 | ← Absent → | | |
| 19 | Vedant Kamble | <u>Kamble</u> | |
| 20 | Gandip Kodam | <u>Kodam</u> | |



Lab Assistant

Batch Incharge

H.O.D.
H.O.D.

DR. VASANTRAO DADA PATIL SHETKARI
Padmabhooshan Vasantrodada Patil
MECHANICAL ENGINEERING

1) Class S.Y. (Mech)
2) Batch Incharge Vishal P. Patil
3) Expt. No. 03
4) Title Shear Stress

OBSERVATION TABLE

| Sr. NO | Specimen (Material) | Cross section Area in mm ² | Load (P) at Failure in KN | shear stress in N/mm ² |
|--------|---------------------|---------------------------------------|---------------------------|-----------------------------------|
| 1. | Aluminium | 113.04 | 26.92 | 0.238 |
| 2. | Mild steel | 113.04 | 82.92 | 0.733 |

1. Single shear stress → Load = 26.92 = 0.238
(Aluminium) c/s Area 113.04

2. Double shear stress → Load = 82.92 = 0.733
(Mild steel) 2x c/s Area 113.04

2109 - Jay N. Kaxande - ~~Kaxande~~

SHIKSHAN MANDAL SANGLI'S
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DEPARTMENT (Degree)

Subject: S.O.M. Lab

Date: 13-03-2024

Batch: A-1

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| 2102 | Vinayak S. Pawar | V.S.P. | |
| 2103 | ← Absent → | | |
| 2104 | Pranav P. Patil | P.P. | |
| 2105 | Shurad S. Patil | S.P. | |
| 2106 | Amol D. Mote | A.D.M. | |
| 2107 | Vaibhav S. Armi | V.A. | |
| 2108 | Abhisek T. Hande | A.H. | |
| 2109 | Jay N. Kaxande | J.N.K. | |
| 2110 | Garthak S. Patil | G.S.P. | |
| 2111 | Sajali B. Pawar | S.B.P. | |
| 2112 | Ashish Jangam | A.J. | |
| 2113 | Abhang Shendage | A.S. | |
| 2114 | ← Absent → | | |
| 2115 | Pratik S. Trate | P.S.T. | |
| 2116 | ← Absent → | | |
| 2117 | ← Absent → | | |
| 2118 | Arif S. Patel | A.S.P. | |
| 2119 | Vedant S. Kamble | V.S.K. | |
| 2120 | ← Absent → | | |



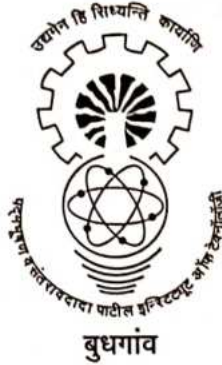
Lab Assistant

Batch Incharge

W.O.D.

Mechanical Engineering (Degree)

Padmabhooshan Vasatraodada Patil Institute of Technology, Budhgaon (Sangli)



Certificate

This is to certify that Shri. / Mjss. Tanmay Arun Yadav

_____ Roll No. 2103

of S.Y Class has completed satisfactorily 06

experiments in the subject SOM - I

during the year 20 23 - 20 24

Date : 05/6/24


INCHARGE


HEAD OF THE DEPT.
H.O.D.


PRINCIPAL

Mechanical ~~Department~~ Engineering (Degree)



Experiment No. 01**TENSILE TEST****1. Aim:**

To perform Tensile test on different material using UTM

2. Objective:

1. To determine Tensile Strength
2. To study the behaviour of the given material under Tensile load and to determine Percentage elongation in length, Percentage reduction in area, Working stress or permissible stress or safe stress, Young's modulus, Yield stress, Ultimate stress or Maximum tensile stress, Breaking stress or Failure stress

3. Principle:

In engineering, tension test is widely used to provide basic design information on the strength of the materials. In the tension test a specimen is subjected to a continually increasing uniaxial tensile force while simultaneous observations are made of the elongation of the specimen. Depending on the ability of material to undergo plastic deformation before the fracture two fracture modes can be defined

Ductile fracture – most metals (not too cold):

- Extensive plastic deformation ahead of crack
- Crack is “stable”: resists further extension unless applied stress is increased

Brittle fracture – ceramics, ice, cold metals:

- Relatively little plastic deformation
- Crack is “unstable”: propagates rapidly without increase in applied stress

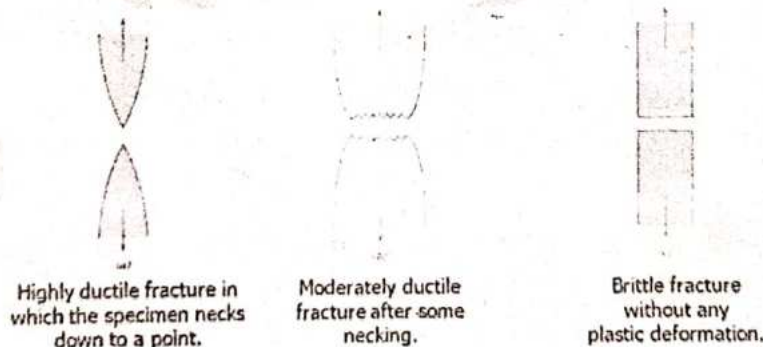


Fig. Steps in fracture of tensile Specimen

4. Apparatus Required:

1. Universal Testing machine,
2. Dial gauge,
3. Vernier calliper,
4. Scale.

5. Theory:

A stress-strain curve is plotted from the load-elongation measurements. The parameters which are used to describe the stress-strain curve of a material are the tensile strength, yield strength or yield point, percent elongation and reduction of area. The first two are strength parameters; the last two indicate ductility.

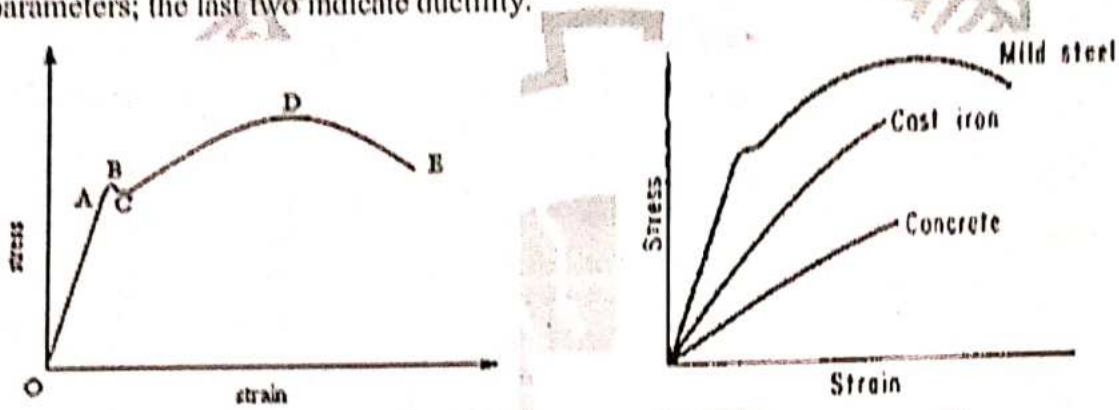


Fig. Stress Strain Curve

1. Limit of proportionality (A): It is the limiting value of the stress up to which stress is proportional to strain.
2. Elastic limit: This is the limiting value of stress up to which if the material is stressed and then released (unloaded), Strain disappears completely and the original length is regained.
3. Upper Yield Point (B): This is the stress at which, the load starts reducing and the extension increases. This phenomenon is called yielding of material.
4. Lower Yield Point (C): At this stage the stress remains same but strain increases for some time.
5. Ultimate Stress (D): This is the maximum stress the material can resist. At this stage cross sectional area at a particular section starts reducing very fast (fig.1). This is called neck formation.
6. Breaking Point (E): The stress at which finally the specimen fails is called breaking point.
7. Hooks law: Within the elastic limit, the stress is proportional to the strain for an isentropic material.

6. Experimental Setup:

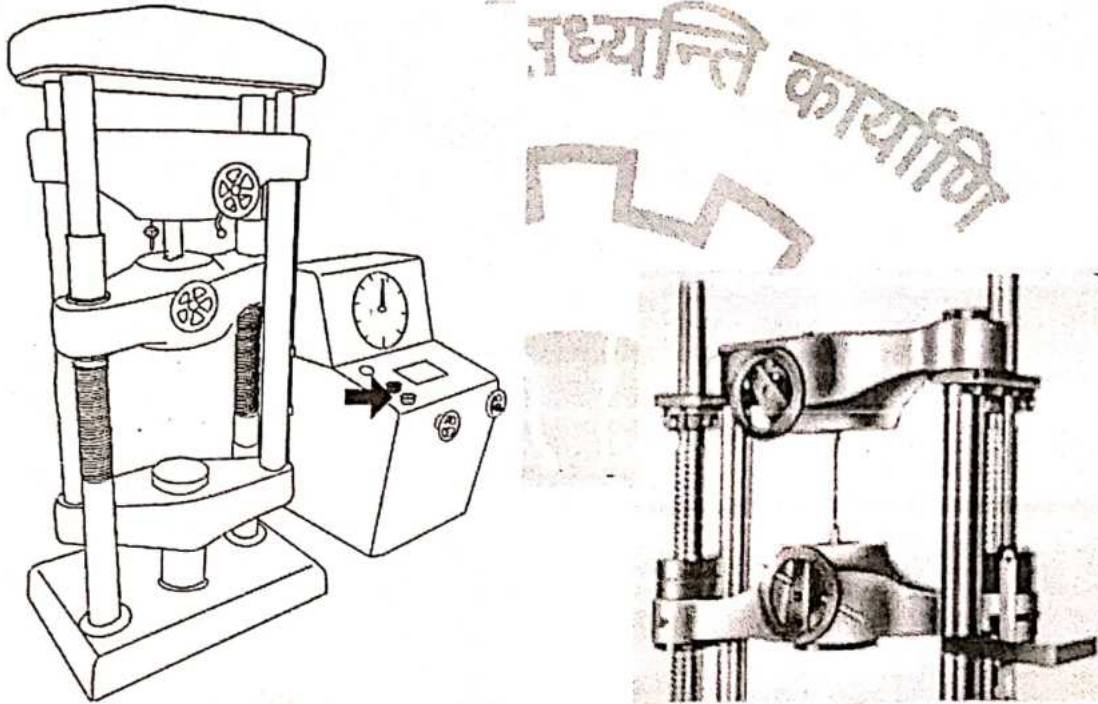


Fig. UTM and Tensile Testing Arrangement

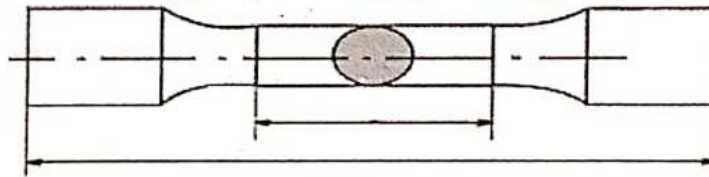


Fig. Specimen with circular cross section

7. Procedure:

1. Take the Specimen, measure the diameter at three different places. Also measure the overall length of specimen. Calculate the gauge length according to the diameter of the specimen.
2. Select the suitable loading image depending on the diameter of specimen. Start the UTM and adjust the dead weight of movable heads and then set the load pointer to zero.
3. Fix the specimen bar between the grips of top and middle cross heads of loading frame.
4. Attach the extensometer on the bar at the central portion of the bar. The distance between upper and lower pivots of extensometer shall be equal to gauge length. Rotate the dial gauge till the pointer reads zero.
5. Switch on the machine and open the control valve so that the load is increased gradually and at the required rate.
6. Corresponding to loads, note the readings of extensometer. For initial few observations, load and extension are in pace with each other. Record the yield point load by

observing the hesitation of load pointer. The extension readings are faster at this moment.

7. Remove the extensometer, and measure extension by divider or suitable scale, till ultimate load.
8. Record the maximum load. Observe the decrease in load and neck formation on the specimen.
9. Record the load at fracture and switch off the machine.
10. Remove the specimen. Observe the cup and cone formation at the fracture point. Rejoin the two pieces, measure the final gauge length and the reduced diameter.

8. Observation:

Material Used For the Tensile Test: cast iron

Before Test

1. Initial Gauge diameter d_1 = 8.1 mm
2. Initial Gauge length L_1 = 20 mm
3. Total Length of Specimen = 39 mm
4. Any Other Dimensions =

After test:

1. Final Gauge diameter d_2 = 8.3 mm
2. Final Gauge length L_2 = 21 mm
3. Any Other Dimensions =

9. Calculations:

1. Initial Cross sectional area $A_1 = \pi d_1^2 / 4$

$$\frac{3.14 \times (8.1)^2}{4} = 51.50 \text{ mm}^2$$

2. Final Cross Sectional area $A_2 = \pi d_2^2 / 4$

$$\frac{3.14 \times (8.3)^2}{4} = 54.07 \text{ mm}^2$$

3. Yield stress = Yield load / Cross Sectional Area

$$\frac{13.6 \times 10^3}{54.07} = 251.32 \text{ N/mm}^2$$

4. Ultimate Stress = Ultimate Load / Cross Sectional Area

$$\frac{16.62 \times 10^3}{54.07} = 307.37 \text{ N/mm}^2$$

5. Breaking Stress = Breaking Load / Cross Sectional Area

$$\frac{16.32 \times 10^3}{54.07} = 301.83 \text{ N/mm}^2$$

6. % Elongation = $(L_2 - L_1/L_1) \times 100$

$$\left[\frac{21-20}{20} \right] \times 100 = 5.1$$

7. Reduction in area = $(A_2 - A_1/A_1) \times 100$

$$\left[\frac{54.07 - 51.50}{51.50} \right] \times 100 = 4.99-1$$

8. Stress (σ) (Within elastic limit) =

$$\sigma = \frac{P}{A} = \frac{0.5 \times 10^3}{51.50} = 9.70 \text{ N/mm}^2$$

9. Corresponding strain (e) =

$$e = \frac{\Delta L}{L} = \frac{0.1}{19.7} = 0.05$$

10. Modulus of elasticity, $E = \sigma/e$

$$\frac{9.70}{0.05} = 194 \text{ N/mm}^2$$

10. Results:

1. Initial Cross sectional area $A_1 = 51.50 \text{ mm}^2$
2. Final Cross Sectional area $A_2 = 54.07 \text{ mm}^2$
3. Yield stress = 251.52 N/mm^2
4. Ultimate Stress = 307.07 N/mm^2
5. Breaking Stress = 301.83 N/mm^2
6. % Elongation = 5.1
7. Reduction in area = $4.99-1$
8. Stress (σ) (Within elastic limit) = 9.70 N/mm^2
9. Corresponding strain (e) = 0.05
10. Modulus of elasticity, $E = 194 \text{ N/mm}^2$

11. Conclusions:

Conclusion:-
cast iron gets fracture without any plastic deformation. There is no any major in diameter during fracture.

Mild Steel

Padmabhshushan Vasantrodada Patil Institute Of Technology

Budhgaon Polytechnic Wing(045),Budhgaon Tal- Miraj Dist-Sangli

TENSILE TEST REPORT

| | | | |
|-------------------|---------------|------------------|---------------------|
| Machine Model | FUT-40 | Test File Name | A1 tensile A1.Utm |
| Machine Serial No | ***** | Date Time | 21/02/2024 10:56 AM |
| Customer Name | A1 SY. B.Tech | Customer Address | S Y B.Tech |
| Lot No. | 1 | Test Type | Tensile |
| Order No. | 1 | Heat No. | |

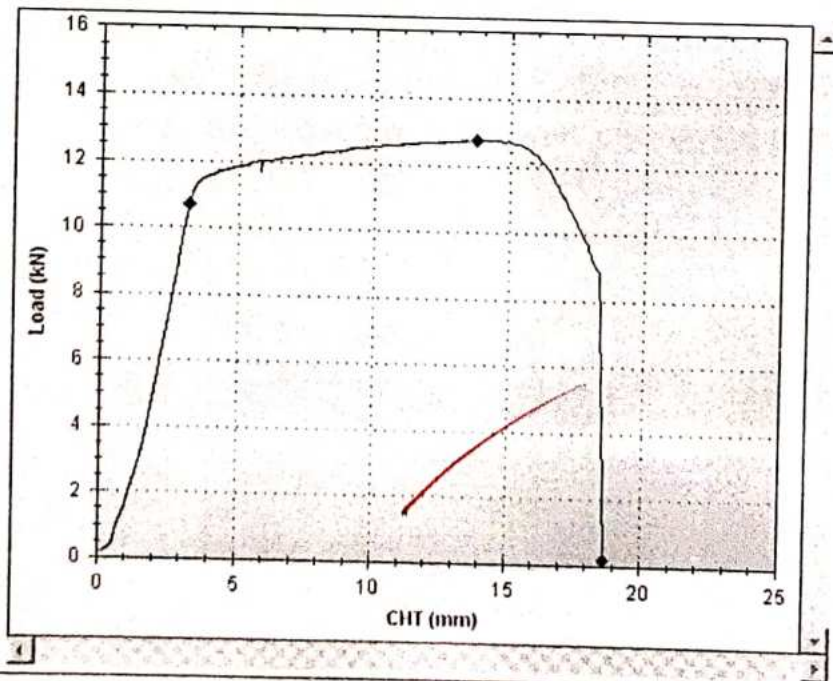
Input Data

| | | |
|-----------------------------|-------------|-----------------|
| Specimen Shape | Solid Round | |
| SpecimenType | Aluminium | |
| Specimen Description | | |
| Specimen Diameter | 8.31 | mm |
| Gauge Length For % elong | 197 | mm |
| Pre Load Value | 0 | kN |
| Max. Load | 400 | kN |
| Max. Elongation | 200 | mm |
| Specimen Cross Section Area | 54.24 | mm ² |
| Final Sp Diameter | 5.1 | mm |
| Final Gauge Length | 212 | mm |
| Final Area | 20.43 | mm ² |

Output Data

| | | |
|---------------------|---------|-------------------|
| Load At Yield | 10.62 | kN |
| Elongation At Yield | 3.250 | mm |
| Yield Stress | 195.809 | N/mm ² |
| Load at Peak | 12.760 | kN |
| Elongation at Peak | 14.150 | mm |
| Tensile Strength | 235.266 | N/mm ² |
| Load At Break | 0.180 | kN |
| Elongation At Break | 18.670 | mm |
| % Reduction Area | 62.33 | % |
| % Elongation | 7.61 | % |

Load Vs. Cross Head Travel



observing the hesitation of load pointer. The extension readings are faster at this moment.

7. Remove the extensometer, and measure extension by divider or suitable scale, till ultimate load.
8. Record the maximum load. Observe the decrease in load and neck formation on the specimen.
9. Record the load at fracture and switch off the machine.
10. Remove the specimen. Observe the cup and cone formation at the fracture point. Rejoin the two pieces, measure the final gauge length and the reduced diameter.

8. Observation:

Material Used For the Tensile Test: Aluminium

Before Test

1. Initial Gauge diameter d_1 = 8.31 mm
2. Initial Gauge length L_1 = 19.7 mm
3. Total Length of Specimen = 40 mm
4. Any Other Dimensions =

After test:

1. Final Gauge diameter d_2 = 5.2 mm
2. Final Gauge length L_2 = 21.2 mm
3. Any Other Dimensions =

9. Calculations:

1. Initial Cross sectional area $A_1 = \pi d_1^2 / 4$

$$\frac{3.14 \times (8.31)^2}{4} = 54.20 \text{ mm}^2$$
2. Final Cross Sectional area $A_2 = \pi d_2^2 / 4$

$$\frac{3.14 \times (5.2)^2}{4} = 21.22 \text{ mm}^2$$
3. Yield stress = Yield load / Cross Sectional Area

$$\frac{10.62 \times 10^3}{21.22} = 500.47 \text{ N/mm}^2$$
4. Ultimate Stress = Ultimate Load / Cross Sectional Area

$$\frac{12.76 \times 10^3}{21.22} = 601.31 \text{ N/mm}^2$$

5. Breaking Stress = Breaking Load / Cross Sectional Area

$$\frac{0.18 \times 10^3}{21.22} = 8.48 \text{ N/mm}^2$$

6. % Elongation = $(L_2 - L_1 / L_1) \times 100$

$$\left[\frac{21.2 - 19.7}{19.7} \right] \times 100 = 7.61\%$$

7. Reduction in area = $(A_2 - A_1 / A_1) \times 100$

$$\left[\frac{21.22 - 54.20}{54.20} \right] \times 100 = 60.84\%$$

8. Stress (σ) (Within elastic limit) =

$$\frac{1 \times 10^3}{54.20} = 18.45 \text{ N/mm}^2$$

9. Corresponding strain (e) =

$$\frac{0.3}{20} = 0.025$$

10. Modulus of elasticity, $E = \sigma / e$

$$\frac{18.45}{0.025} = 738 \text{ N/mm}^2$$

10. Results:

1. Initial Cross sectional area $A_1 = 54.20 \text{ mm}^2$
2. Final Cross Sectional area $A_2 = 21.22 \text{ mm}^2$
3. Yield stress = 500.47 N/mm^2
4. Ultimate Stress = 601.31 N/mm^2
5. Breaking Stress = 8.48 N/mm^2
6. % Elongation = 7.61%
7. Reduction in area = 60.84%
8. Stress (σ) (Within elastic limit) = 18.45 N/mm^2
9. Corresponding strain (e) = 0.025
10. Modulus of elasticity, $E = 738 \text{ N/mm}^2$

11. Conclusions:

Aluminium has highly ductile fracture in which the specimen necks down to a point.

Cast Iron

Padmabhshushan Vasantraodada Patil Institute Of Technology

Budhgaon Polytechnic Wing(045),Budhgaon Tal- Miraj Dist-Sangli

TENSILE TEST REPORT

| | | | |
|-------------------|---------------|------------------|---------------------|
| Machine Model | FUT-40 | Test File Name | A1 Tensile CI.Utm |
| Machine Serial No | '----- | Date Time | 28/02/2024 10:50 AM |
| Customer Name | A1 SY. B.Tech | Customer Address | S Y B.Tech |
| Lot No. | 2 | Test Type | Tensile |
| Order No. | 1 | Heat No. | |

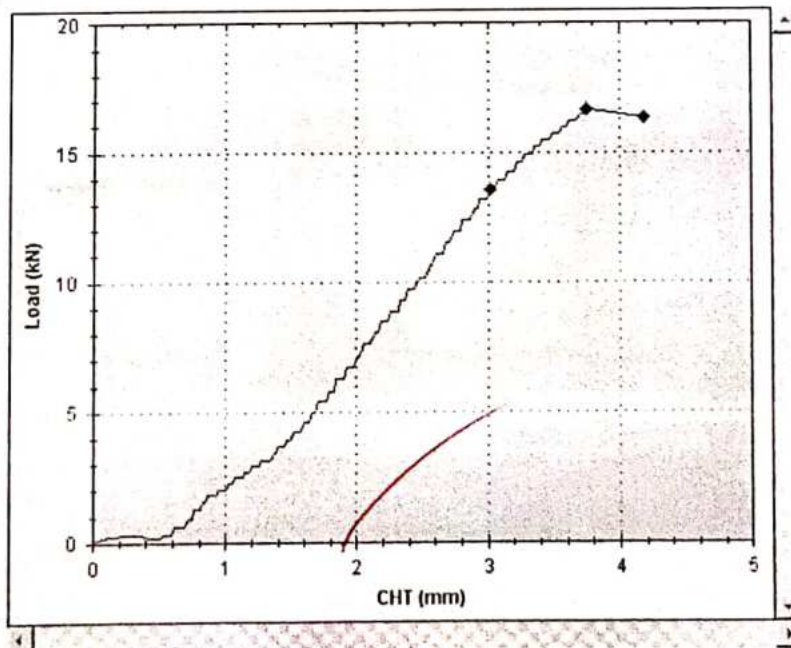
Input Data

| | | |
|-----------------------------|-------------|-----------------|
| Specimen Shape | Solid Round | |
| SpecimenType | Cast Iron | |
| Specimen Description | | |
| Specimen Diameter | 8.2 | mm |
| Gauge Length For % elong | 200 | mm |
| Pre Load Value | 0 | kN |
| Max. Load | 400 | kN |
| Max. Elongation | 200 | mm |
| Specimen Cross Section Area | 52.81 | mm ² |
| Final Sp Diameter | 8.2 | mm |
| Final Gauge Length | 200 | mm |
| Final Area | 52.81 | mm ² |

Output Data

| | | |
|---------------------|---------|-------------------|
| Load At Yield | 13.16 | kN |
| Elongation At Yield | 3.000 | mm |
| Yield Stress | 249.195 | N/mm ² |
| Load at Peak | 16.620 | kN |
| Elongation at Peak | 3.800 | mm |
| Tensile Strength | 314.712 | N/mm ² |
| Load At Break | 16.320 | kN |
| Elongation At Break | 4.180 | mm |
| % Reduction Area | --- | % |
| % Elongation | --- | % |

Load Vs. Cross Head Travel



PVPIT Budhgaon
Department of Mechanical Engg.
Value Added Certification Course:- Programming in C and CPP
offered by SPOKEN TUTORIALS, IIT BOMBAY

Duration: January, 2024

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Department of Mechanical Engg.
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Duration: January, 2024

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| 69 | GANGADHAR JOSHI | gvjoshi1@gmail.com | Male |
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[Signature]
H.O.D.
 Mechanical Engineering (Degree)



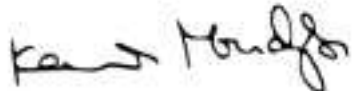
Spoken Tutorial
Project at
IIT Bombay

Certificate of Participation

This is to certify that **VISHWAJEET JADHAV** participated in the **C and Cpp** training organized at **Padmabhooshan Vasantrodada Patil Institute of Technology, Budhgaon** in **January 2024** semester, with course material provided by the Spoken Tutorial Project, IIT Bombay.

A comprehensive set of topics pertaining to **C and Cpp** were covered in the training.

March 10th 2024


Prof. Kannan M Moudgalya
IIT Bombay

Credits for the Spoken Tutorial courses are based on our estimates of the work required to complete them. Recipient institutions are required to apply due diligence and get them ratified/modified by their own duly formed academic/assessment body. Spoken Tutorial is a project at IIT Bombay, started with funding from the National Mission on Education through ICT, Ministry of Education (previously MHRD), Govt. of India.



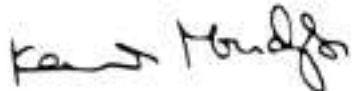
Spoken Tutorial
Project at
IIT Bombay

Certificate of Participation

This is to certify that **MANASI MITHARI** participated in the **C and Cpp** training organized at **Padmabhooshan Vasanttraodada Patil Institute of Technology, Budhgaon** in **January 2024** semester, with course material provided by the Spoken Tutorial Project, IIT Bombay.

A comprehensive set of topics pertaining to **C and Cpp** were covered in the training.

March 10th 2024


Prof. Kannan M Moudgalya
IIT Bombay

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NAAC criteria 2.3.1 – Participative Learning Activities

3. Participation & Winning performance by students in the “GO-KART Racing car competitions” with car building & racing teams – “TROJAN” and “ASHWAMEGH”.

Participative Learning: Go- Kart Manufacturing in PVPIT Budhgaon, Maharashtra, India

Introduction

FKDC is an intercollegiate design competition organized by the Society of Fraternity of Mechanical and Automotive Engineers. The competition challenges student teams to design, manufacture, and validate a single-seat, Go- kart for enduring rugged vehicle. This report details the problem-solving methodologies employed by our team during the manufacturing of our Go kart in Budhgaon, Maharashtra, India.

Problem-Solving Methodologies

- **Design for Manufacturing (DFM):** During the design phase, we prioritized DFM principles to ensure efficient and cost-effective manufacturing in our local machine shops. This involved:
 - Selecting readily available materials and standardized components.
 - Designing components for ease of machining and fabrication.
 - Minimizing part complexity and maximizing modularity for ease of assembly.
- **Design Verification and Validation:** We employed DV&V techniques to ensure the design met the competition's requirements and addressed potential issues before manufacturing. This included:
 - Finite Element Analysis (FEA) to simulate stress distribution and identify potential failure points.
 - Building and testing prototypes of critical components to validate functionality and identify areas for improvement.
- **Project Management:** We adopted a structured project management approach to ensure timely completion within budget constraints. This involved:
 - Work breakdown structure (WBS) to break down the project into manageable tasks.
 - Gantt chart to schedule tasks, identify dependencies, and track progress.
 - Regular team meetings to discuss progress, address challenges, and make collaborative decisions.
- **Root Cause Analysis :** To effectively troubleshoot any manufacturing issues that arose, we followed a systematic RCA approach. This involved:
 - Identifying the problem and its symptoms.
 - Investigating potential root causes through brainstorming and data analysis.
 - Implementing corrective actions to address the root cause and prevent recurrence.
 - Continuously monitoring and evaluating the effectiveness of corrective actions.
- **Communication and Collaboration:** Effective communication and collaboration were paramount throughout the manufacturing process. We implemented strategies such as:
 - Regular team meetings to discuss progress, challenges, and solutions.
 - Utilizing communication tools like project management software and messaging platforms.
 - Maintaining clear documentation of design changes, decisions, and problem-solving steps.

Outcomes

By implementing these problem-solving methodologies, our team successfully manufactured our Go- kart within the stipulated time frame and budget constraints. The Go- kar performed well in the competition, highlighting the effectiveness of our chosen methodologies.

Conclusion

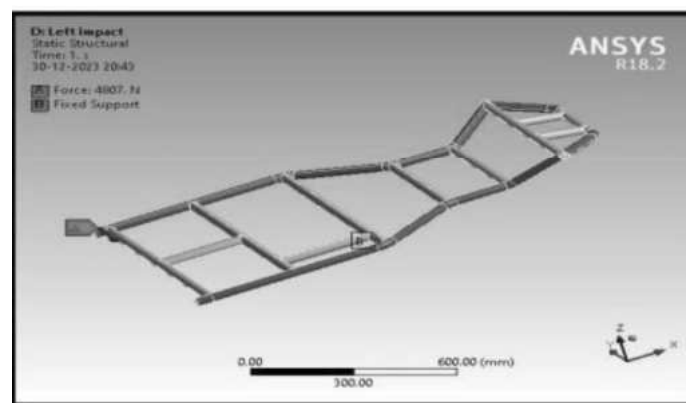
The problem-solving methodologies outlined in this report demonstrate our team's ability to translate theoretical design concepts into a functional and competitive Go- Kart. These methodologies can be applied to future Go karting projects and other engineering endeavors to ensure efficient problem-solving, effective project management, and successful product development.

Further Improvements

We are continuously striving to improve our problem-solving methodologies. Here are some areas for further development:

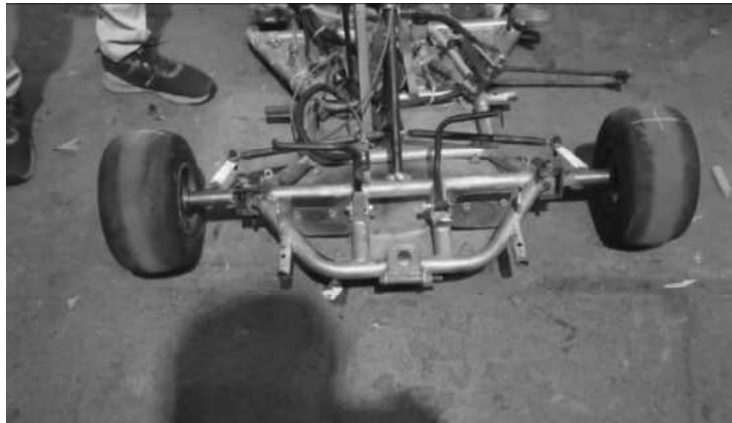
- **Utilization of design optimization software to improve component performance and weight reduction.**
- **Implementation of a more robust quality control plan to ensure consistent manufacturing quality.**

We believe that by continuously refining our problem-solving methodologies, we can achieve even greater success in future Go karting competitions and engineering projects.



[Signature]
 H.O.D.
 Mechanical Engineering (Degree)

2.3.1 Participative Learning




Pradeep
H.O.D.
Mechanical Engineering (Degree)





2.3.1 Participative Learning




Pradeep
H.O.D.
Mechanical Engineering (Degree)

Organized By  FMAE
 INSTITUTE OF MECHANICAL & AUTOMOTIVE ENGINEERING

Co-Presented By  K. J. Somaiya Institute of Technology
 college of technology

Safety Partner  SFI FOUNDATION INC.

Season 7  FKDC


This is to certify that Mr./Ms.


AMBI RAHUL BHAUSO


from **PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF TECHNOLOGY, SANGLI**
 of TEAM TROJAN has participated in FMAE FKDC SEASON 7
 Organized by Fraternity of Mechanical and Automotive Engineers
 Conducted at Kumaraguru College of Technology & Kari Motor Speedway, Coimbatore, India
 from 29th October 2023 to 02nd November 2023. TEAM TROJAN has secured
 Overall 1st Position in FKDC SEASON 7 in Combustion Category


REF:FK230248


Aman
 Mr. AMAN KUMAR
 DIRECTOR OF EVENTS - FMAE
 EVENT MANAGER - FKDC


 FMAE ACADEMY

 FMRE MOTO PARK

 FMAE

 ADROB

 ISO 9001:2015

 SFI FOUNDATION INC.

P.V.P. Karting Club

Formula kart design challenge season -8 (FKDC S-8)

List of students participating in the event:

| Sr. No. | Name | Class | Branch | CRN Number | Birth Date |
|---------|---------------------------|-------------|------------|------------|------------|
| 1. | Atharva Ankush Patil | Final Year | Mechanical | 2214037825 | 12/09/2000 |
| 2. | Pratik Vikas Chavan | Final Year | Mechanical | 2214037828 | 02/06/2003 |
| 3. | Mohamadkaip Shabbir Nadaf | Final Year | Mechanical | 2214037885 | 18/10/2002 |
| 4. | Sandip Vitthal Kadam | Third Year | Mechanical | 2308037700 | 06/04/2004 |
| 5. | Jay Nitin Karande | Third Year | Mechanical | 2208037583 | 25/03/2004 |
| 6. | Prathmesh Rangunath Mali | Third Year | Mechanical | 2208037657 | 21/11/2003 |
| 7. | Pratik Suryakat Irale | Third Year | Mechanical | 2308037658 | 20/12/2004 |
| 8. | Yash Hanmant Chavan | Second Year | Mechanical | 2308038492 | 03/12/2005 |
| 9. | Abhishek Pandurang Aivale | Second Year | Mechanical | 2308038555 | 08/07/2005 |
| 10. | Abhijit Tanaji Jadhav | Second Year | Mechanical | 2308038427 | 24/03/2006 |
| 11. | Shubham Amol Mirje | Second Year | Mechanical | 2308038458 | 22/10/2004 |
| 12. | Shubham Laxman Kapse | Second Year | Mechanical | 2308038614 | 06/10/2004 |
| 13. | Premjyot Pramod Landage | Second Year | Mechanical | 2308038788 | 30/01/2004 |
| 14. | Akshay Dadasao Patil | Second Year | Mechanical | 2308038417 | 10/11/2005 |
| 15. | Yash Hanmant Chavan | Second Year | Mechanical | 2308038492 | 03/12/2005 |
| 16. | Aftab Intekhalam Sande | Passed Out | Mechanical | 2008036401 | 30/10/2002 |
| 17. | Rahul Bhauso Ambi | Passed Out | Mechanical | 2114037469 | 06/06/2000 |




H.O.D.
 Mechanical Engineering (Degree)

P.V.P. Karting Club

YEAR 2023-2024

Achievements- Awards & Titles Won in Competitions

Event: FKDC, Season 7

Team Trojan

- Overall Champion
- Endurance and fuel economy winner
- Skidpad winner
- Autocross winner

Event: Edgeline Championship

Team Ashwamegh

- Overall 1st Runner-up
- Endurance - Winner
- Autocross - Runner-up
- Acceleration- Runner-up
- Design - Runner-up

Team Trojan

- Overall 2nd Runner-up
- Autocross - Winner
- Acceleration - Winner
- Skidpad - Runner-up
- Best In-house Built

Event: APEC, Season 4

Team Trojan

- Overall Champion
- Endurance- Winner
- Autocross - Winner
- Business -Winner
- Skid-pad -Runner-up

Team Ashwamegh

- Tug of war- Winner


H.O.D.
Mechanical Engineering (Degree)





Multiple Awards & Titles won at 'EDGELINE CHAMPIONSHIP'



Crowned as 'CHAMPIONS' at 'ADITYA Pro-Karting Competition'



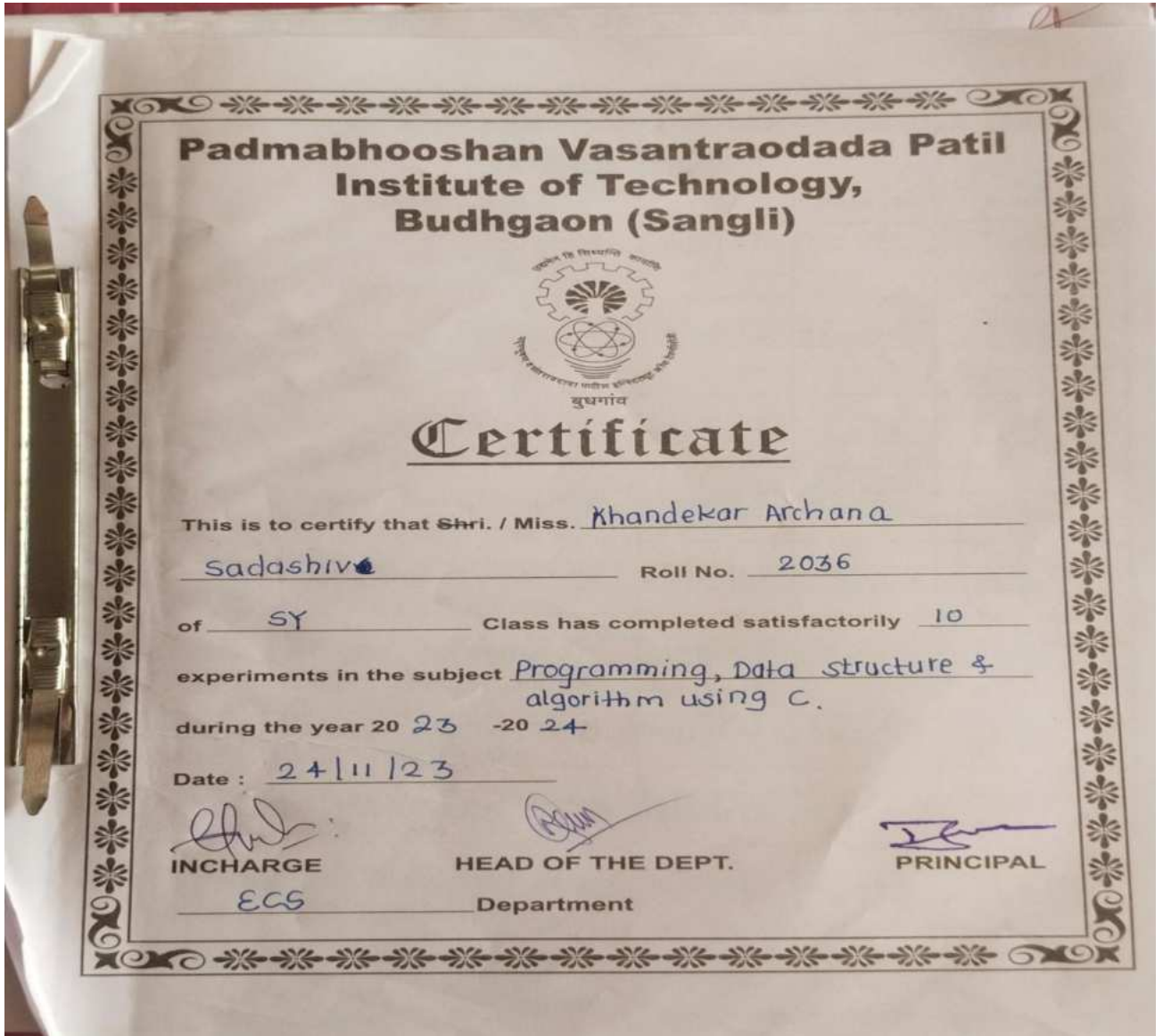
Pradeep
H.O.D.
Mechanical Engineering (Degree)

Participative Learning

It includes the following ways of learning. Proofs of the same are attached below.

1. Lab Manual

| Subject Code | Name of Subject | Name of subject teacher |
|----------------------------|---|-------------------------|
| BTECPL306 S.Y. Sem - I | Electronics Devices & Circuits Lab | Dr. J. A. Shaikh |
| | Programming, Data Structure and Algorithm using C Lab | Mr. V. J. Tamboli |
| BTECPL406 S.Y. Sem - II | Python Programming Lab | Dr. K. P. Paradeshi |
| | Database Management System Lab | Ms. A. S. Bhandare |
| BTECPL506 T.Y. Sem - I | Computer Networks and Cloud Computing Lab | Dr. K. P. Paradeshi |
| | Competitive Programming Lab | Mrs. T. S. Upadhye |
| BTECPL606 T.Y. Sem - II | Internet of Things Lab | Dr. K. K. Pandya |
| | Artificial Intelligence and Machine Learning Lab | Dr. J. A. Shaikh |
| BTEXL707 | Embedded System Design Lab | Mr. R. D. Patil |





PADMABHOOSHAN VASANTRAODADA PATIL
INSTITUTE OF TECHNOLOGY, BUDHGAON

INDEX

| Sr. No. | Name of Experiment | Date | Page No. | Remarks |
|---------|--|----------|----------|---------|
| 1) | Write a code and understand the concept of variable data type and data object in c | 21/08/23 | 01-04 | |
| 2) | Write a code and understand the concept of constructor and relationship | 28/08/23 | 05-08 | |
| 3) | Write a code and understand the concept of list in D.S | 04/09/23 | 08-13 | |
| 4) | Write a code & understand the concept of queue in D.S | 11/09/23 | 14-22 | |
| 5) | Write a code and understand concept of array in D.S. | 25/09/23 | 23-27 | |
| 6) | Write a code and understand the concept of graph & trees | 30/09/23 | 28-38 | |
| 7) | Write a code & understand concept of Hashing, Hash table in D.S. | 09/10/23 | 39-45 | |
| 8) | Write a code & understand concept of search algorithm in D.S. | 16/10/23 | 46-49 | |
| 9) | Write a code & understand concept of sorting algorithm in D.S | 30/10/23 | 50-56 | |
| 10) | Write a code & understand Concept of algorithm technique on Greedy | 20/11/23 | 57-60 | |

A
checked**EXPERIMENT NO.1**

Title: Write code and understand the concept variable, data type and data object in c.

Aim: To understand the concept variable, data type and data object in c.

What is C?

C is a general-purpose programming language created by Dennis Ritchie at the Bell Laboratories in 1972.

It is a very popular language, despite being old.

C is strongly associated with UNIX, as it was developed to write the UNIX operating system.

Why Learn C?

- It is one of the most popular programming language in the world
- If you know C, you will have no problem learning other popular programming languages such as Java, Python, C++, C#, etc, as the syntax is similar
- C is very fast, compared to other programming languages, like Java and Python
- C is very versatile; it can be used in both applications and technologies

Difference between C and C++

- C++ was developed as an extension of C, and both languages have almost the same syntax
- The main difference between C and C++ is that C++ support classes and objects, while C does not

```
#include <stdio.h>
```

```
int main() {  
    printf("Hello World!");  
    return 0;  
}
```


Example

```
int myNum;  
myNum = 15;
```

Note: If you assign a new value to an existing variable, it will overwrite the previous value:

Example

```
int myNum = 15; // myNum is 15  
myNum = 10; // Now myNum is 10
```

Output Variables

You learned from the output chapter that you can output values/print text with the `printf()` function:

Example

```
printf("Hello World!");
```

Data Types

As explained in the Variables chapter, a variable in C must be a specified data type, and you must use a format specifier inside the `printf()` function to display it:

Example

```
// Create variables  
int myNum = 5; // Integer (whole number)  
float myFloatNum = 5.99; // Floating point number  
char myLetter = 'D'; // Character  
  
// Print variables  
printf("%d\n", myNum);  
printf("%f\n", myFloatNum);  
printf("%c\n", myLetter);
```

Explanation of Example

Line 1: `#include <stdio.h>` is a **header file library** that lets us work with input and output functions, such as `printf()` (used in line 4). Header files add functionality to C programs.

Line 2: A blank line. C ignores white space. But we use it to make the code more readable.

Line 3: Another thing that always appear in a C program, is `main()`. This is called a **function**. Any code inside its curly brackets `{}` will be executed.

Line 4: `printf()` is a **function** used to output/print text to the screen. In our example it will output "Hello World".

Line 5: `return 0` ends the `main()` function.

Line 6: Do not forget to add the closing curly bracket `}` to actually end the main function.

Variables are containers for storing data values.

In C, there are different **types** of variables (defined with different keywords), for example:

- `int` - stores integers (whole numbers), without decimals, such as 123 or -123
- `float` - stores floating point numbers, with decimals, such as 19.99 or -19.99
- `char` - stores single characters, such as 'a' or 'B'. Char values are surrounded by **single quotes**

Declaring (Creating) Variables

To create a variable, specify the type and assign it a value:

Syntax

```
type variableName = value;
```

Where `type` is one of C types (such as `int`), and `variableName` is the name of the variable (such as `x` or `myName`). The equal sign is used to assign a value to the variable.

So, to create a variable that should store a number, look at the following example:

Example

Create a variable called `myNum` of type `int` and assign the value 15 to it:

```
int myNum = 15;
```

You can also declare a variable without assigning the value, and assign the value later:

Basic Data Types

The data type specifies the size and type of information the variable will store.

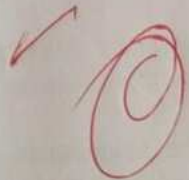
| Data Type | Format Specifier | Size | Description |
|------------------|-------------------------|--------------|--|
| int | %d or %i | 2 or 4 bytes | Stores whole numbers, without decimals |
| float | %f | 4 bytes | Stores fractional numbers, containing one or more decimals. Sufficient for storing 7 decimal digits |
| double | %lf | 8 bytes | Stores fractional numbers, containing one or more decimals. Sufficient for storing 15 decimal digits |
| char | %c | 1 byte | Stores a single character/letter/number, or ASCII values |

PDA PRACTICAL : 1

```
#include<stdio.h>
int main()
{
    printf("Practical no. 1\n");
    int a = 23;
    printf("The no. you have intered %d\n",a);
    int *p = &a;
    int q = &a;
    printf("%d\n",q);
    printf("p = %p",*p);
    return 0;
}
```

OUTPUT :

```
Practical no. 1
The no. you have intered 23
6487568
p = 0000000000000017
-----
Process exited after 0.05456 seconds with return value 0
Press any key to continue . . .
```



2. Seminar presentations

| Roll No. | Name of Students | Seminar Topic | Name of Guide |
|----------|-------------------------------|--|-----------------|
| | Aditya Sambhaji Babar | DC To AC Inverter Using 555 Timer IC | Dr. A.B. Shinde |
| 2. | Vaishnavi Yuvraj Samane | Smart Voting And Face Recognition | Dr. A.B. Shinde |
| 3. | Bhumika Uttam Sankapal | Hydrophonic System | Dr. A.B. Shinde |
| 4. | Unmesh Rajendra Bagal | Sensor Technology | Dr. A.B. Shinde |
| 5. | Arya Parshram Kamble | Intelligent Transport System | Dr. A.B. Shinde |
| 6. | Omkar Sanjaykumar Ghorpade | Wireless Charging | Dr. A.B. Shinde |
| 7. | Tejas Sanjay Patil | Image Sensor | Dr. A.B. Shinde |
| 8. | Sejal Bapuso Patil | Smart Voting And Face Recognition | Dr. A.B. Shinde |
| 9. | Sarthak Prakash Mali | Image Sensor | Dr. A.B. Shinde |
| 10. | Rugved Satish Sawant | Touch Screen Display Technology | Dr. A.B. Shinde |
| 11. | Rohan Subhash Fasale | Touch Screen Display Technology | Dr. A.B. Shinde |
| 12. | Onkar Shanka Shinde | Sensor Technology | Dr. A.B. Shinde |
| 13. | Shreya Sanjay Mahajan | Hydrophonic System | Dr. A.B. Shinde |
| 14. | Sakshi Uttam Abdare | Night Vision Technology | Dr. A.B. Shinde |
| 15. | Ashish Balkrishna Katkar | Preventing Banking Fraud Using AI | Dr. A.B. Shinde |
| 16. | Harshwardhan Deepak More | Preventing Banking Fraud Using AI | Dr. A.B. Shinde |
| 17. | Satyam Vinayak Pawar | Bioelectronic | Dr. A.B. Shinde |
| 18. | Pratik Prakash Mali | Solar Motor Pump | Dr. A.B. Shinde |
| 19. | Aditya Vijay Halwai | Piezoelectric Motor | Dr. A.B. Shinde |
| 20. | Prathmesh Sanjay Patil | PATH Following And Collision Avoidance Bot Using Arduino | Dr. A.B. Shinde |
| 21. | Shreya Jaysing Shinde | Hologram Technology | Dr. A.B. Shinde |
| 22. | Vishal Shankar Wankar | Path Planning And Navigation Using AI | Dr. A.B. Shinde |
| 23. | Prathamesh Pravin Patil | Path Planning And Navigation Using AI | Dr. A.B. Shinde |
| 24. | Smita Kishor Patil | Solar Ptes | Dr. A.B. Shinde |
| 25. | Srushti Shivaji Patil | Hologram Technology | Dr. A.B. Shinde |
| 26. | Sujit Vijay Zambare | Bioelectronic | Dr. A.B. Shinde |
| 27. | Vrushali Ravsaheb Lohar | Solar Ptes | Dr. A.B. Shinde |
| 28. | Mahamadsaalim Usmanali Bargir | PATH Following And Collision Avoidance Bot Using Arduino | Dr. A.B. Shinde |
| 29. | Aditi Raju Sabne | Artificial Passenger | Dr. A.B. Shinde |
| 30. | Varad Vinay Wale | | Dr. A.B. Shinde |
| 31. | Manthan Annaso Bedage | Piezoelectric Motor | Dr. A.B. Shinde |
| 32. | Omkar Ravindra Waydande | Solar Motor Pump | Dr. A.B. Shinde |
| 33. | Devaraj Lakkappa Malame | Network Security | Dr. A.B. Shinde |
| 34. | VishnuShishupal Khot | | Dr. A.B. Shinde |

| | | | |
|-----|------------------------------|---|------------------|
| 35. | AkshataHemantBansode | Traffic Prediction Using ML | Dr. A.B. Shinde |
| 36. | Archana Sadashiv Khandekar | Traffic Prediction Using ML | Dr. A.B. Shinde |
| 37. | Harshad Ananda Patane | Electronic Payment System | Mr. V.J. Tamboli |
| 38. | PrathameshVijay Jadhav | Agriculture Using Technology | Mr. V.J. Tamboli |
| 39. | Sahil Rajkumar Katre | Nanotechnology In 3D Printing | Mr. V.J. Tamboli |
| 40. | Mirfika Rizwanahmed Moulvi | Gi FI Technology | Mr. V.J. Tamboli |
| 41. | Shraddha Purushottam Dongare | Swarm Robot | Mr. V.J. Tamboli |
| 42. | Gayatri Ranjeet Dubal | Gi FI Technology | Mr. V.J. Tamboli |
| 43. | Sanika Shankar Patil | Swarm Robot | Mr. V.J. Tamboli |
| 44. | Rohan Jayawant Patil | Submitted By Students | Mr. V.J. Tamboli |
| 45. | VAISHNAVI MOHAN BHOKARE | | Mr. V.J. Tamboli |
| 46. | Sumit Vijaykumar Todkari | Agriculture Using Technology | Mr. V.J. Tamboli |
| 47. | Aniket Tanaji Pawar | | Mr. V.J. Tamboli |
| 48. | Rohit Prakash Dorkar | ARS Creative Side | Mr. V.J. Tamboli |
| 49. | Vishwajeet Shankar More | ARS Creative Side | Mr. V.J. Tamboli |
| 50. | Nishant Prakash Baul | WI- FI Technology | Mr. V.J. Tamboli |
| 51. | Dinesh Krishnadev Salunkhe | Paper Battery | Mr. V.J. Tamboli |
| 52. | Prathmesh Amarjeet Yadav | WI- FI Technology | Mr. V.J. Tamboli |
| 53. | Avishkar Pratap Pawar | Paper Battery | Mr. V.J. Tamboli |
| 54. | Sujal Pratap Anugade | Submitted By Students | Mr. V.J. Tamboli |
| 55. | Shreya Ravi Kamble | Battery Less Mobile Phones | Mr. V.J. Tamboli |
| 56. | Riya Gangadhar Devkule | Computer Multitasking | Mr. V.J. Tamboli |
| 57. | Vaishnavi Mohan Bhokare | Battery Less Mobile Phones | Mr. V.J. Tamboli |
| 58. | Snehal Subrao Yadav | Text Encryption Using Cryptographic Algorithm | Mr. V.J. Tamboli |
| 59. | Tushar Arun Patil | | Mr. V.J. Tamboli |
| 60. | Balkrushna Sudhakar Tade | Data Visualization | Mr. V.J. Tamboli |
| 61. | Shivani Tatyaso Patil | Smart Door Lock System | Mr. V.J. Tamboli |
| 62. | Siddhi Manoj Patil | Smart Door Lock System | Mr. V.J. Tamboli |
| 63. | Atul Shivling Wale | Data Visualization | Mr. V.J. Tamboli |
| 64. | Ankit Kalyanrao Ambure | Biometric | Mr. V.J. Tamboli |
| 65. | Pratik Shahaji Kure | 5G Technology | Mr. V.J. Tamboli |
| 66. | Mangesh Nitin Joshi | Biometric | Mr. V.J. Tamboli |
| 67. | Alishabi Ghudulal Shaikh | Data Cleaning In Excel Using Machine Learning | Mr. V.J. Tamboli |
| 68. | Aditya Atul Mahamuni | | Mr. V.J. Tamboli |
| 69. | Sakshi Bajirao Patil | HapticTechnology | Mr. V.J. Tamboli |
| 70. | Maheshwari Shrikant Mule | Data Cleaning In Excel Using Machine Learning | Mr. V.J. Tamboli |
| 71. | Sharvani Prakash Mali | Artificial Intelligence Chatbot | Mr. V.J. Tamboli |
| 72. | AryanTanajiDeshmukh | | Mr. V.J. Tamboli |
| 73. | Vaishnavi Vitthal Shinde | HapticTechnology | Mr. V.J. Tamboli |
| 74. | Kamble Sakshi Vinod | Computer Multitasking | Mr. V.J. Tamboli |
| 75. | SomaSekhar Gopalrao vuyyuru | Swarm Robot | Mr. V.J. Tamboli |
| 76. | Shruti Sunil More | Artificial Intelligence Chatbot | Mr. V.J. Tamboli |
| 77. | Aditya Sambhaji Babar | DC To AC Inverter Using 555 Timer IC | Dr. A.B. Shinde |

3. Value-added courses –

Android Programming - Students are motivated for online course.

Course Outline

This module briefs you on this course's agenda and the few prerequisite knowledge that can efficiently help you in app development. You will also get a tad of info on setting up an environment for Android Studio.

Android Studio is the official IDE for Android Application development. In this module, you will go through a complete demo on getting started with Android Studio and understand its various terms. This module consists of a hands-on session on creating the first Android app called Hello World, through which you are moving a step ahead in app development.

Random Number Generator Android App

This module is a hands-on session on developing an app called Random Number Generator using Android Studio. This module consists of a hands-on session developing an Android app that adds Two Numbers using Android Studio.

| Name | Email Address | Assignment State |
|----------------------|----------------------------------|------------------|
| Abhay Nangare | abhaynangare3@gmail.com | Done |
| swapnil Mali | sm4958846@gmail.com | Done |
| Shrawani Nikam | shrawanin79@gmail.com | Done |
| samiksha hajare | samikshahajare147@gmail.com | Done |
| PRANAV MOHITE | pranavmohite3082003@gmail.com | Done |
| Harshada Patil | patilharshada9665@gmail.com | Done |
| Rutuja Mali | rutujamali807@gmail.com | Done |
| Sanika Lad | sanikalad001@gmail.com | Done |
| Bhagyashree Shinde | shindebhagyashree050@gmail.com | Done |
| Anisha Shinde | shardas1300@gmail.com | Done |
| Siddharth Vadgaonkar | siddharth.vadgaonkar06@gmail.com | Done |
| Pragati Kamble | pragatikamblesonu4994@gmail.com | Done |
| Sanika Patil | psanika589@gmail.com | Done |
| Omkar Shinde. | omkarshinde5295@gmail.com | Done |
| Sumedh Patil | patilsumedh116@gmail.com | Done |
| Akanksha Jagdale | akankshajagdale7@gmail.com | Done |
| Akshay Patil | patilakshay7657@gmail.com | Done |
| Ankita Madane | ankitamadane2003@gmail.com | Done |
| Arshad Shaikh | arshadmarlin1a134@gmail.com | Done |
| Aryan Mane | aryanmane17499@gmail.com | Done |
| Ashutosh Mahindrakar | mahindrakarashutosh763@gmail.com | Done |
| Atharva | atharva0069@gmail.com | Done |
| Atharva Phatak | atharvabhiphatak@gmail.com | Done |
| Atul Patil | atulsuhaspatil@gmail.com | Done |
| Guruprasad Pujari | guruprasadpujari2@gmail.com | Done |

| | | |
|---------------------|--------------------------------|------|
| Sanika Limaye_PVPIT | sanikalimaye76@gmail.com | Done |
| Karan Koli | karankoli88809@gmail.com | Done |
| Maithili Patil | maithilipatil1608@gmail.com | Done |
| PRATHAMESH MANE | maneprathamesh902@gmail.com | Done |
| Payal Bhosale | bhoslepayal44@gmail.com | Done |
| Prajwal Patil | pdpatil483@gmail.com | Done |
| Prathamesh Mali | prathmeshmali525@gmail.com | Done |
| Prathmesh Patil1630 | ppatil1021@gmail.com | Done |
| Pratiksha Chavan | pratikshachavan4004@gmail.com | Done |
| Pratiksha Sale | salepratiksha1@gmail.com | Done |
| Rugved Kalal | rugvedkalal19@gmail.com | Done |
| Rutuza Zende | rutujazende02@gmail.com | Done |
| Samruddhi Devkule | devkulesamaruddhi@gmail.com | Done |
| Sanjivani madane | sbmadane2002@gmail.com | Done |
| Sejal Pawar | sejalpawar1308@gmail.com | Done |
| Shraddha Chougule | shraddhachougule2020@gmail.com | Done |
| Shriyata Chavan | chavanshriyata@gmail.com | Done |
| Shruti Gurav | shrutisunflower12@gmail.com | Done |
| Shubham Nangare | nangareshubham334@gmail.com | Done |
| Soham B | besoham28@gmail.com | Done |
| Sumaiyya Shaikh | sumaiyyashaikh8484@gmail.com | Done |
| Vidya Madane | madanevd@gmail.com | Done |
| Vishvajeet Chavan | vishvajeetchavan169@gmail.com | Done |
| snehal Pawar | pawarsnehal853@gmail.com | Done |



CERTIFICATE OF COMPLETION

Presented to

Ashutosh Mahindrakar

For successfully completing a free online course
Android Application Development

Provided by

Great Learning Academy

(On April 2024)

To verify this certificate visit verify.mygreatlearning.com/RNRQWUVE

2. Two days workshop on – Internet of Things Assosiation with LogiBit Technologies pvt. Ltd.





Two days workshop on

Node MCU and Raspberry Pi

Date: 15th and 16th May 2024

| Sr. No. | Name of Student | Class | Mobile Number | Sign |
|---------|----------------------------|-------------|---------------|------|
| 1. | Aayan Nitin Mane | T.Y. B.Tech | 8237952510 | |
| 2. | | | | |
| 3. | Vishvajit C. Jadhav | T.Y. B.Tech | 8381050236 | |
| 4. | Shradha Sanjay Chougale | T.Y. B.Tech | 9175856097 | |
| 5. | Pratiksha R. Chavhan | T.Y. B.Tech | 9325276743 | |
| 6. | Akanksha A. Jagdale | T.Y. B.Tech | 8412847699 | |
| 7. | Atkarva A. Phatak | T.Y. B.Tech | 8624831948 | |
| 8. | Shreya Rahul Yadav | T.Y. B.Tech | 8625899760 | |
| 9. | Rutuja Sanjay Malu | T.Y. B.Tech | 9356183553 | |
| 10. | Rugved R. Katal | T.Y. B.Tech | 7770083140 | |
| 11. | Dhanashri Balasa Gurav | T.Y. B.Tech | 9923729912 | |
| 12. | Arshad Umar Shaikh | T.Y. B.Tech | 9322012612 | |
| 13. | Guruprasad Suresh Pujari | T.Y. B.Tech | 8421699899 | |
| 14. | Samruddhi Rajendra Devkule | T.Y. B.Tech | 9859782625 | |
| 15. | Abhay Gananan Hangare | T.Y. B.Tech | 9146268795 | |
| 16. | Akshay Balasaheb Patil | T.Y. B.Tech | 9284318991 | |
| 17. | Payal Sanjay Bhasale | T.Y. B.Tech | 8055131771 | |
| 18. | Sanalip Suresh Sawant | T.Y. B.Tech | 7517649846 | |
| 19. | Sanika Uttam Lad | T.Y. B.Tech | 8983790079 | |
| 20. | Rutuja Vidut Zende | T.Y. B.Tech | 8856966952 | |
| 21. | Mayuri Tukaram Jadhav | T.Y. B.Tech | 9730978580 | |
| 22. | Vidya Dilip Madane | T.Y. B.Tech | 9666637406 | |
| 23. | Sakshi Mahadev Chougale | T.Y. B.Tech | 9768071631 | |
| 24. | Ankita Vilas Madane | T.Y. B.Tech | 8767766996 | |
| 25. | Achutesh A. Mahindrakar | T.Y. B.Tech | 9970911875 | |
| 26. | Sanjivani Bhimraj Madane | T.Y. B.Tech | 9529896244 | |

4. NPTEL Courses –

| Sr. No | PRN | Name of Students | Appeared for NPTEL Exam for Foreign Language |
|--------|----------------|------------------------------|--|
| 1. | 1962691376009 | Shaikh Numan Zakirhusen | YES |
| 2. | T2062691293012 | Yash Ramesh Chavan | YES |
| 3. | T2062691376001 | Akash Sanjay Pawaskar | YES |
| 4. | T2062691376002 | Ajay Khandu Kumbhar | YES |
| 5. | T2062691376003 | Gajanan Govindrao Jadhav | YES |
| 6. | T2062691376004 | Komal Sandeep Patil | YES |
| 7. | T2062691376007 | Sanika Santosh Mane | YES |
| 8. | T2062691376008 | Sarfaraj Mustak Pathan | YES |
| 9. | T2062691376009 | Sharwari Sanjay Gaikwad | YES |
| 10. | T2062691376011 | Shivani Shivling Sankpal | YES |
| 11. | T2062691376012 | Shruti Dayanand Tasgaonkar | YES |
| 12. | T2062691376013 | Sneha Dadaso Shinde | YES |
| 13. | T2062691376015 | Tanmay Pradip Mankani | YES |
| 14. | T2062691376016 | Mohite Vighnaraj Dinkar | YES |
| 15. | T2062691376017 | Godase Vrushali Subhash | YES |
| 16. | T2062691376018 | Srushti Basavaraj Pachhapure | YES |
| 17. | T2062691376019 | Aniket Sanjay Chavan | YES |
| 18. | T2062691376020 | Mokashi Parshuram Bhimrao | YES |
| 19. | T2062691376021 | Aditya Rajendra Patil | YES |
| 20. | T2062691376022 | Pallavi Parashuram Manugade | YES |
| 21. | T2062691376023 | Mali Snehal Uday | YES |
| 22. | T2162691376502 | Prajyot Prashant Sathaye | YES |
| 23. | T2162691376503 | Shraddha Sandeep Deshmukh | YES |
| 24. | T2162691376504 | Uzma Miyalal Khatib | YES |
| 25. | T2162691376505 | Gauri Sanjay Nakate | YES |
| 26. | T2162691376506 | Anjali Pandit Mohite | YES |
| 27. | T2162691376507 | Akshay Pandurang Pawar | YES |
| 28. | T2162691376509 | Pranali Vishwas Devkule | YES |

| | | | |
|-----|----------------|--------------------------------|-----|
| 29. | T2162691376510 | Prathamesh Sunil Parit | YES |
| 30. | T2162691376511 | Vaibhav Prakash Vibhute | YES |
| 31. | T2162691376512 | Aditya Sudhir Waghmare | YES |
| 32. | T2162691376513 | Om Milind Dhamanage | YES |
| 33. | T2162691376514 | Nilesh Nayan Kulkarni | YES |
| 34. | T2162691376515 | Pramod Abhay Alate | YES |
| 35. | T2162691376516 | Shounak Shrikant Shirgurkar | YES |
| 36. | T2162691376517 | Sakshi Sachin Magdum | YES |
| 37. | T2162691376518 | Divya Arun Irale | YES |
| 38. | T2162691376519 | Shivratna Ramchandra Patil | YES |
| 39. | T2162691376521 | Pruthviraj Chandrakant Mane | YES |
| 40. | T2162691376522 | Pranav Tulshiram Kharat | YES |
| 41. | T2162691376523 | Harshavardhan Arwind Savant | YES |
| 42. | T2162691376525 | Abhijeet Babu Hubale | YES |
| 43. | T2162691376526 | Vidya Ramkrishna Patil | YES |
| 44. | T2162691376527 | Pratiksha Suresh Pawar | YES |
| 45. | T2162691376528 | Shubham Sambhaji Kadam | YES |
| 46. | T2162691376530 | Aditi Narayan Abhyankar | YES |
| 47. | T2162691376532 | Harshwardhan Yashwant Chougale | YES |
| 48. | T2162691376533 | Tejas Shital Navale | YES |
| 49. | T2162691376534 | Gitanjalee Sitaram Gurav | YES |
| 50. | T2162691376535 | Akash Hari Kolekar | YES |
| 51. | T2162691376536 | Siddharth Balasaheb Kamble | YES |
| 52. | T2162691376537 | Pranjali Dattatray Gavade | YES |
| 53. | T2162691376539 | Aishwarya Sampatrao Mohite | YES |
| 54. | T2162691376540 | Monika Shrikant Mane | YES |
| 55. | T2162691376541 | Jainab Firoz Pinjari | YES |
| 56. | T2162691376543 | Pratik Ashok Sadare | YES |
| 57. | T2162691376544 | Rushikesh Ashok Kadam | YES |
| 58. | T2162691376545 | Suhana Mahamud Magdum | YES |
| 59. | T2162691376546 | Swapnil Yuvraj Dongare | YES |
| 60. | T2162691376547 | Dhiraj Manikl Pawar | YES |
| 61. | T2162691376548 | Shraddha Ravaso Chougule | YES |
| 62. | T2162691376549 | Apruv Atul Kharade | YES |
| 63. | T2162691376550 | Supriya Gurappa Mhetre | YES |
| 64. | T2162691376551 | Shweta Shivaji Patil | YES |

Date: - 26 Oct 2023.

NOTICE

All B.Tech Final Year (CSE, ETC, ELECTRONICS) students are hereby informed that the audit course for foreign language will start from next week. The detailed schedule will be send to your department soon. It is observed that many of students are not registered for NPTEL COURSE, Therefore it is decided that the course will be conducted at college level by appointing an external agency which will cover NPTEL Syllabus and also will provide a certificate for the course. The course fee is Rs.500/- per student.

Note- Class Teacher of respective class will provide one student coordinator for coordinating the whole class. Send Mr. Pushpadant Magdum at TPO.

NPTEL Course

Pragdum
26/10/23
Pushpadant Magdum
Asst. TPO

Copy to: -

- HOD (ECS)
- HOD (E&TC)
- HOD (CSE)

Pragdum
26/10/23

6. Poster presentation

7. Think pair share and role play

Participative Learning

It includes following ways of learning. Proofs of the same are attached below.

1. Lab manual
2. Seminar presentations
3. Value added courses
4. NPTEL Courses
5. Guest lectures
6. Poster presentation
7. Think pair share and role play

① water gate current is not controlled
 operation table:

| V _{AK} | I _A |
|-----------------|----------------|
| 0 | 0.5 |
| 10 | 0.5 |
| 20 | 0.5 |
| 30 | 0.5 |

EXPERIMENT NO. 1

Aim: To study V-I characteristics of SCR.

Apparatus: Experimental chassis, multi meter, voltmeter, connecting wires, power supply etc.

Theory:

Thyristor is 3 terminals, 4 layered and 3 junction device. 3 terminals are anode, cathode, and gate. The thyristor has 3 basic mode of operation.

1. Forward blocking
2. Forward conducting
3. Reverse blocking

Operation:

1. Forward blocking:

When the junction at anode voltage is made positive with respect to cathode the junction j₁ and j₃ are forward biased and the junction j₂ is reverse biased. Due to reverse biased junction only small leakage is order of several mA. The any resistor is to be said in forward blocking stage or of f state leakage current called forward biased leakage current or off state current.

2. Forward conducting:

With the junction at the anode voltage is made positive with respect to cathode. If the voltage V_{AK} is increased to sufficient large value the reverse bias junction j₂ will have break, this is known as avalanche breakdown and the voltage at which it occurs is called forward breakdown voltage.

The junction j₁ and j₃ are already forward biased hence breakdown of junction j₂ three junction result in large forward anode current which is limited by external resistance R_L. The thyristor is then said to be in ON state. Once the thyristor

| | |
|----|-----|
| 0 | 0.5 |
| 10 | 0.5 |
| 20 | 0.5 |

observation Table 1 -

① when gate current is not connected

| VAK | IA |
|-----|----|
| 50 | 0 |
| 100 | 0 |
| 150 | 0 |
| 200 | 0 |
| 210 | 0 |

when gate supply is added

IG1 = 17.5mA

| VAK(V) | IAC(MA) |
|--------|---------|
| 50 | 1 |
| 100 | 12 |
| 150 | 18 |
| 180 | 22 |
| 210 | - |

IG2 = 18.5

| VAK(V) | IAC(MA) |
|--------|---------|
| 25 | 2 |
| 50 | 3 |
| 75 | 10 |
| 100 | 12 |
| 125 | 14 |
| 150 | 18 |
| 175 | 22 |

Final o/p is equal to scale $\times 5$

Final o/p = scale $\times 5$

IG3 = 20mA

| VAK(V) | IAC(MA) |
|--------|---------|
| 25 | 2 |
| 50 | 6 |
| 75 | 8 |
| 100 | 12 |
| 125 | 16 |
| 150 | 18 |
| 175 | 22 |

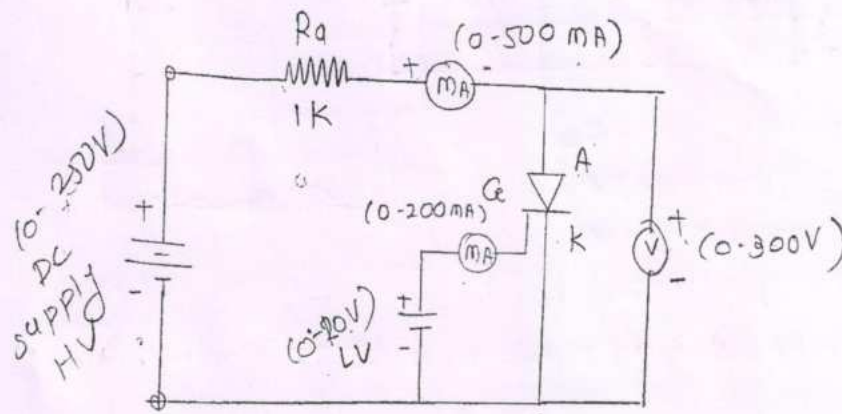
conducts gate current can be reduced to zero. However, immediately after turn ON the anode current must be more than value known as latching current I_L .

In order to maintain required amount of carrier flow across the junction in absence of gate current otherwise device will reverse to blocking condition at the anode to cathode voltage as reduced

3. Reverse blocking:

When supply terminals are reverse, so that cathode voltage is positive with respect to anode. The junction J_2 is forward biased but junction J_1 and J_3 are reverse biased. This is like to reverse biased diode connected in series. Due to reversed bias junction only reverse leakage current known as reverse current would be flow through the device and thyristor is said to be in reverse blocking state. If the reverse voltage V_{ak} is increasing to sufficient large value. The breakdown of voltage J_1 and J_2 will takes place and device will conduct. However this avalanche breakdown would be destructive and therefore device is normally operated in reverse blocking mode.

CIRCUIT DIAGRAM:



$I_g = 15.2 \times 2.51 = 38.2 \text{ mA}$
 $2 \times 5.1 = 10.2$

$A \cdot m \cdot 0.01 = 2 \times 100 = 200$

| (A/m) | 2 x 5.1 = 10.2 | 3AV |
|-------|----------------|-----|
| 2 | 10.2 | 0.2 |
| 10 | 10.2 | 0.1 |
| 100 | 10.2 | 0.1 |
| 1000 | 10.2 | 0.1 |

PROCEDURE:

1. Make the connections as per circuit diagram.
2. Adjust the gate current as per certain value
3. Switch on anode-cathode, power supply and increase the voltage in step down from 0 to 100 volt.
4. Note down V_s , V_{ak} and I_a for each reading.
5. Tabulate the reading.
6. Repeat above procedure for another value of gate current.
7. Plot the graph of V_{ak} and I_a .

PRECAUTIONS:

1. Select SCR gate current and voltage with a proper range.
2. Connections should be proper.

OBSERVATION TABLE:

1) $I_g = 19.5 \text{ mA}$
 $V_{BO} = 180 \text{ V};$
 $I_L = 5.0 \text{ mA};$

$I_{VBO} = 22 \text{ mA}$
 $I_H = 110.0 \text{ mA}$

3) $I_g = 20 \text{ mA}$
 $V_{BO} = 170 \text{ V}$
 $I_{VBO} = 22 \text{ mA}$

2) $I_g = 18.5 \text{ mA}$
 $V_{BO} = 175 \text{ V};$
 $I_L = 10.0 \text{ mA};$

$I_{VBO} = 22 \text{ mA}$
 $I_H = 110.0 \text{ mA}$

$I_L = 10.0 \text{ mA}$
 $I_H = 110.0 \text{ mA}$

Conclusion- we Here conclude that we have studied $V-I$ characteristics of SCR and we have observed that $V_{B1} > V_{B2} > V_{B3}$ and $I_{g3} > I_{g2} > I_{g1}$

① Final o/p = scale $\times 5$

$$I_{G1} = 17.5 \times 5 \text{ mA} = 87.5 \text{ mA}$$

| VAF | scale $\times 5$ | (mA) |
|-----|------------------|------|
| 50 | 1 $\times 5$ | 5 |
| 100 | 12 $\times 5$ | 60 |
| 150 | 18 $\times 5$ | 90 |
| 180 | 22 $\times 5$ | 110 |

$$I_{G3} = 20 \times 5 = 100 \text{ mA}$$

| VAF | scale $\times 5$ | (mA) |
|-----|------------------|------|
| 25 | 2 $\times 5$ | 10 |
| 50 | 6 $\times 5$ | 30 |
| 75 | 8 $\times 5$ | 40 |
| 100 | 12 $\times 5$ | 60 |
| 125 | 16 $\times 5$ | 80 |
| 150 | 18 $\times 5$ | 90 |
| 170 | 22 $\times 5$ | 110 |

$$I_{G2} = 18.5 \times 5 = 92.5 \text{ mA}$$

| VAF | scale $\times 5$ | (mA) |
|-----|------------------|------|
| 25 | 2 $\times 5$ | 10 |
| 50 | 6 $\times 5$ | 30 |
| 75 | 8 $\times 5$ | 40 |
| 100 | 12 $\times 5$ | 60 |
| 125 | 16 $\times 5$ | 80 |
| 150 | 18 $\times 5$ | 90 |
| 170 | 22 $\times 5$ | 110 |

• specification of SCR

max current = 300 A

max voltage = 1200 V

frequency = 1 kHz

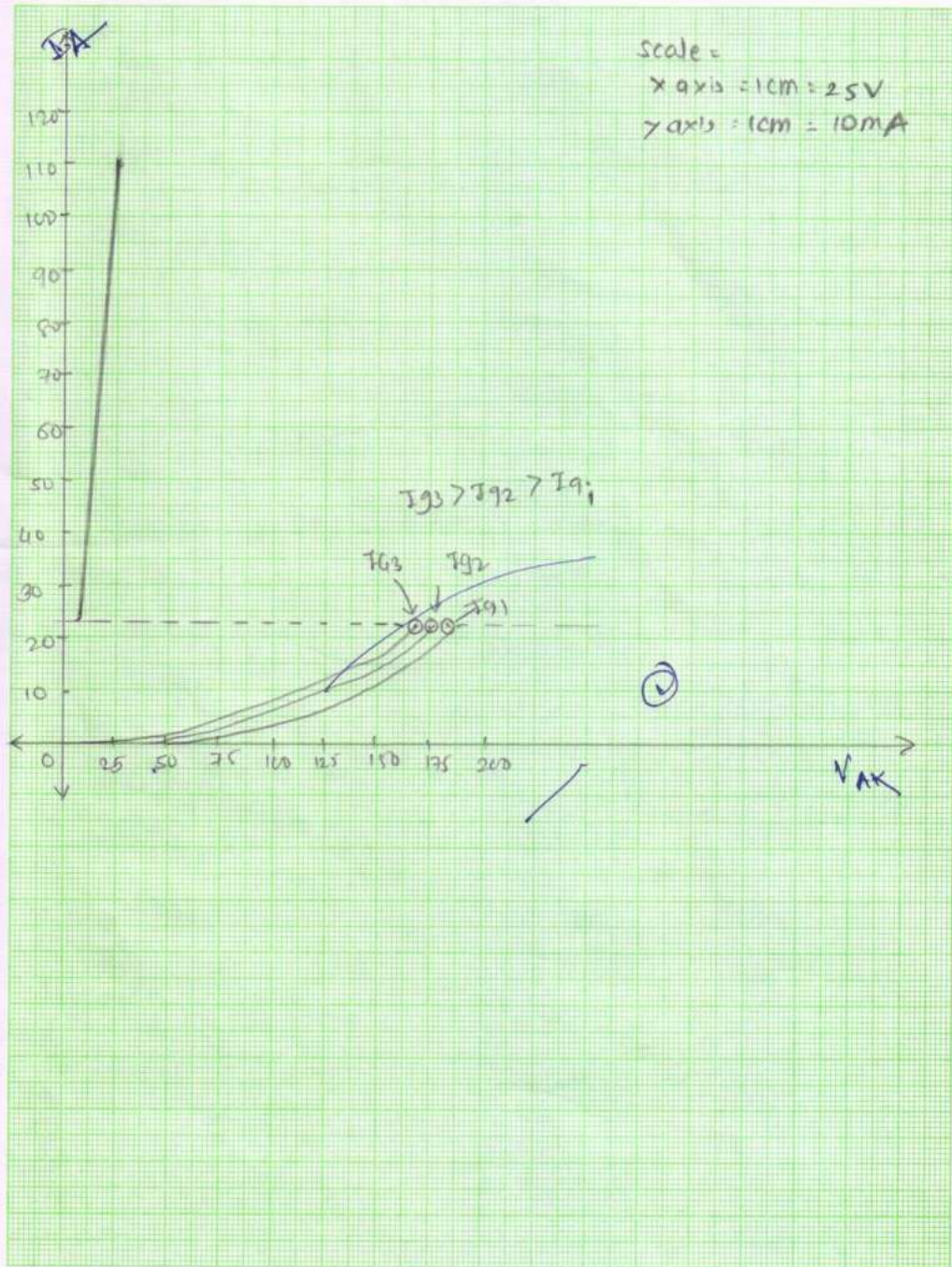
Reliable operating Temperature = 125°C



PADMABHOOSHAN VASANTRAODADA PATIL
INSTITUTE OF TECHNOLOGY, BUDHGAON

Title: SCR VI

Scale- X axis :
Y axis :



Guest Lectures

| Sr. No. | Topic | Guest Name | No. of students | Date |
|---------|--|---|-----------------|---|
| 1 | Career Guidance | Mr. Arvin Patil (McDermott ME Inc Dubai) | 55 | 27/09/2023 |
| 2 | Electrical Design & Drafting using AutoCAD | Mr. Ansar Mulani (M/s EPSIT Enterprises, Sangli) | 50 | (On working Saturdays of Sept & Oct) |
| 3 | Circuit simulation using Proteus & PCB Design | Mr. Shardul Karandikar (Fine Circuits, Sangli) | 52 | 14/10/2023 |
| 4 | Career options for an Electrical Engineers | Mr. Milind Chapekar (Diaspora Innovations Pvt. Ltd. Nagpur) | 31 | 21/05/2024 |

**PADMABHOOSHAN VASANTRAODADA PATIL
INSTITUTE OF TECHNOLOGY, BUDHGAON**

DEPARTMENT OF ELECTRICAL ENGINEERING

In Association with

DIASPORA INNOVATIONS PVT LTD, NAGPUR

**ORGANISES
A SEMINAR ON**

**CAREER OPTIONS FOR AN
ELECTRICAL ENGINEER**

Speaker



**MILIND
CHAPEKAR**

Founder & CEO,
Diaspora Innovations Pvt Ltd



ON TUESDAY, 21
MAY 2024



STARTS AT
06:30 PM

KEY TOPICS

- Higher Studies in Abroad and India
- Private Jobs in IT and Core
- Govt./PSU Jobs Preparation Strategies
- Impact of AI in Job Selection

**PROF. S. S.
PATIL**

Co-ordinator
Asst. Professor,
Electrical Department

**PROF. DR. L. S.
PATIL**

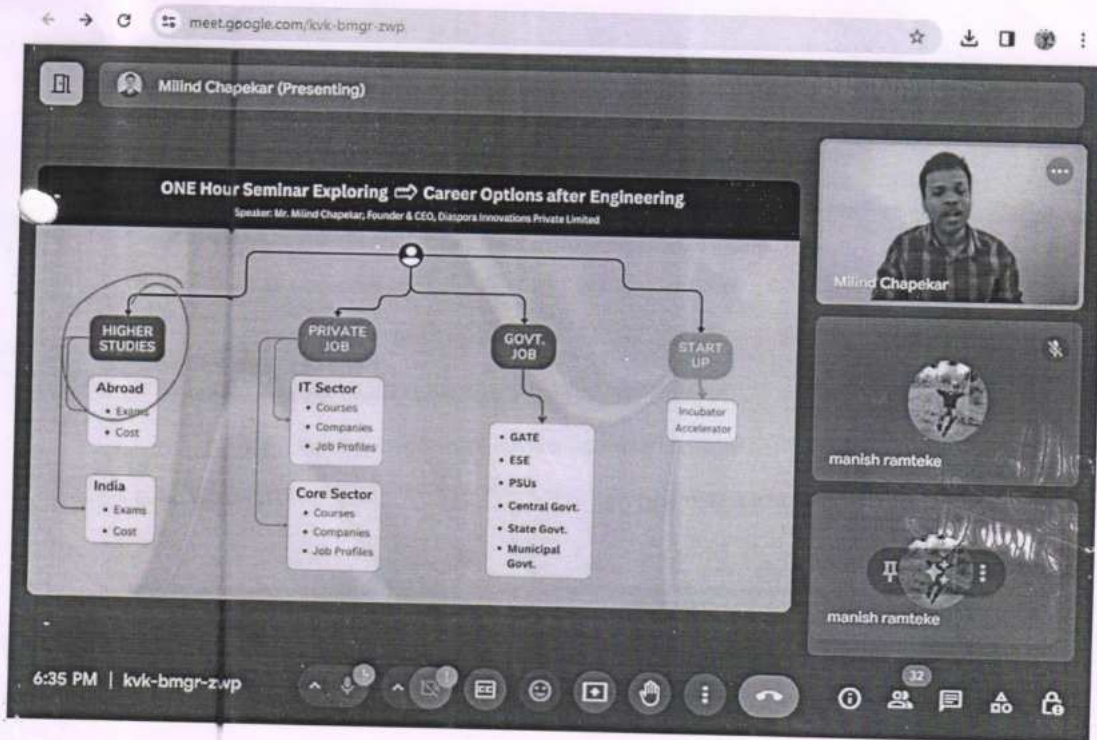
Organiser
HOD
Electrical Department

Patil
H.O.D.
Dept of Electrical & Comp. Engg.
P.V.P.I.T. Budhgaon

**DR. B. S.
PATIL**

Principal
PVPIT, Budhgaon

Event Photos



Event Photos

meet.google.com/kvk-bmgr-zwp

6:37 PM | kvk-bmgr-zwp

Higher Studies → Abroad → MS • MBA

Total Course cost with all other expenses almost Rs. 40L to 2 Cr depends upon College and Country.

| Exams | GRE <small>(Graduate Record Examinations)</small> | TOEFL or IELTS | GMAT <small>(Graduate Management Admission Test)</small> |
|----------------|--|---|---|
| For | Graduation and master graduation including MBA | Need to demonstrate proficiency in English | Premier Business School Admission test |
| Sections | <ol style="list-style-type: none"> Verbal Reasoning Quantitative Reasoning Analytical Writing | <ol style="list-style-type: none"> Reading Listening Speaking Writing | <ol style="list-style-type: none"> Verbal Reasoning Quantitative Reasoning Data Insights |
| Cost | Appx. Rs. 16-17k | Appx. Rs. 17k | Appx. Rs. 20-22k |
| Score Validity | 5 years. | 2 years. | 5 years. |

6:37 PM | kvk-bmgr-zwp

meet.google.com/kvk-bmgr-zwp

6:59 PM | kvk-bmgr-zwp

Private Job → Electrical Core Sector

Electrical

| Courses | Job Profiles | Companies |
|---|--|---|
| <ol style="list-style-type: none"> AutoCAD Certification (PLC) certification (SCADA) certification Certified Energy Manager (CEM) Maintenance and Production Courses Electrical Load Estimation and Designing Course Professional Engineer (PE) Certified Technical Professional (CTP) Certified Systems Engineer Professional | <ol style="list-style-type: none"> Electrical Design Engineer Commissioning Engineer Electrical Hardware Design Engineer Quality Engineer BIW Designer Engineer Lead Engineer Project Engineer Senior Safety Engineer Instrumentation and Control Engineer Electrical Vehicles Engineer Senior Electrical Testing Engineer Electrical Plant Engineer | <ol style="list-style-type: none"> Crompton Greaves Emerson Power Essar Energy Havells JSW Energy Tata Power L&T Orient Electric Philips SIEMENS Wipro Lighting Corporate Bajaj Electronics Ltd |

6:59 PM | kvk-bmgr-zwp

NPTEL Courses

| Sr. No. | Name of Student | Name of Course | Year |
|---------|--------------------------------|--|---------|
| 1. | ATHARV VIVEK RAJMANE | German-I | 2023-24 |
| 2. | SHRAVAN LALASO HATTIKAR | German-I | 2023-24 |
| 3. | SOURABH RAMRAO PATIL | German-I | 2023-24 |
| 4. | TANMAY TAVANAPPA VADGAVE | German-I | 2023-24 |
| 5. | SATYAJEET PANDURANG PATIL | German-I | 2023-24 |
| 6. | SANKET SUHAS PATIL | German-I | 2023-24 |
| 7. | ABDUSSAMAD SALIM NADAF | German-I | 2023-24 |
| 8. | NIKITA ANANDRAO PATIL | German-I | 2023-24 |
| 9. | SHREYA MANJI SALUNKHE | German-I | 2023-24 |
| 10. | SAKSHI UDAY PATIL | German-I | 2023-24 |
| 11. | DADASO HANMANT HONMANE | German-I | 2023-24 |
| 12. | SHREYAS SANTOSH KULKARNI | German-I | 2023-24 |
| 13. | VIVEK RAJENDRA JADHAV | German-I | 2023-24 |
| 14. | RITESH DEVIDAS LONARE | German-I | 2023-24 |
| 15. | KAJAL SHASHIKANT JADHAV | German-I | 2023-24 |
| 16. | AKASH SHASHIKANT SONAWANE | German-I | 2023-24 |
| 17. | SOURABHA RAGHUNANDAN MANE | German-I | 2023-24 |
| 18. | ONKAR PRAKASH HAKE | German-I | 2023-24 |
| 19. | GIRISH BELKAR | German-I | 2023-24 |
| 20. | TASMIYA FIROJKHAN MULLA | German-I | 2023-24 |
| 21. | PRATHMESH SUBHASH INGALE | German-I | 2023-24 |
| 22. | SAKSHI DATTATRAY VIDHATE | German-I | 2023-24 |
| 23. | PRATHMESH SHASHIKANT TASHILDAR | German-I | 2023-24 |
| 24. | ROHAN MAHADEV HARGE | German-I | 2023-24 |
| 25. | DHAIRYASHIL DATTAJIRAO DUBAL | German-I | 2023-24 |
| 26. | SATYAJEET SACHIN PATIL | German-I | 2023-24 |
| 27. | SHIVRAJ JAGANNATH TOPKAR | German-I | 2023-24 |
| 28. | ABHISHEK SUNIL VADAVANE | German-I | 2023-24 |
| 29. | NISHANT BHARAT PATIL | German-I | 2023-24 |
| 30. | SHUBHAM SUNIL NIMBALKAR | German-I | 2023-24 |
| 31. | SHANKARAO RAMCHANDRA PATIL | German-I | 2023-24 |
| 32. | PRATHMESH PRAMOD VASUDEV | German-I | 2023-24 |
| 33. | ARPITA RAMESH JAMDADE | German-I | 2023-24 |
| 34. | HARSHAVARDHAN ANANDA KADAM | German-I | 2023-24 |
| 35. | ASHITOSH RAMESH AWALKAR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 36. | AKASH GANAPATI DUDHAL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 37. | BENJIR MOULA MUJAWAR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 38. | VAISHNAVI VITTHAL CHOUGULE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 39. | SATYAJIT ARUN MALI | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 40. | RAVINDRA RAJU ARJUN | Introduction to Industry 4.0 and | 2023-24 |

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|-----|------------------------------|--|---------|
| | | Industrial Internet of Things | |
| 41. | SHRAVASTI DAYANAND KAMBLE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 42. | PRATIK PARSHURAM SURYAVANSHI | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 43. | SWAPNIL ANANDRAO CHAVAN | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 44. | PRANAV KENGAR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 45. | AMEY VIDYADHAR INGALE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 46. | SAYALI SHANKAR PATIL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 47. | SATYAJIT PRAKASH THORAT | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 48. | PRIYA UDAY MULE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 49. | VINAY SUNIL JAVIR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 50. | SWAPNIL SURESH SALUNKHE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 51. | PRATIKA RAMU MANGAVE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 52. | SUJATA RAMESH JADHAV | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 53. | TEJASHRI RAJENDRA MALI | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 54. | SHRUTIKA SANJAY BAMANKAR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 55. | AJINKYA BHANUDAS SANKPAL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 56. | CHINMAYA BHAGVAN SAWANT | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 57. | KISHOR DNYANESHWAR MANE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 58. | SACHIN NAMDEV PATIL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 59. | SANKET MAHADEV PANSE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 60. | SARVESH SANJAY CHAVAN | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 61. | SHWETA RAMESH SATPUTE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 62. | OMKAR HINDURAO SURYAVANSHI | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 63. | AVANTIKA RANJEET CHAVAN | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 64. | AVANTIKA VITTHAL JADHAV | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 65. | PRANAV SANJAY ROKADE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 66. | YASH GAJANAN MANE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |

| | | | |
|-----|-----------------------------|--|---------|
| 67. | RUTUJA MANOHAR PATIL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 68. | AJIT VISHWAS BHOSALE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 69. | SAKSHI BALU JAMBHALE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 70. | VAISHNAVI MANIK BHOSALE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 71. | PRITI CHOUGULE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 72. | SAKSHI NEMGONDA PATIL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 73. | PRERANA MOHAN KANASE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 74. | SWAPNIL CHANDRAKANT KADAM | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 75. | ABHISHEK UDAY KOLI | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 76. | MUSKAN JAVED ATTAR | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 77. | BALAJI BHASKAR YADAV | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 78. | AVADHUT ANNASO BEDAGE | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 79. | SHIVTEJ RAJENDRA MAGDUM | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 80. | SUYASH BAJIRAO PATIL | Introduction to Industry 4.0 and Industrial Internet of Things | 2023-24 |
| 81. | YASH MILIND PATIL | Entrepreneurship Essentials | 2023-24 |
| 82. | SUFIYAN GOUS KHATIB | Entrepreneurship Essentials | 2023-24 |
| 83. | MAHAMED S. N. ALI SHIKALGAR | Entrepreneurship Essentials | 2023-24 |
| 84. | SUHAIL MULLA | Entrepreneurship Essentials | 2023-24 |



MARKSHEET

Name: ATHRAV VIVEK RAJMANE

DOB: 08-09-2003

| Discipline | Year | Course Name | Marks | | Total Marks (100%) | Status | Performance |
|------------|------|-------------|------------------|------------|--------------------|--------|-------------|
| | | | Assignment (25%) | Exam (75%) | | | |
| HS | 2024 | German - I | 18.41 | 25.88 | 44 | | |

H.O.D.
Dept of Electrical & Comp.Engg.
P.V.P.I.T. Budhgaon

PROF. ANDREW THANGARAJ
NPTEL COORDINATOR
IIT MADRAS

| ID | DEPARTMENT NAME |
|----|---|
| AE | Aerospace Engineering |
| AG | Agriculture |
| AR | Architecture |
| BT | Biotechnology |
| CH | Chemical Engineering |
| CY | Chemistry and Biochemistry |
| CE | Civil Engineering |
| CS | Computer Science and Engineering |
| EE | Electrical Engineering |
| EC | Electronics & Communication Engineering |
| ED | Engineering Design |
| BT | General |
| HS | Humanities and Social Sciences |
| LW | Law |
| MG | Management |
| MA | Mathematics |
| ME | Mechanical Engineering |
| MM | Metallurgy and Material Science |
| MM | Mining Engineering |
| GE | Multidisciplinary |
| OE | Ocean Engineering |
| PH | Physics |
| SS | Special Lecture Series |
| TE | Textile Engineering |

| Total Mark |
|------------|
| >=90 |
| 75-89 |
| >=60 |

| Performance |
|----------------|
| Elite + Gold |
| Elite + Silver |
| Elite |



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

YASH MILIND PATIL

for successfully completing the course

Entrepreneurship Essentials

with a consolidated score of **52** %

| | | | |
|--------------------|----------|----------------|----------|
| Online Assignments | 20.91/25 | Proctored Exam | 30.93/75 |
|--------------------|----------|----------------|----------|

Total number of candidates certified in this course: **2100**

H.O.D.
Dept of Electrical & Comp.Engg.
P.V.P.I.T. Budhgaon



Indian Institute of Technology Kharagpur

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Roll No: NPTEL24GE15S3366300341

To verify the certificate

No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

AKASH GANAPATI DUDHAL

for successfully completing the course

Introduction to Industry 4.0 and Industrial

Internet of Things

with a consolidated score of **58** %

| | | | |
|--------------------|----------|----------------|---------|
| Online Assignments | 23.72/25 | Proctored Exam | 34.5/75 |
|--------------------|----------|----------------|---------|

Total number of candidates certified in this course: **10498**

H.O.D.
Dept of Electrical & Comp.Engg.
P.V.P.I.T. Budhgaon



Indian Institute of Technology Kharagpur

Jan-Apr 2024
(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Roll No: NPTEL24CS34S666300156

To verify the certificate

No. of credits recommended: 3 or 4

Seminar Presentation

| Sr. No. | Name of Student | Class | Seminar Title |
|---------|--------------------------------|----------|--|
| 1. | Sumit chandrakant gaikwad | SY BTech | 3D printing |
| 2. | Riddhi Paresh Parekh | SY BTech | Smart Grid Technology |
| 3. | Sejal Shashikant Nalawade | SY BTech | Thermal Image System |
| 4. | Piyush Pramod Vankhade | SY BTech | Micro Power Generator |
| 5. | Karan Mansinghrao More | SY BTech | Sensor Technology |
| 6. | Vinayak kallappa singammanaver | SY BTech | Cognitive Radio Network |
| 7. | Tejas kishor jadhav | SY BTech | Energy harvesting techniques |
| 8. | Aishwarya Santosh Zende | SY BTech | Wireless Electricity |
| 9. | Vishakha Vijay Patankar | SY BTech | Insulator |
| 10. | Varsha Nandkumar Limbale | SY BTech | Digital Signal Processing |
| 11. | Prathana Popat Patil | SY BTech | AI Technology In Power System |
| 12. | Omkar Prakash Jambhale | SY BTech | Augmented reality |
| 13. | Chopade Pallavi Ratilal | SY BTech | Artificial intelligence of Power station |
| 14. | Prathmesh Vijay Deshmukh | SY BTech | Air monitoring system in smart cities |
| 15. | Priyanka aabaso patil | SY BTech | Deep learning in health care |
| 16. | Atharv Dhondiram Nalwade | SY BTech | Battery |
| 17. | Tejasvi Manohar Babar | SY BTech | AI Based System Induction Motor |
| 18. | Sonika Deepak Vedpathak | SY BTech | Cloud Computing |
| 19. | Guruprasad Prashant Chougule | SY BTech | Radial Feeder Protection |
| 20. | Prathmesh Rajkumar Patil | SY BTech | Wireless Charging for Electric Vehicles |
| 21. | Nishil Bhavesh Kanjiya | SY BTech | Biometric fingerprint technology |
| 22. | Mayuri Hanmantrao Patil | SY BTech | 5 g tecnology |
| 23. | Sutar Aditya Bhaskar | SY BTech | Underground Transmission Lines |
| 24. | Aditya Appasaheb Lavand | SY BTech | Angular (Web development) |
| 25. | Suraj Bhupal Ghorpade | SY BTech | DIGILOCKER |
| 26. | Tejas Vivek Kulkarni | SY BTech | Antivirus |
| 27. | Apeksha Dinesh Daware | SY BTech | Wind energy |
| 28. | Aditya Dinesh Mane | SY BTech | Wireless Usb |
| 29. | Pallavi Vasant Bandgar | SY BTech | Electric Traction System |
| 30. | Sumit Gautam bhale | SY BTech | Communication |
| 31. | Swati Mahadev Gadikar | SY BTech | AUTO CAD |
| 32. | Prathmesh Ashok Mohite | SY BTech | Piezoelectric Motor |
| 33. | Karan Rameshchandra Pandit | SY BTech | Roof Top Solar Energy |

| | | | |
|-----|--------------------------------|----------|--|
| 34. | Anushka Mohan Kadam | SY BTech | 3D printing |
| 35. | Vrushali Tukaram koli | SY BTech | Importance of strong password and authentication in cyber security |
| 36. | Varad Rajendra Suryawanshi | SY BTech | Solar Cell |
| 37. | Dubal Mayuri Sanjay | SY BTech | Touchless Touchscreen Technology |
| 38. | Pranil Popat Kamble | SY BTech | Battery |
| 39. | Vardhaman Subhash Sajane | SY BTech | Power Generation Systems |
| 40. | Rushikesh Popat Chavan | SY BTech | 5g wireless technology |
| 41. | Prachi Mohan Savale | SY BTech | Metamorphic Robots |
| 42. | Komal Duryodhan Narale | SY BTech | Electrical Protective Devices |
| 43. | Prashant Santosh Thote | SY BTech | Smart energy meter |
| 44. | Samiya nashir shaikh | SY BTech | Robotics & application |
| 45. | Sagar Pramod kole | SY BTech | Image processing in machine learning |
| 46. | Sakshi vijay ghatage | SY BTech | Machine learning |
| 47. | Varad Vinay Suryawanshi | SY BTech | Hybrid technology |
| 48. | Atul Arun Deshmukh | SY BTech | Electrical power transmission and distribution |
| 49. | Shubham Dattatray jamdade | SY BTech | Modern Trends in Machine Design Technology |
| 50. | Rohan Ashok Lad | SY BTech | Street light monitoring using IoT |
| 51. | Vaibhav Vilas Pawar | SY BTech | Smart Grid Technology |
| 52. | Harshwardhan vijay sadakale | SY BTech | electrical vehicle |
| 53. | Pawar Pradnya Raosaheb | SY BTech | Electrical relay |
| 54. | Ganesh uttam patil | SY BTech | Electric vehicle |
| 55. | Vivek Vijay Gavali | SY BTech | 3D printing |
| 56. | Rohit Balasaheb Sargar | SY BTech | 5G Technology |
| 57. | Suryakant Tanaji Mane | SY BTech | Artificial intelligence in power system |
| 58. | Vishakha Vijay Patankar | SY BTech | Insulators |
| 59. | Shrutika pandurang sathe | SY BTech | Artificial Intelligence |
| 60. | Mahesh Mahadev Dudhal | SY BTech | Renewable Energy Source |
| 61. | Tasmiya Firojkhan Mulla | TY BTech | Intelligent substation |
| 62. | Basaveshwar Vitthalrao Vanjire | TY BTech | Sensor Technology |
| 63. | Shweta Vijay Sonavane | TY BTech | Electric Traction System |
| 64. | Shreyas Santosh Kulkarni | TY BTech | 5G Technology |
| 65. | Divya Nitin Mane | TY BTech | SCADA in distribution system |
| 66. | Dhairyashil Dattajirao Dubal | TY BTech | Wind Mill. |
| 67. | Prajit Parshuram Kolekar | TY BTech | Introduction of digital meter |
| 68. | Abhijeet Laxman Jadhav | TY BTech | Energy storage system |
| 69. | Shaila vijay boramanikar | TY BTech | Overhead line insulators |
| 70. | Shweta Dashrath Nimbalkar | TY BTech | Renewable energy sources |

| | | | |
|------|----------------------------|----------|--|
| 71. | Divya Yuvraj Shinde | TY BTech | Underwater windmill |
| 72. | Chaitanya Vijay kirdat | TY BTech | Thermal power plant |
| 73. | Avishkar Ramchandra kirdat | TY BTech | Hydroelectric power generation plant |
| 74. | Jadhav vivek rajendra | TY BTech | Pumped hydro storage. |
| 75. | Abhishek sunil vadavane | TY BTech | Substation Equipment |
| 76. | Dadaso Hanmant Honmane | TY BTech | Biomass Technology |
| 77. | Kajal Shashikant Jadhav | TY BTech | Touch Screen Technology |
| 78. | Shankar ramchandra patil | TY BTech | Block chain technology |
| 79. | Nishant Bharat Patil | TY BTech | Space based solar power |
| 80. | Arpita Ramesh Jamdade | TY BTech | Flexible Photovoltaic Technology |
| 81. | SOURABHA RAGHUNANDAN MANE | TY BTech | Smart grid technology |
| 82. | Harshvardhan Ananda kadam | TY BTech | Electrical Insulators |
| 83. | Satyajeet Sachin Patil | TY BTech | DVR (dynamic voltage regulator) |
| 84. | Onkar prakash hake | TY BTech | Smart Grid |
| 85. | Pradnya Dnyandev Rajmane | TY BTech | E-Wast Management |
| 86. | Mangal Sitaram Chavan | TY BTech | Geothermal Energy |
| 87. | Shivraj Jagannath Topkar | TY BTech | Hydrogen storage system |
| 88. | Tanmay Tavanappa Vadgave | TY BTech | lot based battery management system |
| 89. | Prathmesh Subhash ingale | TY BTech | Gravity battery |
| 90. | Rohit Balu Gaikwad | TY BTech | Net metering |
| 91. | Ritesh Devidas Lonare | TY BTech | Security and Privacy in Social Network |
| 92. | Nikita Anandrao Patil | TY BTech | Power electronic devices |
| 93. | Chetan Anilkumar Kamble . | TY BTech | MOCT~ MAGNETO OPTICAL CURRENT TRANSFORMER |
| 94. | Tushar Ashok kadam | TY BTech | Machine learning |
| 95. | Rohan Mahadev Harge | TY BTech | Smart Grid The Future Of The Electric Energy System |
| 96. | Sonal Mohan Patil | TY BTech | Satellite Communication(Telemetry, Tracking and Command System In Satellite.) |
| 97. | Shreya Manaji Salunkhe | TY BTech | Optical interstellite Communication |
| 98. | Aashish Milind Gore | TY BTech | Vehicle To Grid (V2G) Technology |
| 99. | Aniket Mahadev Koli | TY BTech | An Autonomous Vehicle |
| 100. | Sagar Bhaskar Yamgar | TY BTech | Solar electric car |
| 101. | Akash Shashikant Sonawane | TY BTech | Electric Vehicles |
| 102. | Nishikant Namdev Maske | TY BTech | Industrial Fire Safety |
| 103. | Rahul Anil Gidd | TY BTech | AI and its future |
| 104. | Ruruja Janardan Patil | TY BTech | SCADA system |

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|------|---------------------------------|----------|---|
| 105. | Ashish Santosh Masale | TY BTech | AI in Power Station. |
| 106. | Aditya Sunil Potadar | TY BTech | Modern Trends in Automobiles |
| 107. | Pratik vinayak desai | TY BTech | Vortex bladeless windmill |
| 108. | Girish Gajanan Belkar | TY BTech | Microcomputer temperature controller for water cooler |
| 109. | Sai Prasad Jamdar | TY BTech | LiFi technology |
| 110. | Aditi Uday Jagtap | TY BTech | HVDC technology |
| 111. | Prathmesh Pramod Vasudev | TY BTech | Electrical Vehical Pollution. |
| 112. | Sourabh Ramrao Patil | TY BTech | Ocean Thermal Energy Conversion |
| 113. | Prathamesh Shashikant Tashildar | TY BTech | Solar roof top |
| 114. | Sakshi Dattatray Vidhate | TY BTech | Electromagnetic Compatibility |
| 115. | Sakshi Uday patil | TY BTech | Portable mobile charger |
| 116. | Sanket Suhas Patil | TY BTech | Power Transformer |
| 117. | Abdussamad Salim Nadaf | TY BTech | Gas insulation Substation and equipments |
| 118. | Vaishnavi Uttam Rasale | TY BTech | Domestic wiring system |
| 119. | Trupti Chandrakant Zambre | TY BTech | Power Factor Improvement |
| 120. | Shubhamraje Sunil Nimbalkar | TY BTech | Superconductivity |



**PADMABHOOSHAN VASANTRAODADA PATIL INSTITUTE OF
TECHNOLOGY, BUDHGAON**

Department of Electrical Engineering

CERTIFICATE

This is to certify that the seminar report entitled

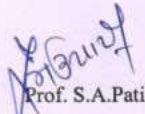
HVDC TECHNOLOGY


submitted by

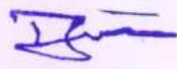
Aditi Uday Jagtap

(3045)

of **T. Y. B. Tech Electrical Engineering** to Dr. BABASAHEB AMBEDKAR
TECHNOLOGICAL UNIVERSITY, LONERE, is a seminar work carried out by
her.


Prof. S.A. Patil
Guide
(Electrical
Department)


Prof. B.S. Patil
Head of Department


Prof. B.S. Patil
Principal

Date: 05/02/2024

Student Notice

An add-on course on topic "Entrepreneurship and Project Report Writing." is scheduled /crafted for chemical engineering students that involve writing project reports for small scale businesses (production/manufacturing). Interested third Year Students (SEM II) are requested to register for this Add On course which will be conducted only on working Saturdays (in extra hours 10 am to 12am and 1 Pm to 3 Pm). Students should read the brochure of course. The course will start from 10/02/2024. A certificate will be issued to the successful student.



Head

Department of Chemical Engineering



Brochure

Working Saturday
10 AM - 12 PM
1 PM- 3 PM
Department of
Chemical Engg

**Entrepreneurship and
Project Report Writing**

About course
Project Report Components

- MSME industry
- Project Description
- Project Costing
- Project Progress
- Risks and Risk Management
- Budget
- Timelines
- Team Performance

What is a project report?
A project report is a document created for a team or company that ensures a project feasibility and business operation

Register Before 10/02/2024

By Dr S B Pawar

**PVP Institute of
Technology,
Budhgaon Sangli**



PVPIT

Add-on Course on

Entrepreneurship and Project Report Writing

TY chemical Engineering Students

Year 2023-2024

Course Outcome

After completing this course, you will be able to:

- Understand various entrepreneurship opportunities
- Understand various schemes supporting entrepreneurship
- Understand small scale business and its working
- Write project report

Time and Venue

Every Working Saturday

At Chemical Engineering Department, PVPIT Sangli

Outline (Lecture wise, 2 hr per lecture + 2 hr Hands-on calculations)

Duration: February 2024 To May 2024

Add-on Course on

Entrepreneurship and Project Report Writing.

TY chemical Engineering Students

Year 2023-2024

Syllabus

Table of contents

1. What is a project report?
2. Why is a project report important?
3. A Complete Guide to Project Reports
4. When to write a project status report?
5. How to write a Project Report in 7 Steps
6. What to include in a project status report?
7. Project Report Examples
8. Project Report Components
9. Small Scale Production of Following Products
 - Ayurveda Medicine Formulations
 - Ball Pen Ink
 - Drying and value addition of agriculture products
 - Detergent Powder and Cake
 - Disposable Syringes
 - Sugar Globules
 - Ethanol plant
 - Extraction of essential oil
 - Processing of ginger
 - Processing of grapes
 - And many more.....

Text Books:

1. Dr. Gupta and Dr. Srinivasan, Entrepreneurship development in India
2. Vasant Desai, Dynamics of Entrepreneurial Development and Management
3. Sarugadharan and Resia Begum, Women Entrepreneurship; institutional support and problems
4. M.W.Deshpande, Entrepreneurship of small Scale Industries
5. D.L. Saxon and RW Smilor (eds), The Art and Science of Entrepreneurs

Reference Books:

1. Venkateshwara Rao and Udai Pareek,(Eds)Developing Entrepreneurship-A Handbook
2. Raja Gopal, Agriculture Business and Entrepreneurship
3. H.Sadhak, industrial development in Backward Regions in India
4. Ravi J. Mathai, Rural Entrepreneurship A Frame Work in Development Entrepreneurship - AHandbook

Links

<https://my.msme.gov.in/MyMsmeMob/MsmeProjectProfile/Home.htm>

<https://www.dcmsme.gov.in/publications/pmryprof/vol6.htm>

CERTIFICATE OF COMPLETION

This is presented to :

Rama Waghmode

completed a three-month Add-On course on
“Entrepreneurship and Project Report Writing” at
PVPIT Sangli

SLS

DR S L BHAGAT
HOD



DR SB Pawar

DR S B PAWAR
Coordinator

CERTIFICATE OF COMPLETION

This is presented to :

Sucherita Sidrale

completed a three-month Add-On course on
“Entrepreneurship and Project Report Writing” at
PVPIT Sangli

SLS

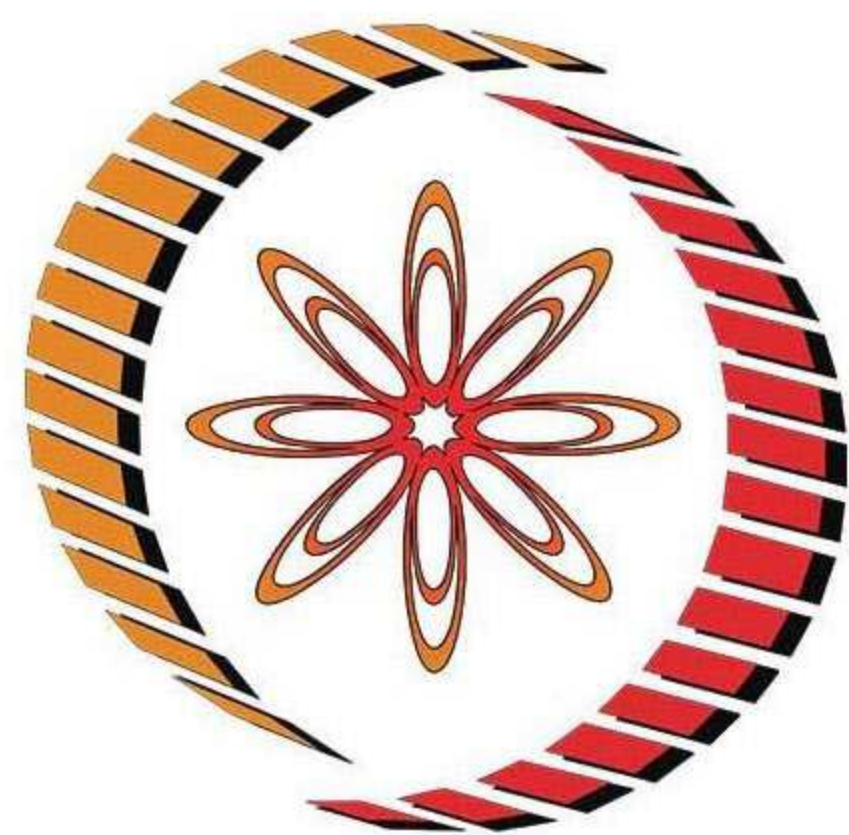
DR S L BHAGAT
HOD



DR SB

DR S B PAWAR
Coordinator





NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

AJINKYA BHIVA SHENDAGE

for successfully completing the course

Aspen Plus® Simulation Software - A Basic

Course for Beginners

with a consolidated score of **49** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 13.13/25 | Proctored Exam | 36/75 |
|--------------------|----------|----------------|-------|

Total number of candidates certified in this course: **429**

Jan-Apr 2024

(12 week course)

Prof. T. V. Bharat

Head, Centre for Educational Technology
NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati

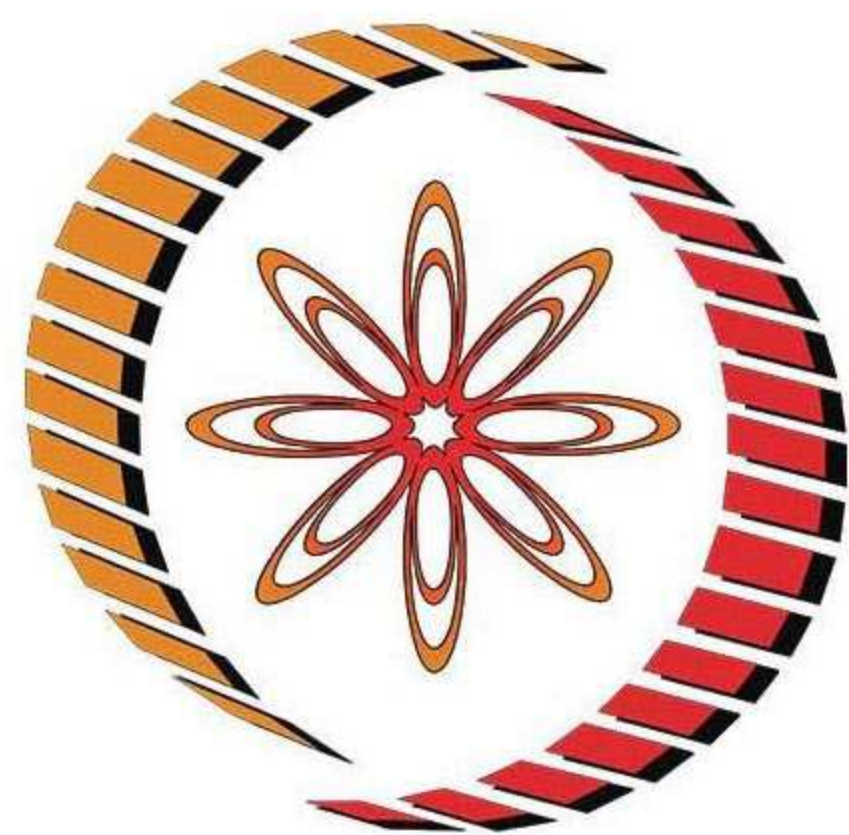


Roll No: NPTEL24CH04S966300571

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

ATUL ARJUN THORAT

for successfully completing the course

Aspen Plus® Simulation Software - A Basic

Course for Beginners

with a consolidated score of **53** %

| | | | |
|--------------------|----------|----------------|----------|
| Online Assignments | 12.25/25 | Proctored Exam | 41.15/75 |
|--------------------|----------|----------------|----------|

Total number of candidates certified in this course: **429**

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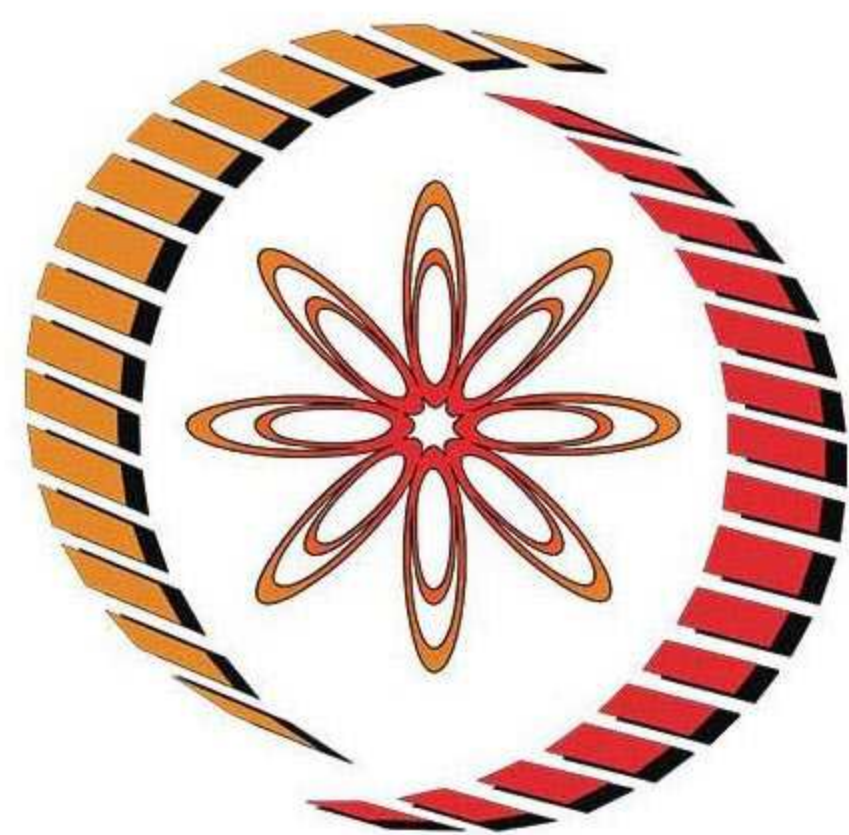


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|--------------------|----------|----------------|-------|
| Online Assignments | 14.69/25 | Proctored Exam | 30/75 |
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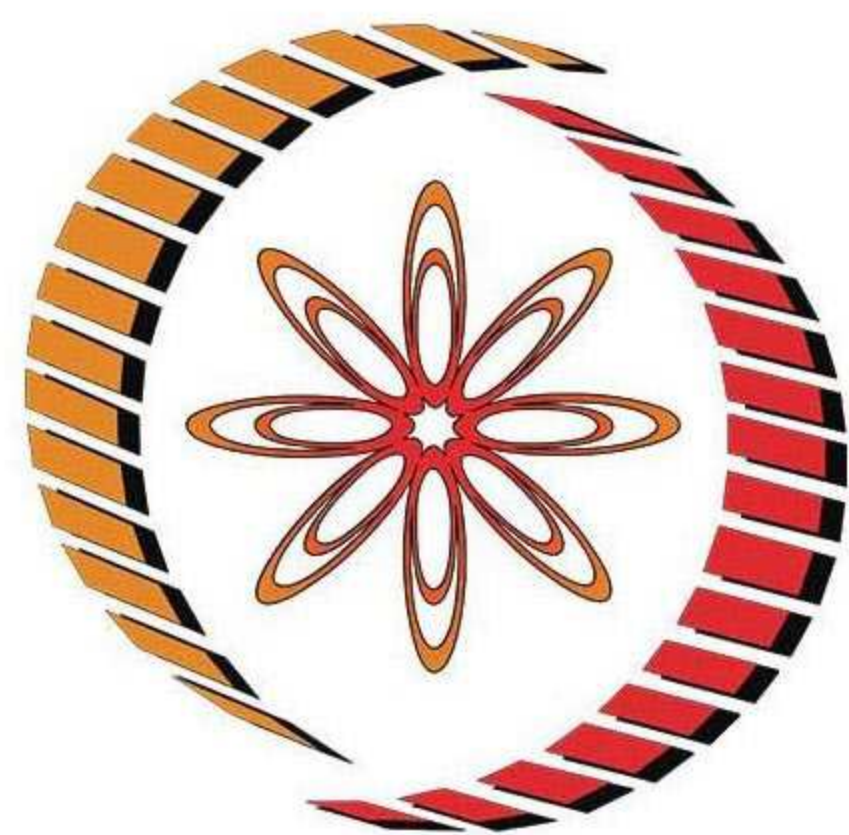


Roll No: NPTEL24CH04S966300233

To verify the certificate



No. of credits recommended: 3 or 4



NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

AJINKYA BHIVA SHENDAGE

for successfully completing the course

Aspen Plus® Simulation Software - A Basic

Course for Beginners

with a consolidated score of **49** %

| | | | |
|--------------------|----------|----------------|-------|
| Online Assignments | 13.13/25 | Proctored Exam | 36/75 |
|--------------------|----------|----------------|-------|

Total number of candidates certified in this course: **429**

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NPTEL Coordinator, IIT Guwahati



Indian Institute of Technology Guwahati

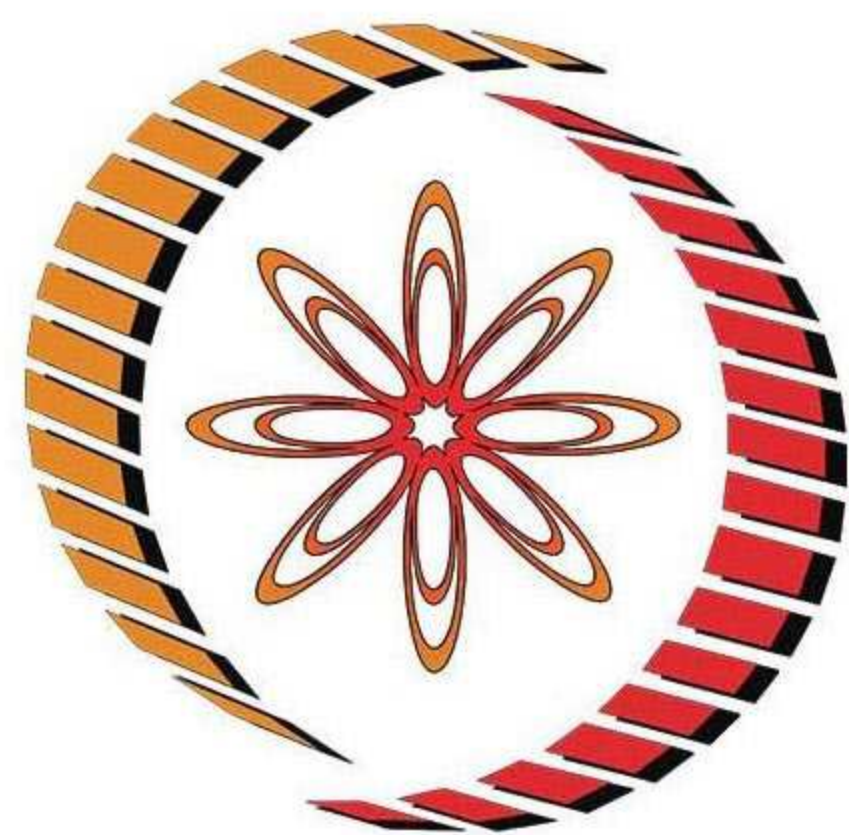


Roll No: NPTEL24CH04S966300571

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Indian Institute of Technology Guwahati



Dr. Vasantdada Patil Shetkari Shikshan Mandal's

**Padmabhooshan Vasantraodada Patil
Institute of Technology, Budhgaon-416 304.**



Department of Electronics & Telecommunication Engineering

Laboratory Manual

ANALOG COMMUNICATION ENGINEERING



INDEX

| Sr. No. | Name of Experiments | Page No. |
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| ✓2 | Study of frequency modulation ✓ | 7 |
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| 8 | Study of DSB modulator & demodulator | 33 |
| 9 | Study of Amplitude modulation using MATLAB simulink tool | 38 |
| 10 | Study of Frequency modulation using MATLAB simulink tool | 40 |

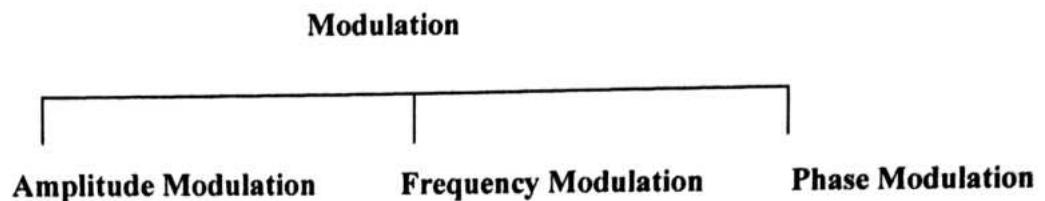
Title : Study of Amplitude Modulation and demodulation.

Objective : To perform the experiment on amplitude modulation and demodulation techniques, take appropriate readings and observe input and output waveforms on CRO

Apparatus : Experimental Kit, connecting cords, CRO

Theory : Modulation is the process of converting low frequency signal to high frequency so that it can be transmitted over a long distance.

We have three basic types of modulations



Modulation is defined as the process by which some characteristics of a carrier signal is varied in accordance with a modulating signal. The base band signal is referred to as the modulating signal and the output of the modulation process is called as the modulation signal.

Amplitude modulation is defined as the process in which is the amplitude of the carrier wave is varied about a means values linearly with the base band signal. The envelope of the modulating wave has the same shape as the base band signal provided the following two requirements are satisfied

(1) The carrier frequency f_c must be much greater than the highest frequency components f_m of the message signal $m(t)$

i.e. $f_c \gg f_m$

(2) The modulation index must be less than unity. If the modulation index is greater than unity, the carrier wave becomes over modulated.

The value of Modulation index is approx. calculated as E_m / E_c where carrier amplitude is always greater than original amplitude. Hence M_a is < 1 .

Padmabhooshan Vasantodada Patil Institute of Technology, Budhgaon (Sangli)



CERTIFICATE

Certified that this Report is submitted by

Shri Anuja Suryakant Shinde Roll No. 09

a student of _____ during the academic year

2023 -2024 as a part of syllabus prescribed by the M.S. Board of Technical

Education, Mumbai for the subject :

sensor and Transducer

And that I have instructed and guided him for the said work from time to time and found him to be satisfactory and progressive.

And that the said work has been assessed by me and I am satisfied that the same is up to that standard envisaged for the level of the course.

And that, the said work may be presented to the External Examiner.


INCHARGE


HEAD OF THE DEPT.

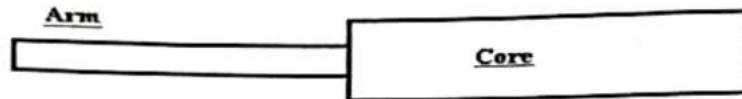
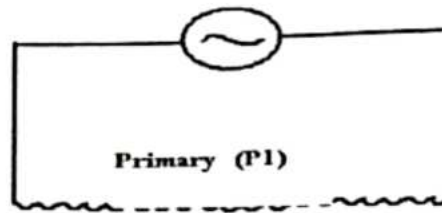

PRINCIPAL

Date : _____

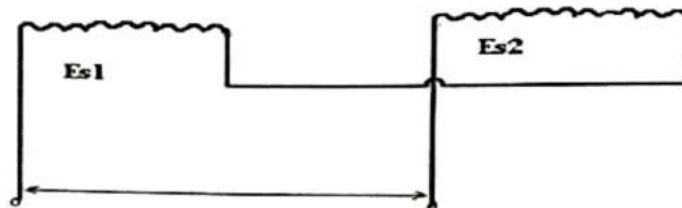
Study of Linear Variable Differential Transformer.

Construction of linear Variable Differential Transformer

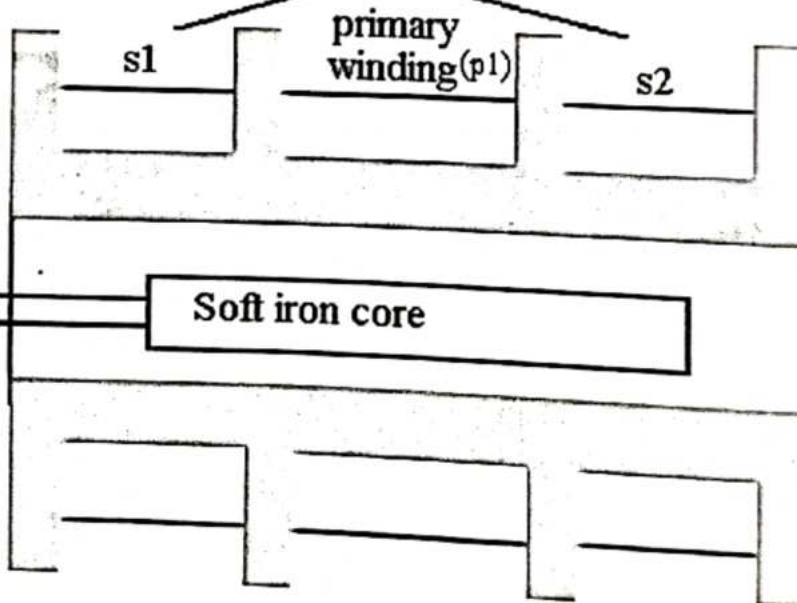
AC Input



Displacement



secondary winding



TITLE:-

Linear Variable Differential Transformer.

AIM:-

To study linear displacement using L.V.D.T.

APPARATUS:-

Digital tutor, L.V.D.T etc.

THEORY:-

One of the most useful variable inductance transducer is the differential transformer, which provides an a.c. voltage output proportional to the displacement of the core passing through the winding. L.V.D.T is very widely used transducer for conversion of mechanical displacement into proportional electrical voltage. The displacement into proportional electrical voltage range extends for few microns to few tens of inches.

CONSTRUCTION:-

The transformer consist of a single primary winding P1 and two secondary windings S1 and S2 wound on a hollow cylindrical former. The secondary windings have equal number of turns and are identically placed on either side of the primary windings. The primary windings is connected to an ac source.

An moveable soft iron core slides within the hollow former and therefore affects the magnetic coupling between the primary and the two secondary. The displacement to be measured is applied to an arm attached to the soft iron core.

WORKING:-

The output voltage of the secondary winding S1 is E_{s1} and that of S2 is E_{s2} . In order to convert the output from S1 to S2 into a single voltage signal, the secondaries S1 and S2 are connected in series opposition. Hence the output voltage of the transducer is the difference of the two voltages. Therefore the differential output voltage is given by,

$$E_o = E_{s1} - E_{s2}$$

When the core is at its normal position, the flux linking with both secondary windings is equal, and hence equal emfs are induced in them. Hence at null position $E_{s1} = E_{s2}$. Since the output voltage of the transducer is the difference of the two voltages, the output voltage E_o is at null position.

Now, if the core is moved to the left of the Null position, more flux links with winding s1 and less with winding s2. Hence, output voltage of the secondary winding s1 is greater than E_{s2} . The magnitude of the output voltage of the secondary is then $E_{s1} - E_{s2}$, in phase with E_{s1} .

Similarly, if the core is moved to the right of the null position, the flux linking with winding s_2 becomes greater than that linked with winding s_1 . This results in E_{s2} becoming larger than E_{s1} . The output voltage in this case is $E_o = E_{s2} - E_{s1}$ and is in phase with E_{s2} .

The amount of voltage change in either secondary winding is proportional to the amount of movement of the core. Hence we have an indication of the amount of the linear motion. The output ac voltage inverts as the core passes the centre position. The farther the core moves from the centre, the greater the difference in the value between E_{s1} and E_{s2} and consequently the greater the value of E_o . Hence, the amplitude is the function of the distance the core has moved, and the polarity or phase indicates the direction of the motion.

ADVANTAGES:-

- ⇒ The output voltage is practically linear for displacement upto 5mm.
- ⇒ The effective resolution depends more on the test equipment than on the transducer.
- ⇒ It gives high output.
- ⇒ The transducer possesses a sensitivity as high as 40 V/mm.
- ⇒ These transducer can usually tolerate a high degree of vibration and shocks.
- ⇒ It has low hysteresis, hence repeatability is excellent under all condition.
- ⇒ It consumes less than 1W of power.

DISADVANTAGES:-

- ⇒ Large displacement are required for appreciable differential output.
- ⇒ They are sensitive to stray magnetic fields.
- ⇒ Temperature also affect the transducer.

PROCEDURE:-

- 1] Connect the terminals marked "Primary" on the front panel of the instrument to the terminals marked "Primary" on the transducer itself, with the help of the flexible wires provided alongwith
- 2] Identically establish connection from terminals marked "Secondary".
- 3] Keep pot marked "Max" in most anticlockwise position.
- 4] The magnetic core may be displaced and the pointer may be brought to zero position. If the DPM is not indicating zero use pot marked "Min" to get a zero on the DPM at zero mechanical position. If the core displaced in both the directions, the meter must show indications with appropriate polarity. Now displace the core to 19 mm position in one of the directions. Adjust the "Max" pot to get an indication of 19.00 on the DPM under these conditions. Now the set up is ready for experimentation. You may again check for zero position also.
- 5] Now the core can be displaced by a known amount in the range +19 and -19 mm and the meter readings can be entered in the table given below. It may be noted that by interchanging the secondary terminals the polarity of the meter indication can be reversed for a given direction of input displacement.
- 6] Plot the graph of the input displacement and the output indications on the X and Y axis resp.

CONCLUSION:-

It is concluded that ,the output voltage of the LVDT is a linear function of the core displacement

end

Observation table

| SR.NO | INPUT DISPLACEMENT | OUT DISPLACEMENT |
|-------|--------------------|------------------|
| 1. | 0.0 CM | |
| 2. | 0.5 CM | |
| 3. | 1.0 CM | |
| 4. | 1.5 CM | |
| 5. | 2.0 CM | |

To study Displacement using LVDT

