R&D
MANAGERS OF THE FUTURE

An Executive Programme

Good management practices have the potential to play an important role in enhancing the level of R&D spending undertaken by firms. Building capabilities of future R&D leaders in India will help complement the R&D spending by industry, leading to an increase in innovation output for firms and in turn the overall economy.

The 'R&D Managers of the Future' is an online learning programme designed for individuals considering a career as future R&D heads. The programme aims to train future managers to deal with various technical and management challenges that are likely to come their way, and also enhance the quality of R&D expenditure their organisations undertake.

R & D

MANAGERS OF THE FUTURE

PROGRAMME

KEY BENEFITS

1. Become future ready for technology and innovation related challenges

2. Learn key management lessons with applications in day to day working

3. Get familiar with multiple roles played by an R&D manager

4. Learn to build credibility and trust with internal and external customers

5. Enable frictionless collaboration with other functional areas

6. Learn to fit technology into corporate strategy

7. Learn to be proactive, receptive and responsive to changing technology needs

8. Benchmark against and learn from best practices in R&D

9. Improve firm level productivity and performance through better R&D Management

CHALLENGES

What are the challenges an R&D leader is likely to face?

- Credibility & Trust
- Operational bottlenecks/Functional Silos
- Identifying and retaining talent
- Uncertain demand for innovation
- Managing multiple R&D projects
- Embracing and tackling risk and uncertainty in innovation
- Commercialisation of R&D
- Balancing between exploitation and exploration
- Coordinating R&D and firm strategy

SKILLS

What are the skills that an R&D leader would need?

- Catalyzing Ideation
- Understanding business needs and strategy
- Collaboration & Compromise
- Speaking the Language of Senior Management
- Marketing R&D
- Understanding market dynamics and competitive environment
- Proactive Financial & IP Management
- Keeping a track of future trends
- Agility and Adaptability
- Communication

ROLES

What are the roles an R&D leader is likely to play?

- Manager
- Entrepreneur
- Team Player
- Innovation Portfolio Manager

Who is the programme for?

- Mid-level R&D professionals looking to lead R&D teams in the future, wishing to enhance their people and project management skills

- Mid-level managers, having some technical or design orientation and looking to transition into a more technical role to lead R&D teams in the future

- Current R&D heads and their direct reports

- Organisations willing to train their employees in R&D and Innovation Management can nominate their choice of employees for this programme

Duration of the programme

R&D Leaders of the Future programme will be delivered over a period of 3 months. Sessions to be held on Saturdays. One weekend will be an in-person residency and rest of the sessions will be delivered online.

Programme Fee

The programme fee is INR 2,20,000 + GST per participant. For organisations who are sponsoring more than one participant, the fee is INR 3,20,000 + GST for every two participants. The industry speaker sessions and other special sessions will be open for the wider R&D team of the organisations.

Course Structure

The programme will include case studies and interactive learning sessions with leading academics as well as industry experts. The programme will cover 14 core modules, individual projects and special sessions with industry speakers and other experts.

COURSE MODULES

- **Inaugural Session:** Role of R&D in India's future and the role of Industry in India's future

- **Making R&D matter to the firm:** Importance of R&D in a firm's strategy. Focused discussion with participants on their current firm practices and R&D strategy. The importance of effectively communicating this strategy to the board will also be discussed.

- **Link between Technology and Corporate Strategy:** How R&D activities can be better aligned with corporate strategy to achieve organisational objectives. To understand how technology & corporate strategy drive each other.

- **Building Innovation Capability:** Encouraging creativity at the organisation level and building and sustaining innovation-related capabilities for current and future strategies. What are barriers to innovation in organizations?

  Integrating innovation capabilities with different functional departments and people. This session will also cover mechanisms of managing explicit and implicit knowledge for sustaining innovation in the future.

- **Leadership & Communication:** Developing the individual as a technology leader, the importance of systems thinking and developing a view of the future as part of the R&D strategy. The leader will develop a culture and systems that encourage people to take risk and embrace failure.

  Focus on effective ways of communicating the importance of the R&D strategy to the board, internal stakeholders and the external stakeholders to get support for implementation.

- **Market and Building the R&D portfolio:** Understanding market dynamics and competitive environment and the importance of building an R&D portfolio.

  Introduction to Design Thinking tools and techniques and develop systematic processes for sustaining innovation.

  Product planning from a strategic perspective and importance of assessing product-market fit. It also covers how to commercialize R&D Outcomes.

- **Managing R&D Finances (Managing R&D as a corporate asset):** Introduction to portfolio management tools and decision matrices to optimise R&D investment portfolio.

  Understanding basic metrics of accounting and financial planning.

  Financial quantification of the R&D investment and analyse the cost of the project vs the benefit derived from it.

  Compliance and accountability for R&D finances.

- **Developing winning products:** How innovation happens in firms, the role of design and how to develop a winning product.

- **Linking R&D, Design & Manufacturing:** How to move R&D from the lab and into the shop floor?

- **Developing the product: collaborating within and outside:** Overcoming operational bottlenecks and functional silos. Understanding and developing external networks to undertake collaborative research.

  Highlight the importance and the benefits of collaborating with academic institutions and other organisations - industry-academia collaborations lead to new products and services. The session will also cover how these collaborations can create a win-win situation for the various partners and how the collaborations can be formalized through contract management.

- **IP Management:** Basics of intellectual property rights and its importance in R&D Management. The mechanisms of sourcing IP for research and innovation will also be covered.

  Practical aspects of IP creation and protection, managing technology transfer and mechanism of managing IP effectively will be covered. The session will also cover the legal aspects of technology transfer (inward/outward)

- **R&D Project Management:** This session focuses on effort estimation for short term and long term projects. It also covers issues related to coordinating with various collaborators and partners for timely execution of projects.

  This session focuses on maintaining the project budget, and how to manage risk and uncertainty related to projects.

- **Building an effective R&D team:** Importance of developing an effective R&D team, how to identify, develop and retain top talent and evaluating and developing future leaders.
  This session will focus on managing conflicts in teams, creating an environment where people can take risks of innovating and learn from their failures.

- **Critical Thinking and Effective Decision Making:** Importance of establishing trust and credibility among different stakeholders and importance of critical thinking and communication.

  How to use critical thinking and data for decision making and tools to mitigate cognitive biases to improve long term decision-making.

- **Communications:** Public understanding of Science and R&D in the organization and outside.

  This session will cover the importance of communication in managing the team. It will highlight the importance of understanding a nudge and how effective communication can help in motivating and managing people.

▼ FACULTY

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Certificate

Successful participants of the programme will be awarded with a certificate of completion signed by Ahmedabad University, CTIER and CII.

ABOUT AHMEDABAD UNIVERSITY

Ahmedabad University is dedicated to rigorous academic pursuit with a focus on building inquiry as a value through interdisciplinary learning. The University promotes an environment where students, working professionals, researchers and scholars explore resolution of complex problems with the faculty through hands-on approach rooted in data and discourse. Often, this learning process is mediated by projects, field work and a belief that good theory leads to good practice.

Ahmedabad University, located in India's first UNESCO World Heritage City, offers programmes across its four schools and four centres at bachelors, masters, and doctoral levels. Established in 2009 by the Ahmedabad Education Society, an 87 years old foundation, the University comprises eminent founders, a congregation of inspiring leaders, engaging scholars, industry experts and a talented pool of highly motivated faculty members.

ABOUT CTIER

The Centre for Technology Innovation and Economic Research (CTIER), based in Pune, has been incorporated under Section 8 of the Companies Act, 2013 in India. CTIER is completely autonomous and works with some of India's leading industry and academic experts in the field of innovation and technology policy. It aims to facilitate high quality economic research, provide a platform to inform policy making and impact higher education in India.

CTIER has been contributing towards improving the timeliness and quality of data, assessing the impact of policy measures introduced to promote R&D and identifying ways to create systemic change in India's R&D and innovation system. The Centre intends to raise the level of debate and awareness amongst policy makers, industry and students about the essential role of technical capability in economic development, and how it is best fostered. Please visit www.ctier.org for further information.

ABOUT CII

The Confederation of Indian Industry (CII) is a non-government, not-for-profit, industry-led and industry-managed organisation, playing a proactive role in India's development process. Founded in 1895, it is India's premier business association and has over 8000 members, from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 200,000 enterprises from around 240 national and regional sectoral industry bodies.

CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues, as well as partners with civil society organizations to execute corporate citizenship programmes.

www.ahduni.edu.in   www.cii.in   www.ctier.org