



भारतीय विज्ञान संस्थान



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**Department of  
Design and Manufacturing  
Placement Brochure**  
Batch 2024-25



# 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.

# #1

**Overall Category**  
University Category  
Best Research Institute in India

**NIRF Ranking | Ministry of Education | Govt. of India**

# Message from the Chairman

## Amaresh Chakrabarti

Chair, Department of Design and Manufacturing (Erstwhile CPDM)

Design Synthesis and Creativity, Eco-Design and Sustainability, AI and Data Analytics, Product Informatics, Smart Manufacturing, Biomedical Devices, Sensors/Actuators



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 Faculties



## Dibakar Sen

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



Indian Institute of Science  
भारतीय विज्ञान संस्थान



## Pradipta Biswas

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



UNIVERSITY OF  
CAMBRIDGE



## Manish Arora

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



University of Twente  
The Netherlands



## Anindya Deb

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



University at Buffalo  
The State University of New York



## Vishal Singh

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



THE UNIVERSITY OF  
SYDNEY



## Abhijit Biswas

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

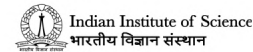


IIT Madras



## N.D. Shivakumar

Polymer based composites, Bio-Composites, Synthesis/ Manufacturing of lightweight materials, Computer Aided Design & Analysis of lightweight materials, Optimization & DOE based studies, Design and Application of developed/Novel lightweight materials.



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## Abhra Roy Chowdhury

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



NUS  
National University of Singapore



## B. Gurumoorthy

CAD, Product Informatics, Computational Metrology, Computer Aided Prototyping



Carnegie Mellon University



## Rina Maiti

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



IIT Bombay

# Students

Entry mode:  
**CEED/GATE**

Batch  
of **2023 –  
2025**



Agrini Chaturvedi



Ayush Chakrawarty



Bagisha Kumari



Bhavesh Katariya



Chanchal Verma



Harun Vignesh



Hemanth G N



Himangi Verma



Malavika Vijayan



Navin Kumar



Nidhi Kulkarni



Nishita Sree



Pallav Waykos



Pawan Kumar



Rachana G N



Shreya Patil



Somnath Thander



Spoorthy Kannur

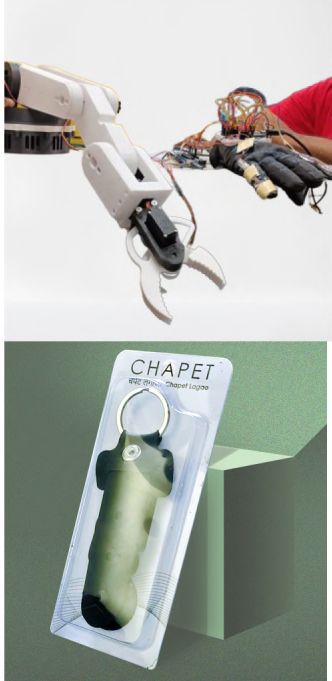


Yash Dudhpachare

- Total of **19 students**
- **9 Architects / Civil Eng.**
- **3 Mechanical / Automobile Eng.**
- **3 Electronics / Electrical Eng.**
- **3 Computer Sci.**
- **1 Biomedical Eng.**

# Our Work

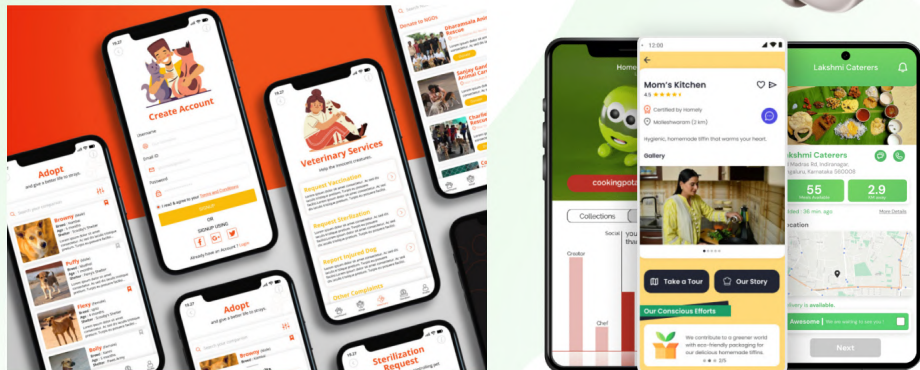
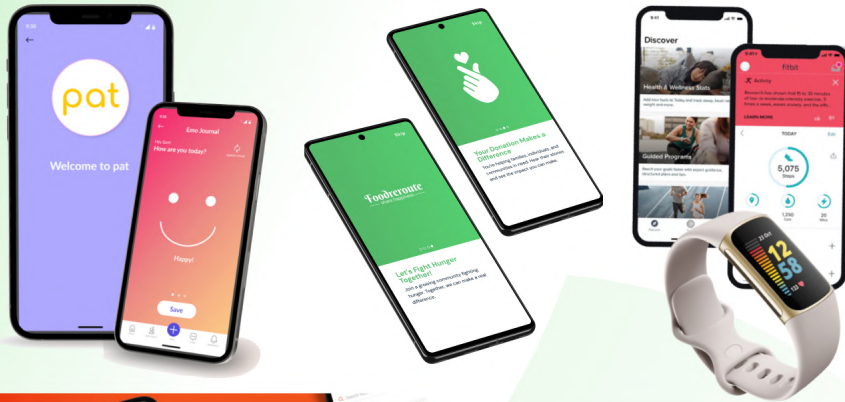
DM students have actively worked on various projects in diverse design fields, both on individual and group levels. The projects have varied from the redesign of products to the innovation of new ones. The highlights of our projects are extensive user research and high concept to patent conversion.



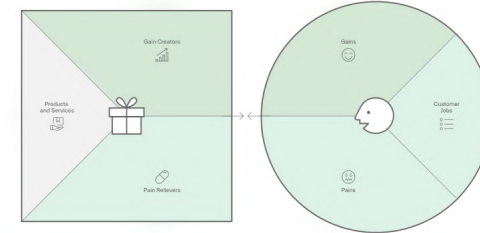
# Digital Design

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

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

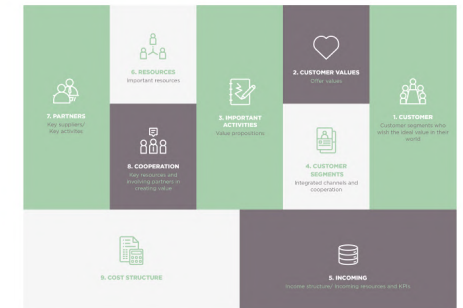
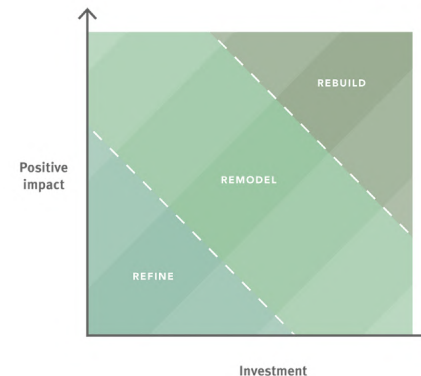


# Product Management



## Key Models and Frameworks

- Business Model Canvas (BMC)
- Fishbone Diagram (Ishikawa)
- Opportunity Horizon Map
- Value Proposition Canvas
- Market Segmentation
- Product Plan
- Product Roadmapping
- S Curves
- Product Evolution Cycle



# “ Empowering Innovation ”

M. Des. curriculum fosters a fusion of design thinking, engineering principles and business acumen.

## Curriculum

### Design

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

### Engineering

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

DM

### Management

- New Product Development (NPD)
- Product Design
- NPD- Strategy and Practice

### Department Electives

- Design of Automotive Systems
- CAE in Product Design
- Computer Aided Product Design
- Design of Biomedical Devices and Systems
- Process Technology & System Engg for Adv Microsensors and Devices
- Mechanism Design
- Human Computer Interaction
- Design and Society
- Methodology for Design Research
- Haptic Systems Design
- Computer Aided Design



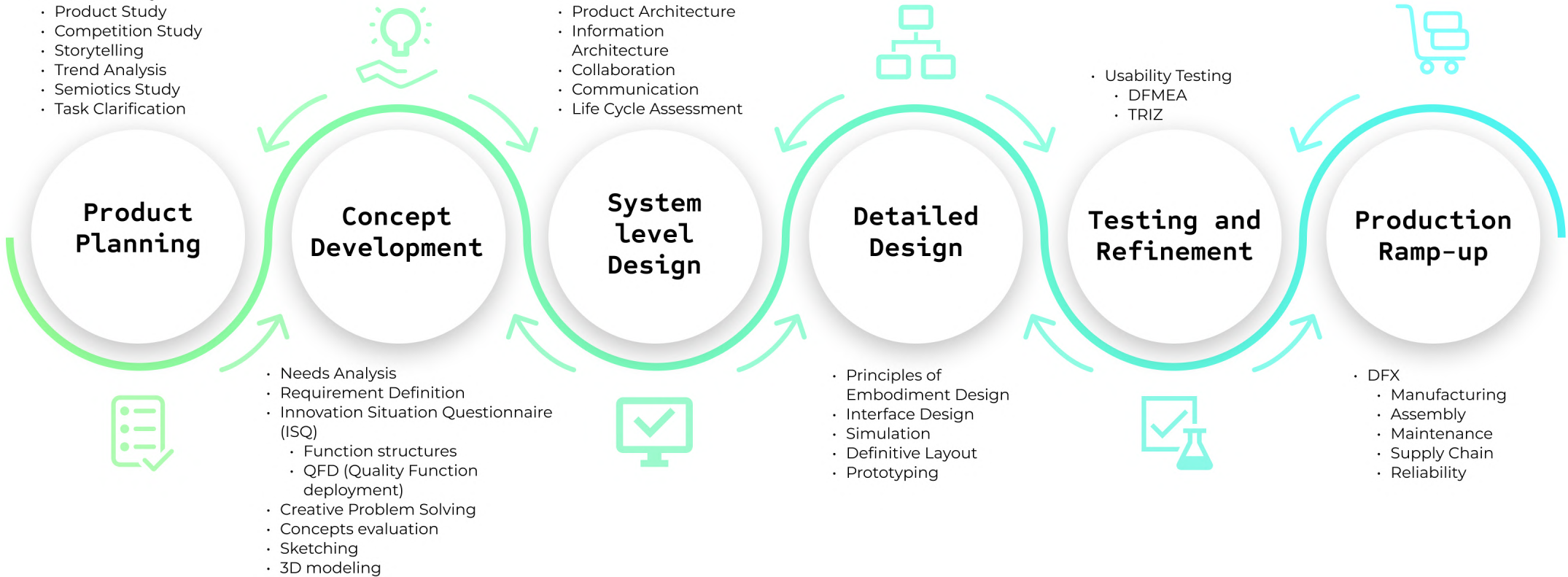
# Techniques & Tools

- Opportunity Identification
- User Research
- Empathy Mapping
- Habitat Study
- Market Study
- Product Study
- Competition Study
- Storytelling
- Trend Analysis
- Semiotics Study
- Task Clarification

- User Flow Development
- DFX
- Product Architecture
- Information Architecture
- Collaboration
- Communication
- Life Cycle Assessment

“  
Hit the ground  
running!  
”

We are ready to apply our knowledge and skills at every step of product development pipeline.



# Facilities



## IDEAS Lab

Innovation Design Study & Sustainability

## UTSAAH Lab

Universal Technology Solutions for Accessible & Affordable Healthcare

## CAR Lab

Creative Automotive Research

## HER Lab

Human Engineering Research Lab

## SCALE Lab

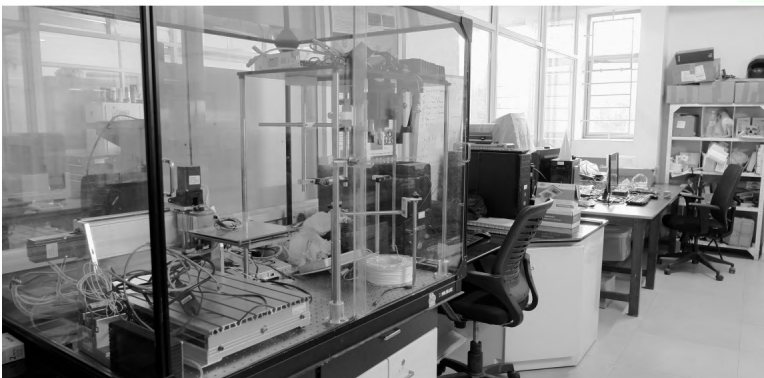
Computerized Anthropometry & Ergonomics Simulation

## IMPACT4IMPACT Lab

Innovation and Management of Property, Architectural and Construction Technologies for Impact

## RIMM Lab

Research in Materials and Manufacturing



## Su-Desi Lab

Sustainability by Design

## PLM Lab

Product Lifecycle Management

## VR Lab

Virtual Reality

## I3D Lab

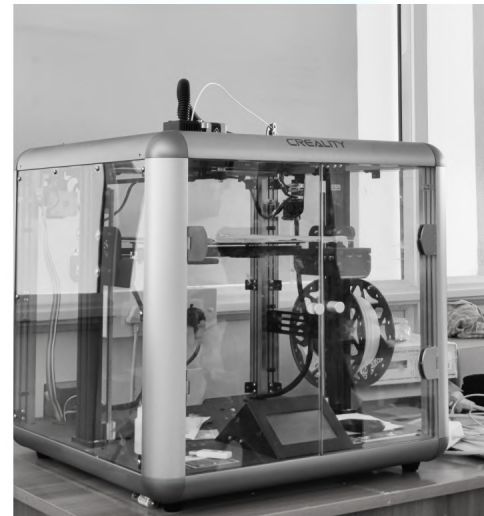
Intelligent Inclusive Interactive design

## RI Lab

Robotics Innovation

## InSPIRE Lab

Innovation Synthesis and Prototyping for Interdisciplinary Research and Engineering



# Event & Awards



**RIPPLES** - The Annual Design show of Department for Industry interaction



**ICoRD'23**  
9th International Conference on Research into Design



**I-4AM'24**  
3rd International Conference on Industry 4.0 and Advanced Manufacturing



**Lifebox** by Deval Karia. An active heart preservation container for extending out-of-body viable time during transport for transplant

**Silver Jubilee** Celebrations  
25 years of DM(CPDM)



**Meraki** by Komal Shah. A device for the treatment of urinary incontinence in women



**Ultrahuman** ring by Apoorv Shankar & Yogansh Namdeo

# Some Notable Alumni

DM's M.Des program boasts a vibrant alumni network of over 100 graduates, all making significant contributions across the country and internationally since its inception in 1997. These accomplished individuals have consistently brought recognition to CPDM through their achievements, garnering awards in diverse fields. Here are some of the many notable alumni with their remarkable achievements.



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



**Shamit Shrivastav**  
Associate Professor of Practice -  
Design - FLAME University



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



**Ami Sampat**  
Lead of Design, Alexa  
Amazon India



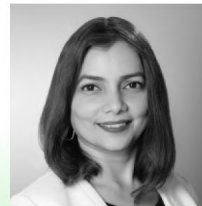
**Amit Singh**  
Senior Design Manager  
Microsoft, Hyderabad



**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



and many more..

# Contact Us

## Faculty Coordinators



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