

Vision

To be at the summit of cutting-edge research, continuous knowledge enhancement, innovative pursuits and active industry engagements for transformative breakthroughs that contribute significant value to society.

Mission

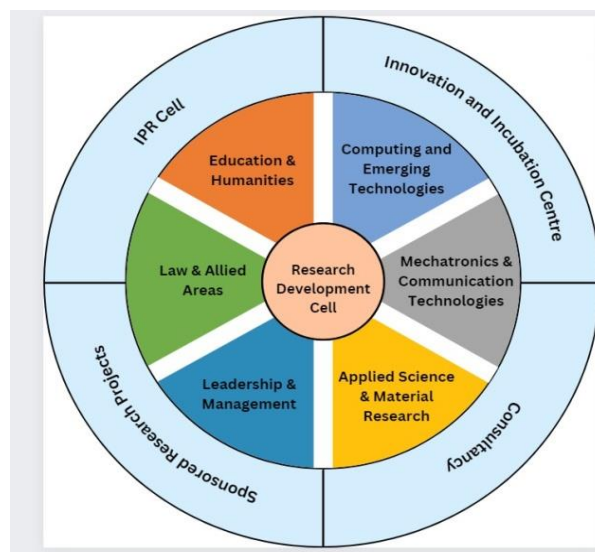
- a. To cultivate creativity and intellectual curiosity among students and faculty, by fostering a free environment, promoting experiential learning, and nurturing a research-oriented mindset.
- b. To develop robust multidisciplinary research practices thereby cultivating a distinctive research culture at the university.
- c. To forge ties between industry and academia unlocking potential for mutual improvement and progress.

Manav Rachna University (MRU) features a robust ecosystem for research catering to fundamental, applied, and multidisciplinary research, scholarly publications, and innovative ideas aligning seamlessly with current societal and industry demands. Our commitment to achieving research excellence spans multiple disciplines, facilitated by an integrated approach that fosters collaboration among researchers from diverse fields. The university houses a talented community of students and faculty excelling in research and innovation, creating a dynamic and stimulating environment that offers numerous unique research opportunities for **scholars**. Our mission extends to making significant contributions at both the national and international levels, creating and disseminating knowledge through articles, publications, products, prototypes, intellectual property, and accessible research to generate value for society.

Recognizing the inherent importance of a multidisciplinary approach that transcends conventional boundaries across diverse fields of study, it becomes evident that such an approach is indispensable in addressing major societal and cultural challenges. Exploring fundamental inquiries encompassing material science, alternative dispute resolutions, data analytics, 5G, teaching-learning processes, and management principles, MRU's research is propelled by Research Development Cell (RDC) supported by Research Executive Council (REC) and Research Advisory Committee (RAC). RDC implements a Policy for Promotion of Research

and Innovation with an aim to push creative ideas among students and faculty where they discover the exciting process of creating and disseminating new knowledge. The objective is to instill strong research practices, promoting a unique and vibrant research culture within the university. The policy is available at the link. With this viewpoint in mind, MRU's research plan is centered around establishment of an Innovation and Incubation Centre (IIC) and Six Research Groups – (i) Computing and Emerging Technologies, (ii) Mechatronics and Communication Technologies, (iii) Applied Science and Material Research, (iv) Leadership and Management, (v) Law and Allied Areas, and (vi) Education and Humanities. IIC and these research groups form the backbone of the entire university, providing a structure where researchers from all schools can engage, contributing their expertise to a spectrum of inquiries, from curiosity-driven exploration to solving immediate technological and societal demands.

These Research Groups are dedicated not only to fostering the potential of our students, researchers, and faculty but also to establishing ourselves as a center of excellence in research and innovation. They give students a chance to participate in active research in their respective fields of study, pursue passions and discern new interests. They aim to engage students in the processes of intellectual inquiry, problem solving and creative thinking, and enhance intellectual exchange and collaboration between students, faculty and the industry.



RDC not only enhances research capabilities but also actively fosters collaboration between MRU and the industry. The MRU Industry Consultancy policy is instrumental in creating a platform for faculty-industry interaction and the initiation of industrial consultancy projects. This engagement facilitates mutual understanding; the University gains insights into industry needs, while the industry recognizes the University's strengths in addressing their challenges.

Additionally, RDC places a strong emphasis on sponsored and collaborative research, encompassing activities like research, training, evaluative testing, and other scholarly and creative pursuits. Various sponsors, including individuals, corporations, foundations, governmental entities, non-profit organizations, and for-profit companies, may provide the necessary funds to support these initiatives. Private sector entities have the flexibility to serve as donors or sponsors based on the manner in which the funds are conveyed.

RDC actively promotes intellectual property, prioritizing the protection of research-generated intellectual properties and advancing technology transfer practices. Acknowledging the significance of safeguarding faculty and student intellectual property, MRU has introduced an Intellectual Property Rights (IPR) cell. This cell educates faculty and students on their intellectual property rights, empowering them to patent their innovative research and subsequently benefit stakeholders. Committed to nurturing an innovative culture, the IPR cell fosters the creation and development of intellectual property within the University. RDC has implemented an IPR policy and established procedures to convert knowledge into wealth, ensuring a prompt processing of applications for patents, designs, copyrights, and related matters.

Some Highlights of the Existing Research Ecosystem

- Students are guided to develop a research-oriented mindset through unique academic programs such as Introduction to Research (ITR). In the ITR program, which commences in the third semester and continues upto fifth semester, students delve into research methodologies, learn literature survey techniques, hone their paper writing skills, and enhance their presentation abilities, culminating in the creation of a research paper.
- University promotes Project-Based Learning (PBL) as an instructional method. PBL and research methodologies synergize seamlessly. In PBL, students engage in hands-on, real-world projects that integrate research practices. This approach fosters inquiry, critical thinking, and collaboration, mirroring the skills essential in research. PBL encourages

students to actively explore and apply knowledge, fostering a research mindset. The collaborative nature of PBL aligns with teamwork in research settings, and the holistic approach complements traditional research assignments. Together, PBL and research methodologies enhance students' understanding, practical skills, and readiness for research-driven environments.

- Students are encouraged to take up research and innovation, to turn into entrepreneurs and build a culture of becoming job givers rather than job seekers. For this MRU enacted a “Policy for Additional Internship/Start-Up/Innovation/Exchange programme to other organizations for Graduate Programme”. The student can take relaxation either in attendance criteria and /or earn extra credits under the following categories: A) Policy for internship in India or abroad excluding their routine summer internship which is mandatory by AICTE as per their policy. B) Start Up/Innovation Project Leading to National or International Competition/Patent/Prototype Development. C) Policy for Exchange Programme to Universities in India or Abroad.
- Research-based assignments are also an integral part of the curriculum.
- The university offers essential infrastructure facilities, encompassing high-end computing resources, e-resources, plagiarism software, Ansys, **Matlab**, **SPSS** available at various centres.
- Research promotion funds, in the form of Seed Money Grants, Internal Research Funds are provided to support innovative ideas from both students and faculty.
- Financial support is extended to faculty and students to facilitate their research pursuits.
- Recognition is awarded for published papers, reflecting the university's active commitment to promoting research and innovation.
- Numerous research projects are submitted to external research grant agencies, including Indian Council of Social Science Research (ICSSR), Department of Science & Technology, Department of Biotechnology (DBT), Government of India.

Research Publications

At MRU, Research publications form a fundamental pillar of the scientific and academic realms, playing a vital role in advancing knowledge, disseminating discoveries, and contributing to progress of the community. They provide the foundation for academic recognition, allowing researchers to build upon existing knowledge. Quality is assured through peer review, and global dissemination encourages collaboration. Beyond individual researchers, their significance extends to influencing education, serving as educational resources, and contributing to the continuous pursuit of innovation and understanding. This makes research publications indispensable for both academic and societal advancement.

