





Batch 24-26

MEET DESIGNERS OF TOMORROW

Placement **Brochure**



M.Des. Internship Brochure 2024-26

Department of Design and Manufacturing Overall Category University Category Best Research Institute in India

WHO WE ARE?

About

Department of **Design and Manufacturing**

Immersed in the world-renowned IISc, DM stands out as one of the few schools in India nurturing talent to create systemically complex, technologically intensive, and socially impactful solutions.

Functionality, aesthetics, usability, and sustainability are at the core of everything we do.

Message from the Chairman

Imagine crafting products that seamlessly blend technology and human need. Products that are not just functional and beautiful, but are also sustainable and impactful. That's the legacy of our M.Des Programme in Product Design and Engineering, launched in 1997. Since then, we've nurtured generations of design pioneers, empowered by our DEPARTMENT OF DESIGN & MANUFACTURING - DM (erstwhile CPDM - Center for Product Design & Manufacturing).

Our dedicated faculty, pioneers in their fields, guide our students through their journey of exploration and innovation. From creativity and ergonomics to sustainability and human-machine interaction, their learning spans diverse domains. Master cutting-edge tools and methods, backed by state-of-the-art facilities like our Smart Factory. They are equipped to tackle the technological challenges of tomorrow, shaping products that resonate with users and the environment.

We aren't just offering graduates; we're offering future leaders. Join us at DM, and watch your company soar to new heights of design and manufacturing excellence. This is more than just a placement brochure; it's an invitation to invest in the future.



Our Faculty



Dibakar Sen

Geometric & Topological Modeling, Digital Human Modelina & Posturina. Geometric & Functional Vision Modeling, Natural Behaviour & Grasp Modeling, Kinematic Assembly Modeling. Deployable Antena Mechanisms, Underactuated & Spring Actuated Mechanisms...



Manish Arora Associate Professor

Biomedical Devices, Co-Design, Collaboration and Open-Source in





B. Gurumoorthy Associate Professor

CAD, Product Informatics, Computational Metrology, Computer Aided Prototyping





N.D. Shivakumar

Polymer based composites, Bio-Composites, Synthesis/ Manufacturing of lightweight materials





Abhra Roy Chowdhury Associate Professor

Robotics & Automation, Collaborative Mobile Robots (Aerial/Terrestrial/Marine), Human-Robot Collaboration, Mechatronics, Bioinspiration & Biomimetics





Vishal Singh Associate Professor

Built Environment (BE) and construction management, Design and design management, Innovation and innovation management





Abhijit Biswas Associate Professor

Core Engineering Area (Electronics and Instrumentation), Interdisciplinary Engineering Area, Basic Science Area (Physiology and Psychology)





Pradipta Biswas Associate Professor

Human-Computer Interaction, User Modelling, Multimodal Interaction, Intelligent Interaction





Anindya Deb Associate Professor

Vehicle Crashworthiness and Occupant Safety, Pedestrian Safety, Impact Modeling and Testing, Behavior of Lightweight Materials under Impact Loading, Design of Automotive Systems.





Rina Maiti Associate Professor

Human Factors Engineering, Biomechanics, Product Design, Medical Engineering, Rehabilitation engineering.



Sumanth N

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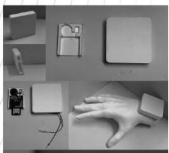
Meet Us





Deepshikha

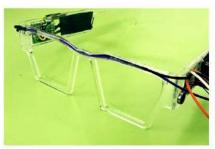
Our Work



DM students have actively worked on various projects in diverse design fields, both on individual and group levels.

The projects have varied from the redesign of products to the innovation of new ones. The highlights of our projects are extensive user research and high concept to patent conversion.











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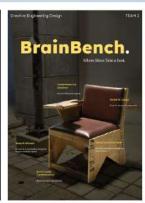














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Our Work



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Our program equips graduates to deliver impactful digital experiences, from the initial spark of an idea to its polished execution.

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We go beyond aesthetics, emphasizing a rigorous design process rooted in extensive user research and testing.

















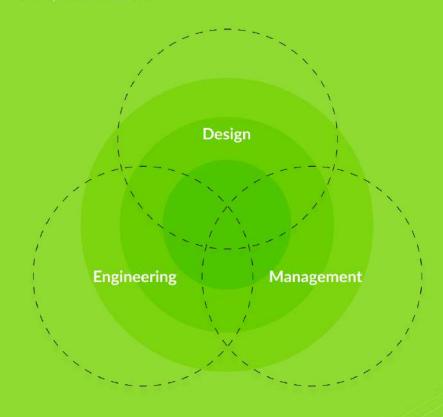




Our Curriculum

M.Des in Product Design, Development & Management

Unlike no other design program in the country, it is one that focuses on the fuzzy front-end of product development that emerges at the intersection of Design, Business and Technology, for the creation of well designed, well engineered and well positioned products that the market requires.



Design

· Creative Engineering Design

- Elements of Design
- · Product Visualization, Communication and Presentation
- Applied Ergonomics
- · Embodiment Design
- · Materials, Manufacturing & Design

Engineering

- · Basics of Electronics for Product Design
- · Computing, Al and Data Science for Product Design
- Mechatronics
- · Elements of Solids and Fluids Mechanics

Management

- · New Product Development-Strategy and Practice
- · New Product Development-Concepts and Tools
- Product Design

Skills & Tools

System Level Design **Detailed Design** Testing and Refinement Production Ramp-up **Product Planning Concept Development** Principles of Usability Testing · Financial User Flow Opportunity Needs Analysis Embodiment Projections Identification Development DFMEA Requirement Design · Value proposition DFX User Research Definition Interface Design Innovation Situation Empathy Product Simulation Mapping Questionnaire (ISQ) Architecture Definitive Layout Habitat Study Information Function structures Architecture QFD (Quality Market Study Function Collaboration Product Study deployment) Communication Competition · Creative Problem Study HCI/HMI Solving Storytelling · concepts evaluation Trend Analysis Sketching Semiotics 3D modelling Study Prototyping Task

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Clarification





Life Cycle

TRIZ

Assessment























16











Facilities

IDEAS Lab

UTSAAH Lab

CAR Lab

HER Lab

SCALE Lab

14l Lab

RIMM Lab

Innovation design study & sustainability

Universal technology solutions for accessible &

affordable healthcare

Creative automotive research

Human egineering

Computerized anthropometry & ergonomics

simulation

Impact4Impact Lab

Research in Materials and Manufacturing

Su-Desi Lab

PLM Lab

VR Lab

I3D Lab

RI Lab

InSPIRE Lab

Sustainability by design

Product lifecycle management

Virtual Reality

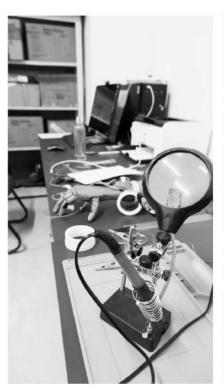
Intelligent Inclusive Interactive design

Robotics innovation

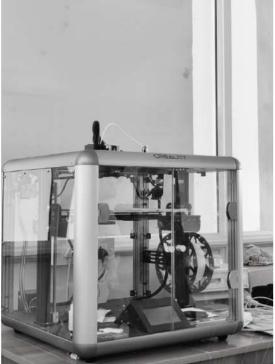
Innovation synthesis and prototyping for interdisciplinary research and engineering







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18

Event & Awards

Events

RIPPLES

The Annual Design show of Department for Industry interaction

Silver Jubilee

Celebrations 25 years of DM(CPDM)

ICoRD'25

10th International Conference on Research into Design

I-4AM'24

3rd International Conference on Industry 4.0 and Advanced Manufacturing

























Awards

RedDot Award

- Apoorv Shankar & Yogansh Namdeo, alumni of CPDM IISc, are winners of the Red Dot Design Award: Product Design 2023 for "Ultrahuman Ring"
- Anup Chander & Govind Sharma (CPDM MDes,alumni) were winners of the prestigious red dot award for their novel design of 'diverter' flip-flop

The James Dyson Award

- LifeBox was declared the national winner of the James Dyson Design Award 2021
- EpiSHOT—a unique reusable epinephrine autoinjector for patients suffering from severe allergic reactions

Lexus Design Award

- CleanRAT- Robotic Sweage Cleaner: IISc team comprising Prof Monto Mani (Students: Yogansh Namdeo and Ujjal Halifa), won the Lexus Design Award 2019
- LifeBox, an active heart preservation container for extending the out-of-body viable time during transport for transplant, which was the National winner of the James Dyson Design Award 2021

Some Notable

Alumni



Shaurya Rawat Founder, UX Designer The Geek's Lab, Delhi



Shamit Shrivastav
Associate Professor of Practice Design - FLAME University



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Pulin M Raje
Associate Design Director
Mckinsey & Company, New Delhi



Ami Sampat Lead of Design, Alexa Amazon India



Amit Singh Senior Design Manager Microsoft Hyderabad



Anas K. A.

Head of Design at designLAB
TCS Interactive, Kochi



Shanavas M.S.
Creative Director at TEQZO
Founder of Gemklip, Bangalore



Shilpa Marathe
Design Lead, Watson IoT
Industry Lab, IBM, Munich



Arunkumar Francis Sr. Motorcycle Design Lead Bajaj Auto, Pune



Debrup Sanyal Lead Designer, Design Mahindra & Mahindra, Mumbai



Dhruv Saxena Co-Founder & Designer Obvious, Bangalore



Guruprasad Rao Director & Mentor Imaginarium, Mumbai



Jaspreet Singh Lead Designer Tata Motors, Pune



Vinay Reddy CoFounder, Product Designer Sickle Innovations, Ahmedabad



Suman Devadula Head, School of Design, MIT World Peace University, Pune



Apoorv Shankar VP, Hardware at Ultrahuman, Bangalore



Srinidhi A.V. AGM- Design VIP Industries, Mumbai



Mona Sharma

Head of Product Design, Bempu
Health, TIMEs top 25 inventions



Unmesh Patki Senior User Experience Architect, Infosys, USA



Yogendra Solanki Associate Design Director IBM IX, Gurgaon



Nitin Gupta
Founder, Product Designer
Sickle Innovations, Ahmedabad



Prasanna Gadkari Experience Design Professional Amazon, Canada



Priyanka Pundhir UX Researcher Lead, Google Pay, Google, Singapore



Rachna Tiwary
Sr. User Researcher
PayPal, Sunnyvale

Alumni Footprint









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Contact Us

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26

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