

INFORMATION BROCHURE  
FOR  
POSTGRADUATE PROGRAMME  
IN  
MECHANICAL ENGINEERING



**NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA**

**Academic Year: 2022-2023**

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## **MESSAGE FROM THE HOD**

**Department of Mechanical Engineering  
National Institute of Technology Agartala**

**Dr. Pritam Das**

It is a great pleasure to be a part of the Department of Mechanical Engineering of the National Institute of Technology, Agartala. Mechanical Engineering programme at NIT Agartala commenced from the date of its inception formerly in Tripura Engineering College. We have five postgraduate specialization with specific objective to cater the needs of society. We have faculty rich with research expertise and state of art lab infrastructures to cater the needs of budding researchers. The M.Tech scholars during their course of study will have comfortable stay and rich academic, research and industrial exposure.



## **MESSAGE FROM PG COORDINATOR**

**Department of Mechanical Engineering  
National Institute of Technology Agartala**

**Dr. Jawahar Paulraj**

We welcome the budding researchers to the Department of Mechanical Engineering. We not only monitor their academic and research performance, but also focus on providing industrial internship linked with their placement during their second year course of time in reputed industries. I wish the budding researcher a comfortable stay at NIT Agartala.

## **INTRODUCTION:**

### **About NIT Agartala**

National Institute of Technology is a Centrally Funded Institute having recognition of Institute of National Importance being set up in April,2006 by Government of India by virtue of conversion of Tripura Engineering College- a state run Engineering College set up in 1965 with Civil, Mechanical and Electrical Engineering having intake capacity of 20 in each branch. By the span of development, this institute offers B.Tech/BS-MS/BT-MT in 12 branches, M.Tech/MSc in 24 specialization, Ph.D in all branches of Engineering, Science, Humanities and Management, MBA, MCA. This institute produced 9350 Undergraduates, 2420 Post-graduates and 207 Ph.Ds. Presently, 3409 undergraduate students, 838 Post graduate students and 275 Ph.D scholars are pursuing their studies in this institute.

This institute is having 92<sup>nd</sup> position in NIRF (National Institutional Ranking Framework) ranking with very good placement records. It is situated 25km away from Agartala City- State capital of Tripura and 5 km away from National Highway. Agartala is connected by Air, Rail and Bus very effectively.

### **About Department of Mechanical Engineering**

Mechanical Engineering Department, a charter department of this institute offers B.Tech., M.Tech. in 5(five) specialization and Ph.D in all fields of research. This department has produced more than thousand undergraduates, 302 Post graduates and 37 Ph.D Scholars. All are very successful in their career. The Department is focused on outcome based education and its B.Tech Programme is accredited by National Board of Accreditation (NBA) for **six years**. The Department is continuously striving to achieve excellence in education, academic, and industry-oriented research as well as consultancy work with service to the society in particular and the nation to a greater extent.

The Department has highly qualified and well-experienced faculty members with a blend of academic and R&D exposure. Academic course work and projects are designed to provide students with the ability to apply science, mathematics, and engineering, blended with ethics along with the capability to work effectively in multidisciplinary teams, providing leadership and technical expertise. In recent years many of our graduates and undergraduates have further upgraded their careers (apart from satisfactory placements in renowned companies) in top IITs. This certainly proves the versatility of our postgraduate, which we achieved through our constant efforts to enrich the standard of technical education. Over the years, the Department has acquired massive infrastructure in all laboratories and workshops. The Department also encourages active research activity for carrying out collaborative and inter-disciplinary research. The Department has a distinguished record in both teaching and research. The Mechanical Engineering Department has a strong commitment to the Overall Development of the students and the continuous progress of the Nation.

## **M-Tech Programs Offered**

Post graduate Programs are aimed at providing in-depth understanding and knowledge to the students in technical, human and conceptual skills necessary for the industries with specialization in different functional areas like Manufacturing Technology, Thermal Science, Machine Design, Automotive and Material Science. The teaching strategy for this program is oriented toward the application of knowledge with live case studies, research and teaching aids.

The two-year program leading to the Masters in Technology comprises the following core areas:

- A. Thermal Science and Engineering
- B. Manufacturing Technology
- C. Machine Design
- D. Automotive Engineering
- E. Material Science and Engineering (Twinning Program with VNIT Nagpur)

The details of the specialization of M.Tech Programs of Mechanical Engineering department are detailed below along with administration.

### **Head of the Department:**

Dr. Pritam Das, B.E (TU), M.M.E (JU), Ph.D (JU).  
Associate Professor,  
E-mail: bhargav\_2006@yahoo.co.in, M- +91 6033197412(M)

### **Postgraduate Programme Coordinator:**

Dr. P. Jawahar, M.E. (Annamalai University), Ph.D. (IIT Madras),  
Assistant Professor  
Email : dr.p.jawahar@gmail.com, M- +91 8754849740

**A. Specialization : Thermal Science and Engineering**

**Intake Capacity : 15**

**Objective of the Program**

Thermal Science and Engineering Program was introduced as the specialization under Mechanical Engineering in the year 2008 with an preliminary objective to create and train Thermal Engineers with an ability to identify, formulate and solve thermal science and engineering problems through analytical, numerical and experimental techniques by understanding and analyzing the impact of a thermal related problems and solutions in the context of scientific, social, environmental and economic progress in order to demonstrate and practice sustainability, ethics and management principle in the thermal engineering field

**Program Coordinator:**

**Dr. Swapan Bhaumik**, B.E (Cal. Univ.), M.M.E (JU), PhD (IIT Roorkee)

Professor

**Specialization:** Heat Transfer, Fluid Mechanics, Thermal Power, Refrigeration and Air Conditioning

**Program Co-Coordinator:**

**Dr. Abhik Majumder**, B. Tech (NERIST); M. Tech (IIT Kanpur), Ph.D (IIT Kharagpur)

Assistant Professor

**Specialization:** Numerical Fluid flow and heat transfer, multi-phase transport of species, Interface Dynamics, Passive cooling

**Core Faculty Members of the Program:**

Sl.No.	Name of the Faculty Member	Designation	Research/Subjects taught
1	<b>Dr. Swapan Bhaumik</b> , B.E (Cal. Univ.), M.M.E (JU), PhD (IIT Roorkee)	Professor	Heat Transfer, Fluid Mechanics, Thermal Power, Refrigeration and Air Conditioning
2	<b>Dr. Ajoy Kumar Das</b> B.E (NIT, Surathkal), M tech (IIT Madras), Ph.D (IIT Kharagpur)	Professor	Computational Fluid Dynamics (CFD), Heat Transfer, Thermal Power
3	<b>Dr. Rajsekhar Panua</b> Ph.D.(JU)	Associate Professor	I.C. Engine, Thermal Power Engineering, Heat Transfer Thermodynamics
4	<b>Dr. Pritam Das</b> B.E (TU), M.M.E (JU), Ph.D	Associate Professor	Fluid Mechanics, Refrigeration and air conditioning
5	<b>Dr. Madhujit Deb</b> B. Tech (NERIST), M.Tech (NIT Agartala), Ph.D (NITA)	Assistant Professor	I.C. Engine, Alternative Fuels
6	<b>Dr. Abhik Majumder</b> B. Tech (NERIST); M. Tech (IIT Kanpur), Ph.D (IIT Kharagpur)	Assistant Professor	Numerical Fluid flow and heat transfer, multi-phase transport of species, Interface Dynamics, Passive cooling

7	<b>Dr. Dipak Chandra Das</b> B.E. ( NIT Agartala ) MME (Jadavpur University) Ph.D. (Jadavpur University)	Assistant Professor	Heat & Mass Transfer
8	<b>Dr. Durbadal Debroy</b> M.Tech (NIT, Agartala) Ph.D (Pursuing)	Assistant Professor	Thermal Engineering, IC Engine & Alternative Fuels, Biofuels & Renewable Energy, Pollution Control in IC Engine, Automotive Engineering
9	<b>Dr. Sagnik Pal</b> B.Tech, (SRM University), M.Tech, (NIT Agartala), Ph.D (IEST Shibपुरi)	Assistant Professor	Heat Transfer
10	<b>Dr. Pinku Debnath</b> B.Tech (NIT Agartala), M.Tech (NIT Silchar), Ph.D. (NIT Silchar)	Assistant Professor	CFD, Thermal Engineering, Computational Combustion, Wind Turbines
11	<b>Dr. Ashis Acharjee</b> B.Tech (NERIST), M.Tech (NIT Agartala), PhD (NIT Agartala)	Assistant Professor	Computational Fluid dynamics and Heat Transfer, Finite Element Analysis, Thermodynamics, Energy studies, analysis and management in thermal power plant, Modeling/Design/Simulation of Energy System and their various impact assessments, Thermal and renewable energy resources and their analysis

**Eligibility Criteria for Admission:** Admission is carried out through the central counseling like CCMT/CCMN being organized by NIT Jaipur. If seats are lying vacant, then institute admits the student through publication /advertisement by NIT Agartala

**Scholarship:** Students admitted through CCMT/CCMN are eligible to get the monthly scholarship of Rs.12400/-- subject to fulfillment of other criteria and financial availability from Ministry of Education, Government of India.

**Program duration :** Two years (Four Semester)

**Program Structure:** This program is having 80 credits where as 25 credits on 1st semester and 25 credits in 2nd semester, 10 credits in 3<sup>rd</sup> semester, 20 credits in 4<sup>th</sup> semester. In First year i.e. First and 2<sup>nd</sup> semester, only theory and sessional classes are taking and in 2<sup>nd</sup> year (3<sup>rd</sup> and 4<sup>th</sup> semester), Project and thesis is being carried out in the Industrial organization or in the institute on the proposed Research Topic so that at least one Resource paper may be able to publish.

The detailed credit, subject and syllabus of the program are available in the department website.

**Evaluation System:** Continuous Evaluation system is followed. Credit based Cumulative Grade Point Average (CGPA) System along with SGPA (Semester Grade Point Average) system is adopted. Theory subjects are evaluated based on Internal Assessment (30 marks ), Mid Term Examination

(20 marks ), and End Term Examination (50 marks ). Questions are prepared following the Blooms Taxonomy satisfying the NBA pattern. Project and Thesis are being evaluated by an Evaluation Committee where External Expert from renowned institutions/organizations like IITs, NITs, ONGCs are present to evaluate the works being carried out by the scholar under the supervision of a faculty member.

The detailed evaluation system is available in M.Tech Rules and Regulation, 2017, which are found in our website of NIT Agartala ([www.nita.ac.in](http://www.nita.ac.in)).

**Library :** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.D programs.

### **Laboratory and Research Facilities and Collaboration:**

#### **Lab Facilities**

1. Phase Change and Heat Transfer Lab (DST – FIST Funded Lab)
2. Experimental Methods in Thermal Engineering Laboratory
3. Computational Fluid Dynamics Laboratory
4. Convective Heat and Mass Transfer Laboratory
5. FEM Modeling and Analysis Laboratory
6. Micro-fluidics laboratory
7. Flow boiling laboratory
8. Two Phase Flow and Heat Transfer Laboratory
9. Computation Methods in Fluid Flow and heat Transfer Lab

**Publications:** Department has published hundreds of research papers out of which significant contributions were there as the outcome of research of post graduate students.

A few notable publications are given below:

1. Chirojyoti Chakma, Amit Kumar, Dipak Chandra Das, Pritam Das, 2022, "Simulation of temperature management inside rubber smokehouses of perspex, steel, and ash-brick materials", Materials Today: Proceedings,.
2. Dipak Chandra Das, Kumar Gourav, Pritam Das, 2022, "Thermal Management of a Cubical Building using Hydrated Salt 24", Advances in Mechanical Engineering, Select Proceedings of ICTEMA2022, NOLEGEIN, an imprint of Consortium E-Learning Network Pvt. Ltd., ISBN: 978-81-952903-6-9.
3. K. Mohana Rao, Amit Kumar, Dipak Chandra Das, Pritam Das, 2022, "Simulation of microchannel heat exchangers with triangular and circular cavities", Advances in Mechanical Engineering, Select Proceedings of ICTEMA2022, NOLEGEIN, an imprint of Consortium E-Learning Network Pvt. Ltd., ISBN: 978-81-952903-6-9.
4. Dipak Chandra Das, Tabrez Alam, Amit Kumar, Pritam Das, 2022, "Numerical Investigation of Heat Transfer of a Thermosyphon varying the Filling Ratios, Advances in Mechanical Engineering", Select Proceedings of ICTEMA2022, NOLEGEIN, an imprint of Consortium E-Learning Network Pvt. Ltd., ISBN: 978-81-952903-6-9.
5. Pinku Debnath, V. Gandhirajan, 2022, "Numerical investigation on performance and wind flow simulation around the helical savonius wind turbine", International Conference on Thermo Fluids and System Design (ICTFSD 2022), pp. 1-14.








6. Pinku Debnath, V. Gandhirajan, 2020, "A review study on Savonius Wind rotor", International Conference on Recent Advancements in Mechanical Engineering (ICRAME 2020), pp.1-6.
7. Niloy Laskar, Anil S. Katarkar, Majumder, Biswajit, Abhik Majumder, and Swapan Bhaumik, 2022, "Pool Boiling of R-134a on ZnO Nanostructured Surfaces: Experiments and Heat Transfer Analysis". (Book Chapter, *Traylor and Francis, Accept* )
8. Niloy Laskar, Anil S. Katarkar, Majumder, Biswajit, Abhik Majumder, and Swapan Bhaumik, 2022. Fabrication of nano-copper surfaces by thermal evaporation technique to investigate nucleate pool boiling heat transfer performance of R-141b. *Materials Today: Proceedings*.(SCOPUS, Elsevier)
9. Sai K. Pinni, Anil S, Katarkar, and Swapan Bhaumik, 2022, "Pool boiling of R-134a refrigerant over a thin film aluminum nanostructured coated surface". *Materials Today: Proceedings*.(SCOPUS, Elsevier)
10. Sai K. Pinni, Anil S, Katarkar, and Swapan Bhaumik, 2021. A review on the heat transfer characteristics of nanomaterials suspended with refrigerants in refrigeration systems. *Materials Today: Proceedings, 44*, pp.1331-1335.(SCOPUS, Elsevier)
11. Alexander, K., Gajghate, S.S., Katarkar, A.S., Majumder, A. and Bhaumik, S., 2021. Role of nanomaterials and surfactants for the preparation of graphene nanofluid: a review. *Materials Today: Proceedings, 44*, pp.1136-1143.(SCOPUS, Elsevier)
12. Arindam Majumder, Rajib Ghosh, 2020, "Task Allocation and Path Planning of a Multi-Robot System Using Heuristic Coupled Particle Swarm Optimization Algorithm", Handbook of Research on Developments and Trends in Industrial and Materials Engineering, pp. 194-209
13. Ajay Biswas, **Abhijit Bhowmik**, Saurav Datta, Swapan Bhaumik, "Feasibility Study of Submerged Arc Welding (SAW) on mild steel plate IS 2062 grade B at zero degree Celsius" The XIII International Conference on Materials, Mechanical and Industrial Engineering (ICMMIE 2015) March 29-30, 2015, Singapore, [Published in International Science Index of World Academy of Science, Engineering and Technology (WASET), eISSN: 1307-6892, Volume: Singapore SG Mar 29-30, 2015, 13(3) Part XVI, pp. 1694-1697]
14. Ajay Biswas, S. Bhaumik, **Abhijit Bhowmik**, "Study of microstructure of weldment obtained by Submerged Arc Welding(SAW) on IS 2062 grade B mild steel plate at zero degree Celsius". The XIII International Conference on Mechanical Engineering Design and Analysis (ICMEDA 2015), January, 23-24, 2015, Paris, France. [Published in International Science Index of World Academy of Science, Engineering and Technology (WASET), eISSN: 1307-6892, Volume: Paris France jan 23-24, 2015, 13(01) Part IX, pp. 1347-1350]

### **Placement and Higher Studies Avenues:**

The institute is having dedicated training and placement department named Career Counseling Department( CCD) through which students are being provided training and placements.

**Alumni:** The department produced 120 nos.of Alumni those who passed from this department with this specialization since 2013 Out of that nearly 75% has chosen their career in industrial organization and academia and 25% have joined in Ph.D programme in different prestigious institution including NIT Agartala.

The names of few notable alumni joined in industrial Organization are also given below:

1	2017		<p><b>Pankaj Barman</b>  Mechanical Engineering  Thermal Engineering</p>	Infosys
2	2019		<p><b>Dinesh Dashbabu</b>  Mechanical Engineering  Thermal Engineering</p>	Research.in
3	2019		<p><b>Raghunandan Padhi</b>  Mechanical Engineering  Thermal Engineering</p>	Research.in
4	2019		<p><b>Rohit Kumar</b>  Mechanical Engineering  Thermal Engineering</p>	Infosys
5	2021		<p><b>KEVIN ALEXANDER</b>  Mechanical Engineering  TSE</p>	Nippon Steel

**Contact :**

**Dr. Pritam Das, Associate Professor, B.E (TU), M.M.E (JU), Ph.D**

Head, Mechanical Engineering Department,

NIT Agartala, Agartala – 799046, Tripura, (INDIA)

Email : bhargav\_2006@yahoo.co.in, M- +91 6033197412(M)

**Program Coordinator:**

**Dr. Swapan Bhaumik, B.E (Cal. Univ.), M.M.E (JU), PhD (IIT Roorkee)**

Email: drsbhaumik@gmail.com, drsbhaumik@nita.ac.in

*Program Coordinator along with all Core Faculty Members of this program would like to welcome the students to join in this Post Graduate Programme to excel his/her career in this prestigious institution -- **National Institute of Technology Agartala***

## B. Specialization : Manufacturing Technology

Intake Capacity : 15

### Objective of the program:

Manufacturing Technology as ME specialization was introduced in the year 2010 to train students with in-depth and advanced knowledge to become highly skilled professionals in the areas of manufacturing science and engineering and allied fields and to make them capable of analyzing and solving complex manufacturing problems such as casting, forming, welding, additive manufacturing and machining related problems and also with the objective of inculcating the ability to design / develop mechanical equipment and systems considering environmental, socio-economic and ethical issues.

### Program Coordinator

**Dr. Manish Bhargava**, B.E., M.Tech.(Honors), Ph.D

Associate Professor

**Specialization:** Manufacturing Science, Laser Material Processing, Production Technology

### Program Co-Coordinator

**Dr. Barnik Saha Roy**, B.E (TU), M.Tech, Ph.D

Assistant Professor

**Specialization:** Thermo Mechanical analysis of Welding Processes, Heat Transfer modelling, Characterization Study

### Core Faculty Members of the Program :

Sl.No.	Name of the Faculty Member	Designation	Research Interest
1	<b>Dr. Manish Bhargava</b> B.E., M.Tech.(Honors), Ph.D.	Associate Professor	Manufacturing and Quality System, Lean Six Sigma and Additive Manufacturing, CAD/CAM
2	<b>Dr. John Deb Barma</b> , B.TECH (NERIST), MME (JU), Ph.D (JU)	Associate Professor	Manufacturing Science, Laser Material Processing, Production Technology
3	<b>Dr. Ajay Biswas</b> B.E.(Calcutta University), M.M.E. (Jadavpur University), Ph.D. (Jadavpur University)	Assistant Professor	Fusion welding, Fusion welding at low temperature Development, Characterization and tribological analysis of Metal Matrix Composites, Hybrid composites, Polymer Composite. Additive manufacturing and property analysis Surface modifications and coatings of materials and property analysis

4	<b>Dr. Barnik Saha Roy</b> , B.E (TU), M.Tech, Ph.D	Assistant Professor	Thermo Mechanical analysis of Welding Processes, Heat Transfer modelling, Characterization Study
5	<b>Dr. Subrata Kumar Ghosh</b> B.Tech, M.Tech, Ph.D (IIT Kharagpur)	Assistant Professor	Non-Traditional Manufacturing Process, Conventional Manufacturing Process
6	<b>Mr. R. K. Bhogendro Meitei</b> BSc. Engineering (DEI, Agra), MTech NITTTTR, Kolkata, (WBUT)	Assistant Professor	Manufacturing Technology, Drawing, AutoCad , Welding Technology
7	<b>Dr. Jawahar Paulraj</b> B.E., M.E. (Annamalai University),Ph.D. (IIT Madras)	Assistant Professor	Polymer Nanocomposites, Rubber Technology, Metal Matrix Composites, Tribology
8	<b>Mr. Arindam Sinha</b> M.Tech( Manufacturing Technology) NIT Agartala	Assistant Professor	Manufacturing Science, Non-Traditional Manufacturing Process
9	<b>Dr. Joydeep Roy</b> B-Tech (NIT Agartala), M-Tech (NIT Agartala), PhD (NIT Agartala)	Assistant Professor	Welding, Materials science, Optimization

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**Scholarship:** Students admitted through CCMT/CCMN are eligible to get the monthly scholarship of Rs.12400/-- subject to fulfillment of other criteria and financial availability from Ministry of Education, Government of India.

**Program duration :** Two years (Four Semester)

**Program Structure:** This program is having 80 credits where as 25 credits on 1st semester and 25 credits in 2nd semester, 10 credits in 3<sup>rd</sup> semester, 20 credits in 4<sup>th</sup> semester. In First year i.e. First and 2<sup>nd</sup> semester, only theory and sessional classes are taking and in 2<sup>nd</sup> year (3<sup>rd</sup> and 4<sup>th</sup> semester), Project and thesis is being carried out in the Industrial organization or in the institute on the proposed Research Topic so that at least one Resource paper may be able to publish.

The detailed credit, subject and syllabus of the program are available in the department website.

**Evaluation System:** Continuous Evaluation system is followed. Credit based Cumulative GradePoint Average (CGPA) System alongwith SGPA (Semester Grade Point Average) system is adopted. Theory subjects are evaluated based on Internal Assessment (30 marks ), Mid Term Examination (20 marks ), and End Term Examination (50 marks ). Questions are prepared following the Blooms Taxonomy satisfying the NBA pattern. Project and Thesis are being evaluated by an Evaluation Committee where External Expert from renowned institutions/organizations like IITs,NITs,ONGCs are present to evaluate the works being carried out by the scholar under the supervision of a faculty member.

The detailed evaluation system is available in M.Tech Rules and Regulation, 2017, which are found in our website of NIT Agartala ([www.nita.ac.in](http://www.nita.ac.in)).

**Library :** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.Dprograms.

### **Laboratory and Research Facilities and Collaboration:**

#### **Lab Information:**

1. CAD/CAM Laboratory
2. Welding Laboratory
3. Robotics and Mechatronics Laboratory
4. Non Traditional Machining Laboratory
5. Metal Casting Laboratory

**Publications:** Department has published hundreds of research papers out of which significant contributions were there as the outcome of research of post graduate students.

A few notable publications are given below:

1. **Selvakumar.D**, Srinath J, Amalijith TH, M d Ehsan, Chenna Krishna, Christopher Solomon S, Madhujit Deb, 2022, "Analysis of crimping processes in Elliptically Deformed Nuts", National Aerospace Manufacturing Seminar 2022, pp. 464-472.
2. **Suman Setu**, Sethi. D, Manish Bhargava, Saha Roy B., "Effect of Tool Rotational Speed on Microstructure and Mechanical Properties of AA6061/SiC surface composites using friction stir processing", Recent Innovations and Technological Development in Mechanical Engineering (ICRITDME-2021), JECRC, Jaipur, IOP Science (SCOPUS), (Accepted Paper).
3. **Subhankar Dey**, Dr. Manish Bhargava, "Advancement in Additive Manufacturing in the fabrication of Removable Partial Dentures (RPDs) Framework: A review", 20th ISME Conference on Advances in Mechanical Engineering (ISME 20), IIT ROPAR, (Accepted Paper)
4. Abhijit Bhowmik, **Dipanjan Chakraborty**, Dipankar Dey, Ajay Biswas, "Investigation on wear behaviour of Al7075-SiC metal matrix composites prepared by stir casting", ELSEVIER, Science Direct, Materials Today: Proceedings Volume 26, Part 2, 2020, Pages 2992-2995.
5. Dipankar Dey, **Sudhir Kumar Chintada**, Abhijit Bhowmik, Ajay Biswas, "Evaluation of wear performance of Al2024-SiC ex-situ composites", ELSEVIER, Science Direct, Materials Today: Proceedings Volume 26, Part 2, 2020, Pages 2996-2999.

6. Ajay Biswas, **Abhijit Bhowmik**; *Study of heat generation and its effect during submerged arc welding (SAW) on mild steel plate at zero degree Celsius plate temperature*; ELSEVIER, Science Direct, Materials Today: Proceedings Volume 5, Issue 5, Part 2, 2018, Pages 13400–13405.
7. **Sumit Das Lala**, Ajay Biswas, John Debbarma, A.B. Deoghare; *Study of hardness of the weld bead formed by partial hybrid welding by metal inert gas welding and submerged arc welding at three different heat inputs*; ELSEVIER, Science Direct, Materials Today: Proceedings Volume 5, Issue 5, Part 2, 2018, Pages 13650–13657.
8. Ajay Biswas, **Dipankar Saha**, “*Study of Hardness of Weldment Produced by Submerged Arc Welding on Mild Steel Plate Preheated at 100°C Temperature*”, International Conference on Healthcare, Applied science and Engineering, New York, United States of America during August 04-05, 2017 at New York, United States of America organized by the Ontario College for Research and Development, Ontario, Canada.
9. **Rahul Kanti Nath**, Ajay Biswas, “*Regression Analysis of Submerged Arc Welding Process Parameters with Respect to Different Electrode Angle as Well as Welding Direction*”, International Journal of Engineering Research & Technology (IJERT). ISSN: 2278-0181, Vol. 5 Issue 04, April-2016, Page 46 to 50.







#### Placement and Higher Studies Avenues:

The institute is having dedicated training and placement department named Career Counseling Department ( CCD) through which students are being provided training and placements.

**Alumni:**The department produced 105nos.of Alumni who passed from this department with this specialization since 2008. Out of that, nearly 70% has chosen their careers in industrial organization and academia and 30% have joined the Ph.D.program in different prestigious institution including NIT Agartala.

The names of a few notable alumni who joined in Industrial Organization are also given below:






1	2017		Chayan Ranjan Das Mechanical Engineering Manufacturing Technology	Infosys India
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2	2018		Abhi Achajee Mechanical Engineering Manufacturing Technology	Ways2Capital
3	2018		Vasekar Akshar Mechanical Engineering Manufacturing Technology	Loonycorn
4	2021		Dipanjan Chakraborty Mechanical Engineering Manufacturing Technology	Infosys India
5	2021		Devender Kumar Mechanical Engineering Manufacturing Technology	Infosys India
6	2021		Pradeep Kumar Mechanical Engineering Manufacturing Technology	Startup
7	2022		Dhananjay Gupta Mechanical Engineering Manufacturing Technology	Technical Management Trainee Bosch Rexroth



8	2022		Shubham Gupta Mechanical Engineering Manufacturing Technology	GTE Bajaj Auto
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The names of few notable alumni joined in Higher studies are also given below:

1	2014		Debraj Das Mechanical Engineering Manufacturing Technology	Research Scholar NIT Agartala Mechanical Engineering Department
2	2015		Dipankar Saha Mechanical Engineering Manufacturing Technology	Research Scholar NIT Mizoram Mechanical Engineering Department
3	2015		Prasanta Majumder Mechanical Engineering Manufacturing Technology	Research Scholar NIT Mizoram Mechanical Engineering Department
4	2015		Sumit Das Lala Mechanical Engineering Manufacturing Technology	Research Scholar NIT Silchar Mechanical Engineering Department
5	2016		Rahul Kanti Nath Mechanical Engineering Manufacturing Technology	Research Scholar NIT Agartala Mechanical Engineering Department

6	2018		Atosh Kumar Sinha Mechanical Engineering Manufacturing Technology	Research Scholar NIT Durgapur Department of Metallurgical and Materials Engineering
7	2019		Ankan Das (CR) Mechanical Engineering Manufacturing Technology	Research Scholar IIT Guwahati Mechanical Engineering Department

**Contact:**

**Dr. Pritam Das, Associate Professor, B.E (TU), M.M.E (JU), Ph.D**  
Head, MechanicalEngineering Department,  
NIT Agartala  
Email :bhargav\_2006@yahoo.co.in, M- +91 6033197412(M)

**Program Coordinator:**

**Dr. Manish Bhargava, B.E., M.Tech.(Honors), Ph.D**  
Associate Professor  
**Specialization:** Manufacturing Science, Laser Material Processing, Production  
Technology

*ProgramCoordinator along with all Core Faculty Members of this program would like to welcome the students to join in this Post Graduate Program to excel his/her career in this prestigious institution -- **National Institute of Technology Agartala***

### C. Specialization : Machine Design

**Intake Capacity : 5**

#### **Objective of the Program:**

Machine Design post graduate program in Mechanical Engineering specialization was introduced in the year 2013. The primary objective is to develop competent and creative Machine design Engineers with an ability to independently carry out research /investigation and development work to solve Machine Design related problem. Curriculum is planned with an objective to impart competitive skills and to make our scholars to design / develop mechanical equipment and systems considering environmental, socio-economic and ethical issues and also to provide optimal and sustainable solutions by conducting numerical analysis, vibration analysis, failure analysis, mechanism synthesis.

#### **Program Coordinator:**

**Prof. (Dr.) Prasun Chakraborti**, M.Tech (Design), IIT Delhi, Ph.D, IIT Kharagpur, FIE, LIMSTE, LMPSI  
Professor

**Specialization:** Machine Design, Surface interaction, Tribology, Energy transfer and Technology transfer

#### **Program Co-Coordinator:**

**Dr. Pankaj Kr. Das**, B.E (TEC), M.M.E (JU), Ph.D  
Assistant Professor

**Specialization:** Machine Design, Workshop Processes, FEM, SOM

#### **Core Faculty Members of the Program:**

Sl.No.	Name of the Faculty Member	Designation	Research Expertise
1	<b>Prof. (Dr.) Prasun Chakraborti</b> , M.Tech (Design), IIT Delhi, Ph.D, IIT Kharagpur, FIE, LIMSTE, LMPSI	Professor	Machine Design, Surface interaction, Tribology, Energy transfer and Technology transfer
2	<b>Dr. Vipin Kumar Tripathi</b> B.E. (B.U., Bhopal), M.Tech. (MACT, Bhopal), Ph.D. (IIT, Kanpur)	Professor	Design Optimization, CAD, Composite Materials
3	<b>Dr. Ankuran Saha</b> M.M.E (JU), Ph.D	Assistant Professor	Solid Mechanics, Vibration, Composite Material, Dynamics
4	<b>Dr. Arindam Majumder</b> Ph.D	Assistant Professor	Soft Computing Techniques, Advanced Manufacturing Systems, Robotics, Welding, Non-traditional Machining

5	<b>Dr. Pankaj Kr. Das</b> , B.E (TEC), M.M.E (JU), Ph.D	Assistant Professor	Machine Design, Workshop Processes, FEM, SOM
6	<b>Dr. Ashis Acharjee</b> B.Tech in Mech.Engg (NERIST), M.Tech (Thermal Science and Engineering), NIT Agartala, PhD (NIT Agartala)	Assistant Professor	Computational Fluid dynamics and Heat Transfer, Finite Element Analysis, Thermodynamics, Energy studies, analysis and management in thermal power plant, Modeling/Design/Simulation of Energy System and their various impact assessments, Thermal and renewable energy resources and their analysis.
7	<b>Ms. Moutoshi Singha Roy</b> M.Tech (NIT Agartala)	Assistant Professor	Materials, Composites, Tribology

**Eligibility Criteria for Admission:** Admission is carried out through the central counseling like CCMT/CCMN being organized by NIT Jaipur. If seats are lying vacant, then institute admits the student through publication /advertisement by NIT Agartala

**Scholarship:** Students admitted through CCMT/CCMN are eligible to get the monthly scholarship of Rs.12400/-- subject to fulfillment of other criteria and financial availability from Ministry of Education, Government of India.

**Program duration :** Two years (Four Semester)

**Program Structure:** This program is having 80 credits where as 25 credits on 1st semester and 25 credits in 2nd semester, 10 credits in 3<sup>rd</sup> semester, 20 credits in 4<sup>th</sup> semester. In First year i.e. First and 2<sup>nd</sup> semester, only theory and sessional classes are taking and in 2<sup>nd</sup> year (3<sup>rd</sup> and 4<sup>th</sup> semester), Project and thesis is being carried out in the Industrial organization or in the institute on the proposed Research Topic so that at least one Resource paper may be able to publish.

The detailed credit, subject and syllabus of the program are available in the department website.

**Evaluation System:** Continuous Evaluation system is followed. Credit based Cumulative Grade Point Average (CGPA) System along with SGPA (Semester Grade Point Average) system is adopted. Theory subjects are evaluated based on Internal Assessment (30 marks ), Mid Term Examination (20 marks ), and End Term Examination (50 marks ). Questions are prepared following the Blooms Taxonomy satisfying the NBA pattern. Project and Thesis are being evaluated by an Evaluation Committee where External Expert from renowned institutions/organizations like IITs, NITs, ONGCs are present to evaluate the works being carried out by the scholar under the supervision of a faculty member.

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**Library :** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.D programs.

### **M.Tech. Machine Design**

#### **Lab Information:**

1. Machine Tool Laboratory
2. Vibration Laboratory
3. Modeling and Analysis Laboratory
4. Computer Aided Design Laboratory
5. Design Optimization Laboratory

**Library:** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.D Program.

**Publications:** Department has published hundreds of research papers out of which significant contributions were there as the outcome of research of post graduate students.






1. Arindam Majumder, Abhishek Majumder, Rahul Bhaumik, Teaching–Learning-Based Optimization Algorithm for Path Planning and Task Allocation in Multi-robot Plant Inspection System. Arabian Journal for Science and Engineering, pp. 8999-9021, 2022.
2. Arindam Majumder, Rajib Ghosh, Task Allocation and Path Planning of a Multi-Robot System Using Heuristic Coupled Particle Swarm Optimization Algorithm. Handbook of Research on Developments and Trends in Industrial and Materials Engineering. Pp. 194-209, 2020

#### **Placement and Higher Studies Avenues:**

The institute is having dedicated training and placement department named Career Counseling Department( CCD) through which students are being provided training and placements.




**Alumni:** The department produced 37 nos of Alumni those who passed from this department with this specialization since 2010 Out of that nearly 70% has chosen their career in industrial organization and academia and 30% have joined in Ph.D programme in different prestigious institution including NIT Agartala.


The names of few notable alumni joined in industrial Organisation are also given below

2016				<p><b>Pranjal Kumar Nath</b>          Mechanical Engineering          Machine Design</p>	NRL
2016				<p><b>Y.R.Kishore</b>          Mechanical Engineering          Machine Design</p>	SVCET
2016				<p><b>Bivash Chakraborty</b>          Mechanical Engineering          Machine Design</p>	TIT
2016				<p><b>Ujjal Das</b>          Mechanical Engineering          Machine Design</p>	TCEA
2016				<p><b>Pitor Debbarma</b>          Mechanical Engineering          Machine Design</p>	TIT

2017		Tanmoy Halder Mechanical Engineering Machine Design	MIET, Bandel
2020		<b>Rahul Bhumik</b> Mechanical Engineering Machine Design	<b>Analysis &amp; Simulation Engineer</b>
2022		<b>Sagar Gajanan Dharmik</b> Mechanical Engineering Machine Design	<b>Areteans Technology</b>

The names of a few notable alumni joined in Higher studies are also given below:

2015		<b>Chiranjit Bhowmik</b> Mechanical Engineering Machine Design	NIT Agartala ( <b>Ph.D.</b> pursuing)
2016		<b>Suman Dey</b> Mechanical Engineering Machine Design	NIT Agartala ( <b>Ph.D.</b> pursuing)
2018		Shahis Hashim Mechanical Engineering Machine Design	<b>PhD</b> (IIT Madras)

2019				<p style="text-align: center;"><b>Raja Kumar</b> Mechanical Engineering Machine Design</p>	<p style="text-align: center;"><b>Ph.D.</b> (IIT Kharagpur)</p>
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**Contact:**

**Dr. Pritam Das, B.E (TU), M.M.E (JU), Ph.D**

Head, Mechanical Engineering Department,  
NIT Agartala, Agartala – 799046, Tripura, (INDIA)

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**Program Coordinator :**

**Prof. (Dr.) PrasunChakraborti**, B.E (Mech), CU, M.Tech (Design), IIT Delhi, Ph.D, IIT Kharagpur, FIE, LIMSTE, LMPSI

Email : cprasun.dpc@gmail.com

**Program Co-Coordinator**

Dr. Pankaj Kr. Das, B.E (TEC), M.M.E (JU), Ph.D

Assistant Professor

**Email:** p.kdas\_642004@yahoo.com

*Program Coordinator along with all Core Faculty Members of this program would like to welcome the students to join in this Post Graduate Program to excel his/her career in this prestigious institution -- **National Institute of Technology Agartala***



**D. Specialization : Automotive Engineering**

**Intake Capacity : 05**

### **Objective of the Programme**

Automotive Engineering was introduced as the specialization under Mechanical Engineering in the year 2013. To create and train Automotive Engineers who use their talents to achieve excellence in the domain of Automobile Engineering. The specialization has successfully managed to create quality engineers till date. This program is introduced with an objective to provide qualitative technical knowledge and nurture creativity in the budding researchers in the field of Automobile Engineering. The objective of this program is to create postgraduate scholars to carry out research and development work to solve practical problems in Automotive Engineering with an ability to inculcate a research knowledge base through literature study, problem identification, analysis and interpretation related to automotive technology. Our curriculum provides our scholars an ability to design and development of components and processes in automotive systems meeting industrial needs, with due consideration to public health, safety along with social, cultural and environment considerations.

### **Program Coordinator:**

**Dr. Rajsekhar Panua**, Ph.D.(Jadavpur University)

Associate Professor

**Specialization:** I.C. Engine, Thermal Power Engineering, Heat Transfer Thermodynamics.

### **Program Co-Coordinator:**

**Dr. Rahul Banerjee**, M.E (Automobile Engineering)(J.U), Ph.D

Assistant Professor

**Specialization:** I.C Engines, Alternative Fuels, Emission Reduction HCCI

### **Core Faculty Members of the Program:**

<b>Sl.No.</b>	<b>Name of the Faculty Member</b>	<b>Designation</b>	<b>Research Expertise</b>
1	<b>Dr. Ajoy Kumar Das</b> B.E (NIT, Surathkal), M tech (IIT Madras), Ph.D (IIT Kharagpur)	Professor	Computational Fluid Dynamics (CFD), Heat Transfer, Thermal Power
2	<b>Dr. Rajsekhar Panua</b> Ph.D.(JU)	Associate Professor	I.C. Engine, Thermal Power Engineering, Heat Transfer Thermodynamics.
3	<b>Dr. Pritam Das</b> B.E (TU), M.M.E (JU), Ph.D	Associate Professor	Fluid Mechanics, Refrigeration and air conditioning
4	<b>Dr. Madhujit Deb</b> B. Tech (NERIST), M.Tech (NIT Agartala), Ph.D (NITA)	Assistant Professor	I.C. Engine, Alternative Fuels

5	<b>Dr. Rahul Banerjee, M.E</b> (Automobile Engineering)(J.U), Ph.D	Assistant Professor	I.C Engines, Alternative Fuels, Emission Reduction HCCI
6	<b>Dr. Dipak Chandra Das</b> Ph.D. (Jadavpur University)	Assistant Professor	Heat & Mass Transfer
7	<b>Dr. Durbadal Debroy</b> M.Tech, Ph.D (Pursuing)	Assistant Professor	Thermal Engineering, IC Engine & Alternative Fuels, Biofuels & Renewable Energy, Pollution Control in IC Engine, Automotive Engineering
8	<b>Dr. Sagnik Pal</b> B.Tech, (SRM University), M.Tech, (NIT Agartala), Ph.D (IEST Shibpuri)	Assistant Professor	Heat Transfer
9	<b>Dr. Pinku Debnath</b> B.Tech (Mechanical Engineering, NIT Agartala), M.Tech (Thermal Engineering, NIT Silchar), Ph.D. (Mechanical Engineering, NIT Silchar)	Assistant Professor	CFD, Thermal Engineering, Computational Combustion, Wind Turbines
10	<b>Dr. Ashis Acharjee</b> B.Tech in Mech.Engg (NERIST), M.Tech (Thermal Science and Engineering), NIT Agartala, PhD (NIT Agartala)	Assistant Professor	Computational Fluid dynamics and Heat Transfer, Finite Element Analysis, Thermodynamics, Energy studies, analysis and management in thermal power plant, Modeling/Design/Simulation of Energy System and their various impact assessments, Thermal and renewable energy resources and their analysis.

**Eligibility Criteria for Admission:** Admission is carried out through the central counseling like CCMT/CCMN being organized by NIT Jaipur. If seats are lying vacant, then institute admits the student through publication /advertisement by NIT Agartala

**Scholarship:** Students admitted through CCMT/CCMN are eligible to get the monthly scholarship of Rs.12400/-- subject to fulfillment of other criteria and financial availability from Ministry of Education, Government of India.

**Program duration:** Two years (Four Semester)

**Program Structure:** This program is having 80 credits where as 25 credits on 1st semester and 25 credits in 2nd semester, 10 credits in 3<sup>rd</sup> semester, 20 credits in 4<sup>th</sup> semester. In First year i.e. First and 2<sup>nd</sup> semester, only theory and sessional classes are taking and in 2<sup>nd</sup> year (3<sup>rd</sup> and 4<sup>th</sup> semester), Project and thesis is being carried out in the Industrial organization or in the institute on the proposed Research Topic so that at least one Resource paper may be able to publish.

The detailed credit, subject and syllabus of the program are available in the department website.

**Evaluation System:** Continuous Evaluation system is followed. Credit based Cumulative Grade Point Average (CGPA) System along with SGPA (Semester Grade Point Average) system is adopted. Theory subjects are evaluated based on Internal Assessment (30 marks), Mid Term Examination (20 marks), and End Term Examination (50 marks). Questions are prepared following the Blooms Taxonomy satisfying the NBA pattern. Project and Thesis are being evaluated by an Evaluation Committee where External Expert from renowned institutions/organizations like IITs, NITs, ONGCs are present to evaluate the works being carried out by the scholar under the supervision of a faculty member.

The detailed evaluation system is available in M.Tech Rules and Regulation, 2017, which are found in our website of NIT Agartala ([www.nita.ac.in](http://www.nita.ac.in)).

**Library:** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.D programs.

### **Laboratory and Research Facilities and Collaboration:**

#### **Lab Information:**

1. Automotive Systems Laboratory
2. CAD/CAM Laboratory
3. Automotive Simulation and Analysis Laboratory
4. Robotics and Mechatronics Laboratory

**Publications:** Department has published hundreds of research papers out of which significant contributions were there as the outcome of the research of postgraduate students.






1. Sandipan Deb, Paresh Mahesh Kanade, Sagnik Pal, Ajoy Kumar Das, (2022), "Influence of horizontal enhanced tube on flow boiling heat transfer characteristics of environmentally friendly refrigerant R-407c", Materials Today Proceedings. (Available Online)

### **Placement and Higher Studies Avenues:**

The institute is having dedicated training and placement department named Career Counseling Department (CCD) through which students are being provided training and placements.

**Alumni:** The department produced 40 nos. of Alumni those who passed from this department with this specialization since 2010. Out of that nearly 65% has chosen their career in industrial organization and academia and 35% have joined in Ph.D programme in different prestigious institution including NIT Agartala.

The names of few notable alumni joined in industrial Organization are also given below

1	2018		<p><b>Ajay Kumar Yadav</b>  Mechanical Engineering  Automotive Engineering</p>	<p><b>Design engineer</b>  ALP  Nishikawa co.  Pvt. Ltd.  Gurgaon</p>
2	2019		<p><b>Rinku Philem</b>  Mechanical Engineering  Automotive Engineering</p>	<p>SAS R&amp;D India  (Pvt.) Limited</p>
3	2019		<p><b>Barun Kumar</b>  Mechanical Engineering  Automotive Engineering</p>	<p>Epic Research</p>
4	2021		<p><b>MALAY PANDA</b>  Mechanical Engineering  Automotive Engineering</p>	<p>DNJ Infotech</p>
5	2021		<p><b>Gauhar Iqbal</b>  Mechanical Engineering  Automotive Engineering</p>	<p>EVOSYS</p>

**Contact:**

**Dr. Pritam Das, Associate Professor, B.E (TU), M.M.E (JU), Ph.D**  
Head, Mechanical Engineering Department,  
NIT Agartala, Agartala – 799046, Tripura, (INDIA)  
Email : bhargav\_2006@yahoo.co.in, M- +91 6033197412(M)

**Program Coordinator:**

**Dr. Rajsekhar Panua, Ph.D. (JU)**  
Associate Professor  
Mechanical Engineering Department,  
NIT Agartala  
Agartala – 799046, Tripura, (INDIA)  
Email: rajsekhar\_panua@yahoo.co.in

**Program Co-Coordinator:**

**Dr. Rahul Banerjee, M.E (Automobile Engineering)(J.U), Ph.D**  
Assistant Professor  
Mechanical Engineering Department,  
NIT Agartala  
Agartala – 799046, Tripura, (INDIA)  
Email: iamrahul.ju@gmail.com

*Program Coordinator along with all Core Faculty Members of this program would like to welcome the students to join in this Post Graduate Programme to excel his/her career in this prestigious institution -- **National Institute of Technology Agartala***

## E. Specialization : Material Science and Engineering

**Intake Capacity** : 10

### Objective of the program:

Material Science and Engineering program is introduced in the year 2020 with the first batch graduating out in 2022. Its an twinning program between NIT Agartala and Visvesvaraya National Institute of Technology Nagpur, in which student will undergo first semester at NIT Agartala and second semester at VNIT Nagpur. Students will undergo their Project work in joint collaboration under the guidance of faculty members of NIT Agartala and VNIT Nagpur.

The Material Science and Engineering program is introduced with the primary objective of producing young Professionals of Material Science and Engineering to provide research contributions to Industry, government and society. Our curriculum is planned to provide the ability to select, develop, process, analyze, characterize advance engineering materials considering economic, environmental, and societal context with ethical considerations leading to sustainable development.

### Course Coordinator:

**Mr. R. K. Bhogendro Meitei**, BSc. Engg. (DEI, Agra), MTech NITTTTR, Kolkata, (WBUT)  
Assistatnt Professor

**Specialization:** Manufacturing Technology, Welding Technology.

### Course Co-Coordinator:

**Dr. P. Jawahar**, M.E. (Annamalai University), Ph.D. (IIT Madras)  
Assistant Professor

**Specialization:** Polymer Nanocomposites, Rubber Technology, Metal Matrix Composites, Tribology

### Core Faculty Members of the Program:

Sl.No.	Name of the Faculty	Designation	Research Interest
<b>NIT Agartala Faculties</b>			
1	<b>Dr. Manish Bhargava</b> , B.E., M.Tech (Honors), Ph.D, (MNIT Jaipur).	Associate Professor	Manufacturing and Quality System, Lean Six Sigma and Additive Manufacturing, CAD/CAM
2	<b>Dr. Ajay Biswas</b> B.E. (Calcutta University), M.M.E. (Jadavpur University), Ph.D. (Jadavpur University)	Assistant Professor	Fusion welding, Fusion welding at low temperature Development, Characterization and tribological analysis of Metal Matrix Composites, Hybrid composites, Polymer Composite. Additive manufacturing and property analysis Surface modifications and coatings of materials and property analysis
3	<b>Dr. Barnik Saha Roy</b> B.E (TU), M.Tech, Ph.D	Assistant Professor	Thermo Mechanical analysis of Welding Processes, Heat Transfer modelling, Characterization Study

4	<b>Dr. Subrata Kumar Ghosh</b> B.Tech, M.Tech, Ph.D (IIT Kharagpur)	Assistant Professor	Non-Traditional Manufacturing Process, Conventional Manufacturing Process
5	<b>Mr. R. K. Bhogendro Meitei</b> BSc. Engineering (DEI, Agra), MTech NITTTR, Kolkata, (WBUT)	Assistant Professor	Manufacturing Technology, Drawing, AutoCad , Welding Technology
6	<b>Dr. P. Jawahar,</b> M.E. (Annamalai University), Ph.D. (IIT Madras)	Assistant Professor	Polymer Nanocomposites, Rubber Technology, Metal Matrix Composites, Tribology
7	<b>Dr. Joydeep Roy</b> B-Tech (NIT Agartala), M-Tech (NIT Agartala), PhD (NIT Agartala)	Assistant Professor	Welding, Materials science, Optimization
<b>VNIT Nagpur Faculties</b>			
1	<b>Dr. R. V. Taiwade</b> B.Tech. (Production Engg, Nagpur University), M.Tech. (FAT & ASM, VRCE), PhD (VNIT)	Assistant Professor	Welding, Corrosion, Biomaterials, Mineral Processing
2	<b>Dr. A. B. Rathod</b> B.Tech, M.Tech, Ph.D (VNIT Nagpur)	Assistant Professor	Wear, Physical Metallurgy, Particulate Technology, and Steel and Iron Making
3	<b>Dr. A. P. Patil</b> B.Tech, M.Tech: Visvesvaraya Regional College of Engineering Nagpur, Nagpur, Phd: VNIT	Professor	Corrosion Engineering, Surface Engineering, Simulation & Modeling, Alloy Steel Making
4	<b>Dr. S. G. Sapate</b> B.E. (Metallurgical Engg.) M.Tech. (FAT & ASM) Ph.D. (Metallurgical Engg.)	Professor	Wear & Tribology, Heat Transfer
5	<b>Dr. A. K. Srivastav</b> B.Tech: National Institute of Technology Rourkela, M.Tech: Indian Institute of Technology Kanpur, Ph.D.: Indian Institute of Technology Madras	Assistant Professor	Non-equilibrium processing, Phase transformations, thermally stable nanoscale materials, Nanomagnetism

6	<b>Dr. J. A. Desai</b> B.Tech: VNIT, M.tech: IIT Kharagpur, Phd: University of Texas	Adjunct Assistant Professor	2-D Materials (Graphene, WS <sub>2</sub> , h- BN), Nanomaterials, Optoelectronics (Photosensors and capacitors)
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**Library :** Departmental Library along with Central Library is utilized for B.Tech, M.Tech and Ph.D programs.

### **Laboratory and Research Facilities and Collaboration:**

#### **Lab Facilities**

1. Structure & Characterization of Materials Lab
2. Physical Metallurgy Lab
3. Non-Destructive Evaluation Lab
4. Metal Casting and Joining Laboratory



**Publications:** Department has published hundreds of research papers out of which significant contributions were there as the outcome of research of post graduate students.

**Few notable publications are given below:**

1. Ankit Samal, Dr. Manish Bharava, Dr. Barnik Saha Roy, "Surface Modification of Plant Fibres for the Purpose of Fabrication of Natural Fibre Reinforced Polymer Composites- A Review", Innovations and Technological Development in Mechanical Engineering (ICRITDME-2021), JERC, Jaipur, IOP Science (SCOPUS), (Accepted)

**Contact:**

**Dr. Pritam Das, B.E (TU), M.M.E (JU), Ph.D**

Head, Mechanical Engineering Department,

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**Program Coordinator:**

**Mr. R. K. Bhogendro Meitei**, BSc. Engg. (DEI, Agra), MTech NITTTR, Kolkata, (WBUT)

Assistatnt Professor

**Specialization:** Manufacturing Technology, Welding Technology.

*Course Coordinator along with all Core Faculty Members of this course would like to welcome the students to join in this Post Graduate Programme to excel his/her career in this prestigious institution -- **National Institute of Technology Agartala***

# Internship and Placement

Our Potential Recruiters of the last 5 years

**AM/NS  
INDIA**

**Infosys**



**HCL**

*Loonycorn*



**BAJAJ**



**NIPPON STEEL**



**BOSCH**



**ARETEANS**