

**EDUCATIONS**

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
B.Tech. Mechanical	IIT Indore	6.59	2021
Senior Secondary	CBSE Board	84.6%	2016
Secondary	CBSE Board	9.4	2014

**PROJECTS**

- Development of heat and mass transfer correlation for falling films towers.** *May. 2020 – May.2021*  
*Dr. Ritunesh Kumar /B. Tech Project*
  - Studied the literature on Heat and mass transfer, Liquid desiccant.
  - Study the correlation for heat and mass transfer for packed or metallic surfaces used in falling film towers.
  - Developed a new correlation for heat and mass transfer for the plastic plate as contacting surface in falling film tower using MATLAB by Numerical method approach.
- Human Vitals Monitoring System** *Apr.2020 - May.2020Dr. I.A.*  
*Palani/Course Project/Instrumentation and Control Systems*
  - Proposed Design addressing the COVID-19 pandemic and its immediate impacts.
  - Designed a Low-Cost Device, for real-time monitoring of the health of patients and Quarantined people and sent the report to the concerned authority.
  - The solution incorporated concepts of Mechatronic systems and Wi-Fi & based Wireless technologies.
- Geotechnical Design of Heat Exchanger Pile** *Jan. 2020 - Apr. 2020Dr.*  
*Devendra Deshmukh/Course Project/Applied Thermodynamics*
  - Studied the different representative cases of piles.
  - Studied the different types of heat exchanger piles and their advantages.
- Automated Cleaning solutions** *Mar. 2020 - May. 2020Dr.*  
*Indrasen Singh/Course Project/Machine Design*
  - Designed a modular attachment for the caddies to clean the roads and collect dust from the road on SOLIDWORKS.
  - Designed a drain sewage cleaner on SOLIDWORKS.
  - To reduce time and minimize human intervention on drain cleaning.
- Design and Machine Drawings of Piston for Hero super Splendor Pro Bike** *Sep. 2020 - Nov. 2020Dr. Ankur*  
*Miglani /Course Project/ IC Engine*
  - Collect dimensions of various parts of the piston.
  - Designed and draw Piston of hero super splendor on CATIA.
- Design of an Epicyclic Gearbox of an Electric Drivetrain** *Sep. 2020 - Nov. 2020Dr. Shailesh*  
*Kundalwal/Course Project/Kinematics and Dynamics of Machines*
  - Modeled the Epicyclic Gearbox and analyzed the motion on SOLIDWORKS.
  - Studied the Kinematics and Dynamics of Epicyclic Gearbox on MATLAB.

**TECHNICAL SKILLS**

- Programming:** MATLAB, Python.
- CAE Tools:** Autodesk Fusion 360, CATIA, SOLIDWORKS, AutoCAD, Ansys(fluent), FluidSIM
- Other Tools:** MS Office..
- Language Known:** English, Hindi, Assamese, Bengali.

## KEY COURSES TAKEN

---

- **Mathematics:** Linear Algebra and ODE-I, Basic Calculus, Numerical Methods.
- **Mechanical:** Fluid Mechanics & Machinery, Thermodynamics, Heat Transfer, Applied Thermodynamics, Introduction to Electrical and Electronic Circuit, Instrumentation and Control Systems, Machine drawing, Solid Mechanics, Strength of Materials, Materials Science, Kinematics and Dynamics of Machines, Machine Design I & II, Industrial Engineering, Principle of Industrial Engineering, Quality Management, Machining Science and Metrology, Manufacturing Techniques, IC Engine, Hybrid Electrical Vehicle, Bio-Science, Biofluid Mechanics, Computation Fluid Dynamics (CFD).
- **Environment:** Environmental Studies: Social, Scientific, and Engineering Aspects.
- **Humanities and Social Science:** Fundamental of Economics, Contemporary Indian Thought.
- **Other:** Computer Programming, Chemistry, Physics I & II, Basic Electrical and Electronics Engineering, Bio-science.

## CERTIFICATION

---

- Introduction to Mechanical Engineering Design and Manufacturing with Fusion 360 by Autodesk.
- Machine Learning by Stanford Online
- Introduction to Data Analysis Using Excel by Rice University.
- Introduction to Programming with MATLAB by Vanderbilt University and offered through Coursera.

## POSITIONS OF RESPONSIBILITY

---

- |   |             |
|---|-------------|
| • <b>Vice-Captain:</b> Udaygiri Sr House, Jnv Barpeta | 2015 - 2016 |
| • <b>Member:</b> AVAANA, IIT Indore                   | 2017 - 2019 |

## ACHIEVEMENTS

---

- |  |      |
|--|------|
| • <b>Rank 750</b> , Assam state NEET UG. | 2017 |
|--|------|
-