



## **National Institute of Technology Durgapur**

### **Vision and Mission Statements**

#### **Vision:**

To impart quality technical education and focus on research and innovation to cater to the need of the country

#### **Mission:**

1. To impart quality technical and scientific education and produce engineers, technologists, scientists and citizens who will contribute meaningfully to the growth and development of the country and excel in various disciplines of knowledge
2. To initiate the students to research-oriented teaching-learning environment in the Institute with a focus on excellence and innovation

## **Vision and Mission Statements of the Departments**

### **Department of Biotechnology**

#### **Vision:**

To produce responsible citizens who can sincerely serve the society with honesty and integrity.

#### **Mission:**

1. To produce highly qualified, well-rounded and motivated graduates possessing fundamental understanding and knowledge in Biotechnology, who can provide service and eventually leadership to the nation and to the world.
2. To pursue creative research and develop new technologies in the field of Biotechnology, in order to serve the needs of government and of industry.

### **Department of Chemical Engineering**

#### **Vision:**

To impart quality technical education in Chemical Engineering and focus on research and innovation in thrust areas of Chemical and related areas of engineering

#### **Mission:**

1. To produce highly qualified, well-rounded and motivated graduates possessing fundamental understanding and knowledge in Chemical Engineering, capable of providing service and leadership to the nation and the world
2. To pursue creative research and work on new technologies in Chemical Engineering and other multi-disciplinary areas in order to serve the needs of industry, & society
3. To achieve visibility by organization of & participation in conferences and other technical activities

### **Department of Chemistry**

#### **Vision:**

To be a globally recognized department in scientific and technical education through value-added teaching, research and innovation and producing quality human resources who can meet the challenges of the ever-changing, technology-based society.

#### **Mission:**

To produce highly qualified, well- rounded, motivated and technologically sound students possessing fundamental understanding and knowledge in chemical science and technology, who can provide service and leadership to the nation and the world and can fulfil the technological and socio-economic need of industry, government and society.

## **Department of Civil Engineering**

### **Vision:**

To produce highly qualified Civil Engineers to develop smart infrastructure for much needed impetus for socio-economic growth, improvement in quality of life and fulfillment of societal needs for fostering the prosperity of our nation.

### **Mission:**

1. To produce outstanding graduate and post graduate Civil Engineers with high technical skills and ethical values for being able to apply smart system in respective areas.
2. To innovate new techniques and methods through basic and applied research in the field of civil engineering with the help of concerned industry so as to be able to develop and sustain smart systems for applications in different areas of civil engineering to achieve better productivity and prosperity for India.
3. To promote collaboration, develop long-term sustainable partnerships with concerned research organizations for sustainability of the vision. This activity is within the ambit of research that will contribute for securing the provision of food, water, shelter, security against disaster, education, energy, sanitation, transportation and ecosystem services.
4. To provide effective consultancy services for delivering the output of the research to the society.
5. To inculcate innovation and novel thinking in the minds of students to better serve the society.

## **Department of Computer Applications**

### **Vision:**

To impart quality technical education and focus on research and innovation in the area of computer science and its applicability to cater the need of the country with an extra thrust on entrepreneurship skill development

### **Mission:**

1. To impart quality technical and scientific education and produce engineers, technologists, scientists and citizens who will contribute meaningfully to the growth and development of the country and excel in knowledge computer science and its applicability
2. To initiate the students to research-oriented teaching-learning environment in the department with a focus on excellence and innovation

## **Department of Computer Science and Engineering**

### **Vision:**

1. To impart leading technical education in the field of Computer Science and to focus on research and innovation to cater to the need of the society
2. To produce quality engineers, scientists and researchers who are responsible citizens contributing to the progress of the nation
3. To contribute to the latest advances in the field of Computer Science through cutting age research

### **Mission:**

The Computer Science and Engineering Department strives for excellence in creating, applying, and imparting knowledge in Computer Science and Engineering through comprehensive educational programs, research in collaboration with industry and government, dissemination through scholarly publications, and service to professional societies, the community, the state, and the nation.

## **Department of Earth and Environmental Studies**

### **Vision:**

To impart quality scientific and technical education with increased focus on research and innovation in the fields of earth sciences and environment to cater to the need of the country

### **Mission:**

1. To produce highly qualified, skillful and motivated manpower with understanding of basic knowledge on earth sciences as well as producing highly qualified professional manpower in the field of environment that can provide service and leadership to the nation.
2. To pursue creative research and strive for new innovations in the fields of earth sciences and environment in order to serve the nation for a sustainable future.
3. To achieve wider visibility by actively contributing to the technical activities and conferences.

## **Department of Electrical Engineering**

### **Vision:**

To impart quality education catering the challenges of new technological advances in Electrical Sciences and to provide updated knowledge in the state of the art technologies, keeping in view the needs of the industry in general and the country in particular and to achieve excellence in education and research.

### **Mission:**

1. To impart quality education for producing qualified and motivated Engineers and Researchers who will contribute meaningfully to the growth and development of the country.

2. To encourage the faculties and the students for research-oriented teaching-learning environment in the department with a focus on excellence and innovation.
3. To pursue creative research and consultancy developing new technologies in Electrical Engineering in order to serve the needs of industry and country as a whole.
4. To create congenial atmosphere for collaborative research, consultancy and other technical activities.

### **Department of Electronics & Communication Engineering**

#### **Vision:**

1. To produce highly competent and resourceful young engineers who can perform well in varied professions.
2. To develop a strong fundamental base which enables students to explore academic and collaborative interactions with industry, academia and research organizations.

#### **Mission:**

1. To advance and cater knowledge in the areas of Communication, Signal Processing and VLSI.
2. To teach state of the art technologies to meet the growing challenges.
3. To carry research in frontier areas

### **Department of Humanities & Social Sciences**

#### **Vision:**

To emerge as a catalyst of synergy between technical education and social sciences so as to produce value-based social technocrats

#### **Mission:**

1. To achieve excellence in imparting communication skill and to emerge as a centre of excellence in language studies.
2. To instill social awareness and social responsibility by giving exposure to social sciences.
3. To enhance decision-making power of budding techno-managers by imparting the knowledge of Economics, Management, and Literature

### **Department of Information Technology**

#### **Vision:**

To impart technical education in the field of Information Technology in a direction that would inspire and encourage students to be prepared to generate value-based output to society, government, industry and academia in terms of technical, professional,

personal, academic, and research expertise, skills and creativity with a blend of leadership, entrepreneurial, and humanitarian excellence.

**Mission:**

1. To impart education that would enable the undergraduate students to have a clear, conceptual understanding of the basic theories and principles of the subjects of the department.
2. The fundamental knowledge of the subjects would drive them to develop logical and analytical skills and would aid them towards higher studies, research and continuous contribution to technical field of exercise in terms of professional organizational job or research in academics and industry.
3. Create a healthy academic growth oriented environment to nurture new talents (both undergraduates and faculties), allow free flow of ideas and thoughts, practice problem definition and quantitative analysis with solutions, and nurture student aspirations, understanding the possibilities and limits.
4. Allow individual students to explore their capabilities and interests to their intellectual potential and ability.
5. To create good citizens with social responsibilities and ethical standards.

**Department of Mathematics**

**Vision:**

To contribute to the nation through quality education and research in Mathematics; to become a valuable resource for industry and society; and to be a centre of excellence

**Mission:**

1. To create an ambiance in which state-art undergraduate, postgraduate, and doctoral programmes will flourish.
2. To identify different industrial problems through industry-academia interaction and to undertake collaborative projects for long term development.
3. To generate human resource with finest capabilities who can emerge as leaders in a range of professions.

**Department of Management Studies**

**Vision:**

To be a world leader in technology based business management education by transforming students to face challenges in the international business stage, and engaging productively with civic society for building a responsible future for both business and society globally.

**Mission:**

1. To deliver rigorous and relevant education of international standing that inspires students to implement their professional skills in an enterprising manner and become architects of an equitable world.

2. Through vibrant collaboration, and innovation we drive excellence in teaching and research to contribute to the intellectual, social and economic development of the communities.
3. To shape a responsible future for both business and society.

### **Department of Mechanical Engineering**

#### **Vision:**

Advancement of the society through excellence in teaching, research and innovation and services that exploits the rapidly changing technical diversity of Mechanical Engineering

#### **Mission:**

1. Imparting quality education to the students and enhancing their skills to make them globally competitive mechanical engineers.
2. Maintaining state-of-the art research facilities for providing our students and faculties with opportunities to innovate, interpret, apply and disseminate their knowledge.
3. To develop linkages with reputed R&D organization, Institutes and Industries world-wide through education and research.

### **Department of Metallurgical and Materials Engineering**

#### **Vision:**

Development of techno-scientific knowledge-base to impart quality education to students at all levels (UG, PG and Ph.D) with an augmented focus on research and innovation in various fields of Metallurgical and Materials Engineering so as to cater the need of Industry and society at large.

#### **Mission:**

1. To develop students possessing strong knowledge-base who will cater Industry, Academia and Research organizations in various fields of Metallurgical and Materials Engineering as highly qualified, skillful and motivated manpower.
2. To pursue inventive research in Metallurgical and Materials Engineering that would support the growth of nation.
3. To enhance internal revenue generation through sponsored research, consultancy & testing and continuing education programme
4. To interact with global scientific community through (i) collaborative research and (ii) participating/organizing seminars, conferences etc

## **Department of Physics**

### **Vision:**

To impart quality education & focus on research in basic and applied sciences leading to advancement of technology to cater to the need of the country

### **Mission:**

1. The Department of Physics of NIT Durgapur aims to provide a quality education to students with a sound understanding of the fundamentals and applications of Physics leading to development of Technologies for the benefit of the mankind.
2. The Department aims to have highly qualified and motivated faculty and staff members along with state-of-the-art facilities to carry out the educational and research process and thereby to ensure increased global visibility of the department.
3. The Department strives to provide the most up-to-date and purposeful curriculum and the highest quality laboratory facilities for the education of our students in a “student-centric” approach to empower them in finding suitable employment.
4. To have close interaction with the nearby industries so that our programs and graduates are highly regarded and accepted in their workplace.
5. To provide the necessary knowledge, experience and ethical values to the students leading to responsible citizen of the nation.