

The Priority Areas specified by Government of India

The priority areas specified by Government of India are Teacher Education and Leadership, Library management and development, Conservation and Heritage science and management, curatorship and museum studies, architecture, and culture management, following domains under the MHRD's IMPRINT initiative:

Domains

I. Health Care

Domain Themes

Health Literacy and Healthy Living | Prevention and Primary, Community Healthcare | Diagnostic Imaging | Wearable Devices and Embedded Systems | Point-of-Care Diagnosis | Healthcare ICT | Drug Discovery, Design and Delivery | Regenerative Medicine | Surgical and Operative Solutions | Traditional Healthcare | Reducing Communicable Disease Burden | Reducing Non-Communicable Disease Burden | Assistive Technology and Self-Management | Healthcare Management & Legal Issues | Accelerating Healthcare Innovation literacy and Healthy Living | Prevention and Primary, Community Healthcare | Diagnostic Imaging | Wearable Devices and Embedded Systems | Point-of-Care Diagnosis | Healthcare ICT | Drug Discovery, Design and Delivery | Regenerative Medicine | Surgical and Operative Solutions | Traditional Healthcare | Reducing Communicable Disease Burden | Reducing Non-Communicable Disease Burden | Assistive Technology and Self-Management | Healthcare Management & Legal Issues | Accelerating Healthcare Innovation

2. Information & Communication Technology

Domain Themes

Layer 1: Data Acquisition and Processing

Sensors, Bio-Sensors & MEMS, Multimodal Data (Text, Video, Audio), Multilingual Data, Novel Interfaces

Layer 2: Communication

Data Communication and Networks, Spectrally Efficient Communication, Secured Communication, THz Technology, Wireless Frontends.

Layer 3: Computation

Encryption and Security, Power Aware Design

Data Analytics, Text Analytics, Cognitive
Computing Digital Humanities, Speech and Language Processing

Layer 4: Computation Infrastructure

Embedded Systems and VLSI, Verifiable and Reliable Systems,
Encryption and Security, Power Aware Design

3. Energy

Domain Themes

Energy Education | Conventional Energy Sources | Renewables |
Energy Storage | Hydrogen |
Energy Systems & Efficiency

4. Sustainable Habitat

Domain Themes

Architecture & Built Form | Urban Planning & Design | Physical Infrastructure |
Social Infrastructure |
Water & Sanitation | Transportation | Economy | Energy & Environment |
Governance | Housing | Resilience

5. Nano-technology Hardware

Domain Themes

SHAPE - Security, Healthcare, Agriculture, Pedagogy, Environment are indeed
the areas where India Grand Challenges
program can shape the country's future and make a significant impact through
clearly defined goals and objectives.

6. Water Resources & River Systems

Domain Themes

Content Pending

7. Advanced Materials

Domain Themes

Emerging Materials | Structural Materials | Functional Materials | Materials Genomics & ICME| Materials Education

8. Manufacturing

Domain Themes

A.1.1 Net-shape processes

A.1.2 Additive processes

A.1.3 Subtractive processes

A.2.1 Bulk properties

A.2.2 Surface properties

B.1 Geometrical Characteristics

B.2 Technological Characteristics

C.1 Machines

C.2 Tooling

D.1 Measurement Technology

D.2 Automation Technology

E.1 Manufacturing System

E.2 Practices

F.1 Typical manufacturing sectors

9. Security & Defence

Domain Themes

Life Sciences | Materials | Electronics and Communication Systems |
Combat Engineering Systems

10. Environmental Science and Climate Change

Domain Themes

Aerosols and Clouds | Air Quality | Carbon Cycle | Clean Energy Materials |
Climate Change | Climate Change Adaptation |
Climate Change-Extreme Events | Climate Modelling | Coastal Zones |
Data Assimilation | Drought Analysis |
Forestry | Geo-engineering | Glaciers | Hydro-Geo-Chemistry | Hydrology |
Indian Monsoon | Land Surface Modelling |
Mitigation and Policy | Natural Hazards Assessment | Rainfall Runoff Modelling |
Remote Sensing & GIS |
Sustainable Design and Manufacturing | Tropical Cyclones | Urban Floods |
Water Pollution | Water Resources |
Wind Energy