MANAV RACHNA UNIVERSITY

ANNUAL REPORT

ACADEMIC YEAR

2021-2022

Sector -43, Aravalli Hills, Surajkund Road,

Faridabad, Haryana -121003

CONTENTS

"Manav Rachna"

Manav Rachna carries forward the mantle of excellence and professionalism with the philosophy of Manav Rachna.

"Vidyantariksha"

This is a conjunction of the words 'vidya' and 'antariksha'. "Vidya means knowledge, information, the basis of creativity and innovation. It is the foundation of technology and envisages the future. "Antariksha means 'the sky', the space which we belong to or exist. It can be broken into 'antar' and 'ikshan' which means inner vision. Hence the combination, the core promise of Manav Rachna becomes "the reality of inner vision or root of all knowledge".

OFFICERS OF THE UNIVERSITY

CHANCELLOR
Dr. Prashant Bhalla

VICE CHANCELLOR
Prof. (Dr.) I.K. Bhat

VICE PRESIDENT, MREI

Dr. Amit Bhalla

PRO VICE CHANCELLOR

Prof. (Dr.) D.S. Sengar

REGISTRAR

Dr. Kameshwar Singh

DEAN ACADEMICS

Prof. (Dr.) Sangita Banga

DEAN RESEARCH

Prof. (Dr.) Pradeep Kumar Varshney

Prof. (Dr.) Shruti Vashist

DEAN STUDENT WELFARE

(30-06-2021 to 27-12-2021)

Prof. (Dr.) Geeta Thakur

DEAN STUDENT WELFARE

(27-12-2021 to 30-06-2022)

PROCTOR

Prof. (Dr.) D K Sharma

DEPUTY CONTROLLER OF EXAMINATION

Ms. Shefali Chopra

DEANS OF FACULTIES

FACULTY OF ENGINEERING & TECHNOLOGY

Prof. (Dr.) Sangita Banga (30-06-2021 to 27-12-2021)

DEAN ENGINEERING & DEAN EXAMINATION

Prof. (Dr.) Shruti Vashist (27-12-2021 to 30-06-2022)

FACULTY OF APPLIED SCIENCES

Prof. (Dr.) Pradeep Kumar Varshney

FACULTY OF MANAGEMENT & COMMERCE

Prof. (Dr.) Parul Jhajharia

FACULTY OF EDUCATION & HUMANITIES

Prof. (Dr.) Babita Parashar

FACULTY OF LAW

Prof. (Dr.) D.S. Sengar

<u>Executive Summary</u>

Manav Rachna University (MRU) is a leading State Private University (established vide Haryana State Legislature Act No 26 of 2014 & under Section 2(f) of UGC Act 1956), and recognized by UGC, offering globally relevant education. MRU is listed on the official website of the Government of Haryana. The University evolved from Manav Rachna College of Engineering (MRCE), which was established in 2004. The Campus is spread over approximately 10.48 acres with a built-up area of about 21982.46 sq.mts. University campus just 15 Km away from South Delhi, provides state-of-the-art facilities and ambience for a conducive learning environment.

A well-established teaching and learning process guided by the global best practices and a culture of academic excellence promoting research, innovation & entrepreneurship. Programs offered at the School of Engineering, School of Law and School of Education and Humanities are approved by the respective regulatory bodies like AICTE, BCI, NCTE & RCI.

Manav Rachna University is among the Top 2 Emerging Engineering Institutions of India and has been ranked the No. 1 Engineering Institution in India for Research Capability & Placements in the Times Engineering Survey 2022. The University has been bestowed with QS I-GAUGE, overall DIAMOND rating. It has received QS I-GAUGE DIAMOND RATING for Excellence in Teaching and Learning, Faculty Quality, Facilities, and Social Responsibility, and QS I-GAUGE PLATINUM RATING for Employability and Academic Development.

Manav Rachna University has been recognized as a valuable Swayam-NPTEL local chapter with rating of 'A'. Innovation Incubation Council (IIC) of MRU established under AICTE-Ministry of Innovation Cell, GOI received 3 Star Rating for the year 2021-22. University has collaborated with the leading universities and Institutions both at global and national level for delivering the best education to its students. It has strong industry connections for the design and delivery of various courses.

The University upgrades its curriculum to keep pace with the latest and relevant trends.It has incorporated courses like Artificial Intelligence, Machine Learning, Data Analysis, Mechatronics, Robotics, Nanotechnology, Financial management, HR Management and

many more to impart training and prepare its students for leadership positions of tomorrow. The academics at MRU is designed towards providing the students a strong background in fundamentals, an ability to translate it to real-life problems and a capacity to design, build and analyze different products, processes and systems. Guided by international best practices, the teaching-learning process ensures the development of Global Graduate Attributes as recommended by various professional bodies/societies.

The academic process is outcome based and ensures development of the desired skill set. Choice Based Credit System provides flexibility to the students to take courses from the areas of their interest. Learner Centric Education with latest pedagogical approaches like active learning, collaborative and cooperative learning, agile methodology ensures holistic development of graduates who understand the impact of their actions/ decisions on the society and environment.

The University envisions developing Sustainable Development as a thrust area of Research and Innovation. The research training provided to our graduate students creates the next generation of leaders well-prepared to advance knowledge and transfer of technology. Several Live Projects are being given by Industry to the UG students to work on and to come out with innovative solutions. Any new Knowledge created by the Students and Faculty through their research and innovation is disseminated through publishing of books, research papers in the reputed Journals and filing of Patents. The dedication and hard work of the faculty and students is acknowledged in terms of awards & recognition they receive at different forums. Entrepreneurial skills is given its due importance and the University has established its Business incubation Centre.

We continually seek feedback from all our stakeholders, analyze it and take actions wherever required. We are conscious of the need to adopt various measures for quality assurance and have taken suitable measures in that direction. Transparency in all our operations, emphasis on an honest and sincere approach, has gained us respect and we are the preferred choice of the faculty and students in Northern India.

CHAPTER: 1

ABOUT THE UNIVERSITY

1.1 Approval of Statutory Bodies

Manav Rachna University is a State Private University (established by Haryana State Legislature Act No 26 of 2014 & under section 2(f) of UGC Act 1956). The University has evolved from Manav Rachna College of Engineering (MRCE), a NAAC Accredited 'A' Grade institute.

1.2 Vision

Manav Rachna University envisions to educate students in frontier areas of knowledge enabling them to take up challenges as ethical and responsible global citizens.

1.3 Mission

- To impart outcome based holistic education
- To disseminate education in frontier areas
- To produce globally competitive, ethical and socially responsible human resources
- To produce human resources sensitive to issues of Environment and Sustainable Development
- To develop Environment and Sustainable development as thrust area of research and development.

1.4 Governance

Manav Rachna University is guided and mentored by robust committees of stalwarts across academic, administrative and financial verticals. The boards and committees, their distinguished members and other important details are listed as follows:

S. No	Boards and Committees
1.4.1	**Governing Body** The Governing body is the highest decision-making authority of the

	University. All the movable and immovable property of the University vests in it. The Governing Body provides general superintendence and direction to the University and in particular, regulates and controls the functioning of the University in accordance with the provisions of the applicable Acts, Statutes, Ordinances, Rules, Regulations, Notifications and Orders etc. In academic year 2021-22, the Governing Body met twice i.e. on 7th August 2021 and 21st January 2022. **Members** 1. Dr. Prashant Bhalla, Chancellor/Chairman 2. Dr. Amit Bhalla, Vice President, MREI 3. Prof. I.K. Bhat, Vice Chancellor 4. Ms. Anita Chaudhary, IAS (Retd.) Former Secretary, GOI 5. Dr. Shalini Tuli, Associate Professor, Govt. College 6. Sh. Amit Kumar, FCA 7. Sh. Rajeev Malhotra, CFO 8. Col. (Retd.) V.K. Gaur, Advisor, MREI 9. Dr. M.M. Kathuria, Trustee, UET 10. Dr. N.C Wadhwa, DG, MREI 11. Prof. Sanjay Srivastava, MD MREI & VC MRIIRS
1.4.2	**Board of Management** The Board of Management (BoM) is the Chief Executive body of the University and works under the overall directions of the Governing Body. The role of BoM is to establish and monitor the achievement of the University's mission and Objectives. This includes, formulation and monitoring of academic standards, benchmarks and goals; establishment of academic and research units; supervision of the University's finances and budgetary processes; conducting institutional performance evaluations; compliance of the University's statutory and regulatory responsibilities; liaison with external agencies and evaluation of the performance of the senior University functionaries. In academic year 2021-22, the BOM met three times i.e. on 07th August, 2021, 21st January, 2022 and 30th June, 2022.

	Members
	1. Prof. I.K. Bhat, Vice Chancellor, MRU- Chairperson
	2. Secretary to the Govt. of Haryana, Higher education or his nominee
	3. Dr. Amit Bhalla, Vice President, MREI
	4. Prof. (Dr.)V.K.Mahna, Ex-Pro-VC, MRU
	5. Sh. Rajeev Kapoor, ED & Group HR-Head, Uno Minda Industries
	6. Mr. Navdeep Chawla, President – FIA
	7. Dr. M.M. Kathuria, Trustee, UET
	8. Prof. Sangita Banga, Dean Academics, MRU
	9. Prof. Shruti Vashisht, Dean, DSW
	10. Prof. Pardeep Kumar Varshney, Dean-Research, MRU
	11. Prof. Versha Vahini, Associate Dean & HoDLaw, MRU
	12. Prof.(Dr.) Jyoti Pruthi, Associate HoD, CST
	13. Registrar, Member Secretary
1.4.3	**Academic Council**
	The Academic Council is the principal academic body of the University. It exercises general supervision over the academic policies of the University, subject to the provisions of the Act, Statutes, Ordinances of the University, The Academic Council is responsible for evaluation and approval of overall educational policy, academic degree programs, requirements for admission, academic honors and awards etc. at the University. In academic Year 2019-20 the Academic Council met three times i.e on 20th August, 2021, 30th October, 2021 and 16th March, 2022.
	Members
	1. Prof. I.K. Bhat, Vice Chancellor-Chairman
	2. Prof. Raj Senani, Professor Emeritus & Former Director, NSIT now, Netaji Subhash University of Technology, Delhi
	3. Prof. M.L. Singla, Professor, Faculty of Management Studies, University of Delhi
	4. Prof. Vikram Goel, Professor, Computer Science and Engineering, IIIT Delhi, Delhi
	5. Prof. (Dr.) S.K. Garg, Professor, Delhi Technical University

	6. Dr. Kanupriya Sachdeva, Professor, MNIT, Jaipur
	7. Prof. Devender Kumar, Professor Delhi Technological University, Delhi
	8. Prof. Anita Rastogi, Professor, Faculty of Education, J.M.I.U., Delhi
	9. Prof. Sangita Kansal, Delhi Technological university, DTU
	10. Dr. V.K. Ahuja, Associate Professor, Law, Delhi University, Delhi
	11. Prof. Sangita Banga, Dean Academics
	12. Prof. Parul Jhajharia, Dean-Management and Commerce, MRU
	13. Prof. Pardeep Kumar Varshney, Dean-Reseach, MRU
	14. Prof. Versha Vahini, Associate Dean-Faculty of Law, MRU
	15. Dr. Babita Parashar, Dean-Faculty of Education and Humanities, MRU
	16. Prof. Shruti Vashisht, Dean, DSW
	17. Ms. Hanu Bhardwaj, HoD, CST
	18. Prof. Sujata Nayak, HoD, Mechanical Engineering
	19. Dr. Sudhish Shukla, HoD, Chemistry
	20. Dr. Rashee Singh, HoD, Education and Humanities
	21. Dr. Deepa Arora, HoD, Mathematics
	22. Dr. Hardeo Thakur, Associate Professor, CSE
	23. Dr. S.K. Bose, Associate professor, Law
	24. Dr. Subodh Saluja, Associate Professor, Management
	25. Dr. Megha Mittal, Associate Professor, Chemistry
	26. Dr. Charu Pathak, Associate Professor, ECE
	27. Shri Joginder Singh, Associate Professor, M.E.
	28. Dr. Savita Sharma, Asst Professor, Education
	29. Dr. Jyoti Pruthi, Associate professor, CSE
	30. Dr. Jai Prakash, HoD-Physics
	31. Dr. K. Singh, Registrar (Member-Secretary)
1.4.4	**Finance Committee** The Finance Committee is the principal financial body of the University. The main task of the Committee is to take care of the Financial matters of

	the University. In academic year 2021-22, the Finance Committee met twice i.e. on 7th December 2021 and 15th March 2022. **Members** 1. Prof (Dr.) I.K Bhat, Vice chancellor 2. Dr. Amit Bhalla, Vice President, MREI 3. Dr. M.M. Kathuria, Trustee, UET 4. Prof. Sangita Banga & Dean Academics, MRU 5. Sh. Amit Kumar, FCA 6. Dr. Kameshwar Singh, Registrar MRU 7. Sh. Rajeev Malhotra, Chief Finance & Accounts Officer, Member Secretary
1.4.5.	**Advisory Board Faculty of Law** The Advisory Board is constituted to advise, guide, supervise and steer the holistic growth of the faculty of law so as to take it to greater heights. In the academic year 2021-22, the Advisory met 28th November 2021. 1. Hon'ble Mr. Justice R.C. Lahoti (Former CJI) Chairman 2. Hon'ble Mr. Justice Amitava Roy, Former Judge, Supreme Court of India 3. Hon'ble Mr. Justice K.K. Lahoti (Former Acting Chief Justice, Hon'ble High Court of Madhya Pradesh) Member 4. Hon'ble Mr. Justice Kailash Gambhir (Former Judge, Hon'ble High Court of Delhi) Member 5. Hon'ble Mr. Justice Rajiv Bhalla (Former Judge, Hon'ble High Court of Punjab and Haryana) Member 6. Mr. Atmaram Nadkarni (ASG, Government of India) Member 7. Mr. P. K. Malhotra, Former Law Secy., GOI 8. Mr. Arvind P. Datar, (Senior Counsel) Member 9. Mr. Ravindra Srivastav (Senior Counsel) Member 10. Mr. Parag Tripathi (Senior Counsel) Member 11. Mr. Gourab Banerji (Senior Counsel) Member 12. Mr. Sanjeev Sharma (Senior Counsel) Member 13. Mr. Gopal Jain (Senior Counsel) Member

	14. Mr. Ashok Gupta (Senior Counsel) Member
	15. Mr. Vinay Bhasin (Senior Counsel) Member
	16. Mr. Jasbir Singh Bajaj (IAS) Member
	17. Mr. R. K. Bajaj, Former Chief Commissioner – IT Member
	18. Mr. Sudhir Sharma (Partner, Luthra & Luthra) Member
	19. Mr. Anup Trehan (Partner, Access Law) Member
	20. Mr. Shashank Garg (Partner, Advani & Co.) Convener
1.4.6	**Advisory Board Manav Rachna Centre for Peace & Sustainability** The Advisory Board is constituted to advise, guide, supervise and steer the holistic growth of the Centre so as to take it to greater heights. In the academic year 2021-22, the Advisory Board met on 18th May 2022. **Members** 1. Dr. Karan Singh (*Indian politician, philanthropist and poet), Chairman* 2. Dr. Prashant Bhalla, Chancellor 3. Dr. Amit Bhalla, Vice President, MREI 4. Hon'ble Mr. Justice R.C. Lahoti (Former CJI) 5. Swami Gyananandji, Spiritual Guru, G.I.E.O. Gita & Shri Krishan Kripa Sewa Samiti 6. Dr. Ved Prakash, Former Chairman, University Grant Commission 7. Dr. Muzaffer Ahmad, Former Director General health Govt of J&K 8. Dr. Rajendra Shende, Chairman Terre Policy Centre 9. Prof. Markandey Rai, National Chancellor, IAEWP, Chancellor, the Global Open University, Nagaland 10. Dr. Meenakshee Gopinathan, Indian educationist, political scientist, writer 11. Dr. Anand Prakash, Professor & Head, Department of Psychology, Delhi University 12. Mr. Vishesh Gupta, Chairperson and Board of Directors of Bharat Soka Gakkai (BSG) 13. Dr. Jyotsna Singh, Director, Dara Shikoh Centre, J & K. Amar Mahal Museum & Library, J & K

	14.	Dr. Sushila Bhan, Chairperson, Institute for Peace Research & Action
	15.	Lt. Gen S. P. Kochhar, Retired Signal Officer in Chief- Indian Army
	16.	Mr. Anuj Sinha, Chairman of the Board at Network of Organisations for S&T Communication
	17.	Prof. Sanjay Srivastava, MD MREI & VC MRIIRS
	18.	Prof (Dr.) I.K Bhat, Vice chancellor
	19.	Dr. Geeta Thakur (Member Secretary)

1.5 Other Committees of the University

A well-organized University set up requires a lot to be monitored for smooth functioning and overall excellence. To name a few, such as attendance, feedback, course uploading in this regard. Managing this entire gamut is not a one man show but it requires a collaborative effort from all staff members. University therefore works in a more decentralized manner through its various committees. These committees are empowered, have more autonomy and thus help in quick decision making. All the committees are headed by coordinators with defined roles and responsibilities to perform.

COMMITTEES		
Committee Name	**Coordinator & Team Members**	**Roles and Responsibility**
Board of Discipline	Prof. S.K.Shukla – Proctor	To consider the matter concerning maintenance of discipline among the students in the University
	HoD concerned and Hostel warden to which act of indiscipline pertain – Member	To enquire into the act of indiscipline or misconduct committed by a student(s) whenever such cases are referred to the Board of Discipline and to submit their findings, conclusions, and recommendations for the quantum of punishment under the provision of this ordinance.
	Dr. Sandeep Kumar, Associate Professor, Physics- Member	To supervise and monitor the discipline ecosystem prevailing in the University

	Ms. Hanu Bhardawaj, Associate Professor, Member	To maintain liaison with the police authorities and concerned departments of the Government, neighboring institutions and the authorities of the University regarding maintenance of law and order in the University.
	Dr. Yogita Sharma, Associate Professor - Member	To organize counseling sessions and liaisoning with parents of the guardians of the students.
	Ms. Simran Singh, Assistant Professor- Member Secretary	To perform such other functions as may be assigned to it by the Vice Chancellor from time to time.
	Mr. A.K. Mishra, Sports Office and Manager Operations- Permanent Invitee	
Annual Report	Prof. Sangita Banga, Dean Academics – Chairperson	The committee shall function under overall supervision and patronage of the Dean Academics and will be required to submit the Draft Annual Report within two month time.
	Prof. Parneet Dhaliwal, Prof. CSE- Convenor	
	Prof. Shruti Vashisht, Dean - Engineering & Examination- Member	
	Prof. Megha Mittal – Member	
	Dr. Kaveri Sharma Associate Professor, Law- Member	
	Dr. Chhavi Kulshreshtha, Associate Prof. Education- Member	
	Dr. Ritu Sharma, Asst. Professor, Education & Humanities – Member	
	Dr. Niharika Thakur, Asst. Professor – Member	
Anti-Ragging Committee	Prof. Ajit, Proctor (Mechanical)	To curb the menace of ragging in the Institution
	Prof. S.K.Shukla, Professor, Chemistry- Member	To make surprise raids on hostels, and other vulnerable places having potential of, ragging and will be empowered to inspect such places
	Prof. Sachin Lakra, Professor, CST- Member	To conduct an on the spot inquiry into any incident of ragging referred to it by the Head of the University or any member of the Faculty or any member
	Prof. Hardeo Kumar Thakur, Professor, CST-	

	Member	of the staff or any student or any parent or guardian or any employee of a service provider or by any other person
	Dr. Subodh Saluja, Associate Prof., Mgmt. - Member	
	Dr.Sanjay Singh, Associate Prof., CST - Member	
	Dr. Aditya Sharma,Physics- - Member	
	Dr.Yogita Sharma, Associate Prof., Mgmt. - Member	
	Dr.S.K. Bose, Associate Prof., Law. - Member	
	Dr. Akhilesh K. Dwivedi, Associate Prof., Humanity- Member	
	Mr. A.K.Mishra, Sports Officer	
Grievance Redressal Committee	Dr. Sangita Banga, Chairperson	The Committee shall deal with all the Grievances directly which are related to the common problems at Department/ University level both Academic and Administrative.
	Dr. Jyoti Pruthi, Member	
	Dr. Babita Parashar, Member	
	Dr. S.N.Shukla, Member	
	Mr. A.K.Mishra, Member	
	A representative of the students (to be nominated by the Chairperson)	
Board of Discipline	Prof.S.K.Shukla, Proctor	To consider the matters concerning maintenance of discipline among the students in the University
	Dr. Sandeep Kumar, Associate Professor	To enquire into the acts of indiscipline or misconduct by student(s) whenever such cases are referred to the Board of Discipline and to submit their findings, conclusions and recommendations for the quantum of punishment under the provision of this Ordinance to the Vice Chancellor.
	HoD concerned and Hostel warden to which act of discipline pertain	To supervise and monitor the discipline climate prevailing in the University

	Ms. Hanu Bhardwaj, Associate Professor	
	Dr. Yogita Sharma, Associate Professor	
	Ms. Simran Singh, Assistant Professor	
Internal Complaint Committee & Women Cell	Prof. Shruti Vashisht - Chairperson	Create and communicate a detailed policy.
	Prof. Versha Vahini, - Member	Ensure awareness and orientation on the sexual harassment at work place
	Ms. Hanu Bhardwaj, Associate Professor – Member	Ensure complaint committee is trained in both skill and capacity.
	Mr. Sandeep Kumar, Associate Professor – Member	Prepare an annual report and report to the Vice Chancellor
	Dr. Shobha Srivastava, Dy. Registrar, Admin	
	Mr. Neeraj kaushik, Executive (Academic)	
	Dr. Archana Bhatia, Chairperson, Nari Uthan Shikshan Shashaktikaran – Member	
Website Committee	Dr. Mrinal Pandey, Associate Professor-CST - Coordinator	**The Website Coordinator will:**
	Ms. Gaganjot Kaur, Asst. Professor-CST – Member	(1) Reviewing the specific portions of website for its contents accuracy (2) Managing Content (3) Maintaining Web Design (4) Maintaining continuity of themes, layout (5) Streamlining navigation (6) Updating contents (7) Ask from the Dean's HoD's for their respective areas contents and events information (8) Communicate with the Web Team to keep apprised of developments (9) Coordinating with the team members reviewing website contents time to time to match with the updations in the university information database (11) Give consolidated feedback to Dean's and HoD'sz
	Mr. Mandeep Bhadana, Asst. Professor-ME – Member	
	Ms. Rashi Banerji, Assistant Professor, Member	
	Dr. Kiran Gupta, Associate Professor-Faculty of Education & Humanities – Member	
	Dr. Ankita Pandey, Asst. Professor-Maths – Member	
	Dr. Jaya Tuteja, Asst. Professor-Chemistry – Member	
Procurement Committee	Dr. Arpit Sand, Department of Chemistry-Coordinator	(1) To give their recommendations for the procurement of first phase equipment for the establishment of

	Dr. Aditya Sharma, Physics Department, Member	Manav Rachna University Instrumentation Centre (MRUIC). (2) To invite quotations from reputed vendors
	Dr. Priti Gupta, Chemistry Department, Member	
	Dr. Vinayak V. Pathak, Chemistry Department, Member	
	Dr. Jyoti Chawla, ASH Department, MRIIRS	
Security Lapses & Losses	Prof. Versha Vahini, Professor – Chairperson	To investigate the security lapses and losses, if any and suggest measures to improve the same.
	Mr. Satish Arora, CVO – Member	
	Mr. A.K. Mishra, Sports Officer - Member	

CHAPTER: 2
ACADEMICS AT MRU

Manav Rachna University, evolved in the year 2014 under the Haryana State Legislature Act No. 26 of 2014 has been humming with activity over several years and has advanced in every way. By implementing modern, cutting-edge, and need-based programmes at both the undergraduate and graduate levels, the university has improved its reputation as an academic institution. In particular, the University has introduced integrated programmes in Education, Law, and the Humanities as well as cross-disciplinary courses in Engineering, Applied Sciences, and other fields, to name just a few.

Manav Rachna University is bestowed with QS I-Gauge Gold rating. In recognition of the digital transition and the university's level of readiness for online education amid the global pandemic, QS I-Gauge has certified Manav Rachna University as a globally recognised and benchmarked higher education institution providing online education. According to the Times Engineering Institutes Survey 2022, Manav Rachna University is one of the Top 3 rising Engineering Institutes in the country. In terms of placement and research capability, it is also one of the most promising and developing institutes.

The university is a regional NPTEL chapter and has been designated as Nodal Centre for Virtual Labs in partnership with IIT, Delhi. Manav Rachna University's Faculty of Law is honoured to be a Foundation Member of the LSAC Global Law Alliance – a group of colleges and universities that provide the highest quality legal education to India's future lawyers. All the programmes offered under the Faculty of Education are NCTE approved.

2.1 Schools of the University

2.1.1. School of Applied Sciences

2.1.2. School of Engineering

2.1.3. School of Management and Commerce

2.1.4. School of Education and Humanities

2.1.5. School of Law

Under the five Faculties, there exist different departments offering Undergraduate; Post Graduate and Doctoral Programs.

2.1.1 School of Applied Sciences:

2.1.1.1 **Department of Chemistry**:
- B.Sc. (Hons.) (3 year): Chemistry
- M.Sc. (2 year): Chemistry
- Ph.D.

2.1.1.2 **Department of Mathematics**
- B.Sc. (Hons.) (3 year): Mathematics
- M.Sc. (2 year): Mathematics
- Ph.D.

2.1.1.3 **Department of Physics**.
- B.Sc. (Hons.) (3 year): Physics
- M.Sc. (2 year): Physics
- Ph.D.

2.1.2. School of Engineering:

2.1.2.1 **Department of Computer Science and Technology**
- B.Tech. (4 year) / B.Tech. Lateral Entry (3 year) Computer Science & Engineering
- With Specialisation in AI and Machine Learning, Cloud DevOps and automation, Cyber Security and Threat Intelligence
- B.Tech. (4 year) with Specialisation in M.Tech. (2 year) Computer Engineering
- Ph.D.

2.1.2.2 Department of Electronics and Communication Engineering
- B.Tech. (4 year) / B.Tech. Lateral Entry (3 year) Electronics & Computer Engineering, with Specialisation in VLSI Design and Verification
- Ph.D.

2.1.2.3 **Department of Mechanical Engineering**
- B.Tech. (4 year) / B.Tech. Lateral Entry (3 year) Mechanical Engineering, with specialization in Smart Manufacturing and Automation
- M.Tech. (2 year): Mechanical Engineering
- Ph.D.

2.1.3. School of Management and Commerce:

2.1.3.1   Department of Management and Commerce

- Bachelor of Business Administration
  - ➢ Bachelor of Business Administration (BBA- Finance & Accounts) integrated with CMA Program, USA and endorsed by Institute of Management Accountants, USA.
  - ➢ Bachelor of Business Administration (BBA- Business Analytics).
  - ➢ Bachelor of Business Administration (BBA- Entrepreneurship & Family Business.
  - ➢ Bachelor of Business Administration (BBA- Health Care Management) in association with Cygnus Hospitals, India.
  - ➢ Bachelor of Business Administration (BBA-Operations Management with Specialization in Supply Chain Management, Logistics & Projects Management).
- Ph.D.

2.1.4. School of Education and Humanities:

2.1.4.1 Department of Education and Humanities

- Integrated B.Sc. B.Ed. (4 year)
- Integrated B.A. B.Ed. (4 year)
- B.Ed. (2 year)
- B.Ed. Special Education (2 year)
- Ph.D.

2.1.5. School of Law:

2.1.5.1 Department of Law

- B.A. LL.B. (Hons.) (5 year)
- BBA. LL.B. (Hons.) (5 year)
- B.Com. LL.B. (Hons.) (5 year)
- LL.M. (1 year)
- LL.M. (2 year)
- Ph.D.

2.2 Doctoral Program:

Manav Rachna University is a multidisciplinary & interdisciplinary research driven University. University invites on-line Applications from the eligible candidates for admission to Doctoral (Ph.D.) Programme as per UGC Minimum Standards and Procedures for Awards of M. Phil/ Ph.D. Degree Regulations, 2016 dated 05.05.2016 published in the Gazette of India dated 05/07/2016.

AREAS OF EXPERTISE AVAILABLE IN THE DEPARTMENTS
Significant research is being done in all of the faculties. The University offers full-time Ph.D. programmes in a number of Faculties in an effort to maintain the research zeal. In general, the following key areas are the focus of research:

1. Computer Science & Technology: - Artificial Intelligence, Pattern Recognition, Machine Learning, Data Mining, Big Data Analysis, Block chain Technology, Search Engine and Hidden Web, Education Technology, Green Computing, Soft Computing, Genetic Algorithms, Communication Systems & Networks, Network Security, Computational Models & Optimization.

2. Electronics & Communication: - Antenna Design, Affordable Healthcare Devices, Human Machine Interaction, Digital Filter Design, Computer Vision and Image Processing, Digital Hardware Design for Biomedical Instruments, VLSI Design, Power System Analysis, Internet of Things, Embedded System Design, Wireless Communication, Energy Harvesting, Solar Cells.

3. Mechanical Engineering: - Tribology-Thin Film Lubrication (EHL/micro-EHL), Wear Phenomena, Friction and (scuffing) Failure Phenomena, Solar Energy and its Applications, Turbo-machines, Thermal Engineering, Fluid Mechanics

4. Management: - Finance, Management, Accounting Strategy, Marketing, Human Resources, Organizational Behavior, Operations, Supply Chain Management, Banking, Insurance, Green Management, Entrepreneurship, Consulting.

5. Physics: - Electronic Structure Calculations, Simulation of Laser-Plasma acceleration, Photonics: Short Radiation Pulse Generation, Laboratory Astrophysics Simulation, Ionospheric Physics, Nanotechnology, Nanoscience, Multiferroics Materials, Spintronics, Organic Solar Cells and Solid State Physics

6. Mathematics: - Algebra, Analysis, Ring Theory, Differential Geometry, Coding Theory, Wavelets, Approximation Theory, Fluid Mechanics, Mathematical Modelling, Operations Research.

7. Chemistry: - Green Chemistry- Green Synthesis of Biofuels, Heterocyclic Compounds, Electrochemical Batteries, Water Detoxification, Corrosion, Heavy Metal Toxicity, Polymer Chemistry, Composites Polymer Electrolytes, Superabsorbent Polymers/Hydrogels, Catalysis, Molecular Modeling, Detoxification by Natural Adsorbents.

8. Education: - Assessment and Evaluation, Educational Psychology, E-learning, School Management and Administration, Curriculum Development, Value Education, Innovative Pedagogies, Research-Based Teacher Education, Peace and Sustainability.

9. Law: - International Arbitration, Corporate Law, Intellectual Property Rights Law, Human Rights, Constitutional Law, Public Law and Policy, Crime and Criminology, Trade Law, Business Law, Competition Law.

No. of seats are dynamically contingent upon the number of available supervisors & other learning resources.

Currently 156 scholars are registered for the doctoral program at MRU under different faculties.

2.3 Teaching Learning Process

Learning experiences are improved by the use of student-centered strategies like experiential learning, participatory learning, and problem-solving procedures. When it comes to designing the curriculum, nowadays the universities are highly flexible. The curricula designed for the various programmes at MRU ensures that students are fundamentally sound, capable of applying the concepts in real-world situations, and able to examine the results of such application. Every course in Engineering and Scientific programmes must include a lab component. Workshop courses are added every semester, substantially enhancing practical skills. Engineers from the industry help deliver some of the engineering programmes. The curriculum created in this way is modern and capable of satisfying industry demands. Additionally, the teaching and learning approaches used complete and enhance the Curriculum.

Classes are taught using pedagogies including cooperative learning, active learning, and collaborative learning. With the assistance of Knowledge Partner, Xebia, the university has developed the idea of Agile Classrooms for the delivery through various methods. The first

campus in India with flexible classrooms is Manav Rachna University. The classroom setting has been mapped in relation to agile practices used in industry. By continuously monitoring their progress on the visual boards, these uniquely built classrooms allow students to work in teams with faculty to enhance evaluation techniques and student performance in both soft skills and technical skills. To solve the shortcomings of conventional methods and track the development of the courses and students' performance, a variety of Agile data visualisation techniques are used.

These various pedagogies encourage collaboration among students in order to achieve a common objective, enhance peer communication, and help students gain the superior skills needed by business.

2.3.1 School of Education and Humanities

The Economics of Valentines

Session Expert: Ms. Kriti Dagar

Activity: Keeping in view the popularity of Valentines among students, an interesting activity was organised to portray the dynamics of the money market through economic tools such as the free market, wealth creation, and the marginal benefit-marginal cost approach.

The demand-supply market activities of the producers and consumers during valentine's week were taught to students reflecting the deadweight loss of valentine's day purchases.

The outcome of the activity was that it helped students understand the market approach to money creation by producers rather than the boring bookish teaching method. And the perks included distribution of chocolates as a token of love.
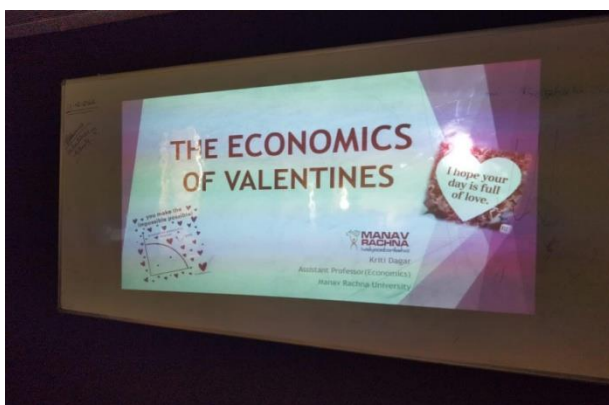
Subject: Education in Contemporary India

Faculty: Ms Ridhi Khanna

Activity: Types of Schools

Through collaborating learning, the topic of types of schools was taught. Under this, the learners were divided into groups of 4-5. Each group representative has to pick one chit in which a type of school was written. Each group was given a 10 minutes' duration to develop content on respective schools and relevant questions attached to it. After preparation of content and questions, each group needs to present the topic and have to ask relevant questions from the audience on the basis of content shared with them. A matrix was developed beforehand and scoring was given for every correct answer to the group. Through this activity, a major topic related to specific schools was covered; learners were actively involved, healthy competition prevailed. At the end of the activity total scoring was given and ranking of the group is done which brings a sense of accomplishment to learners belonging to higher rank and motivation to do well to learners belonging to lower rank.

The types of school are as follows

- ❖ Public Schools
- ❖ Private Schools
- ❖ Boarding Schools
- ❖ CBSE and ICSE Schools
- ❖ Magnet schools
- ❖ Charter schools
- ❖ Montessori Schools
- ❖ Religious Schools

- ❖ IB and CIE Board School
- ❖ Special Schools
- ❖ Kindergarten School

In continuation of activity, the video clips are shown of different school systems like Montessori School, Magnet School, Private School, Public School, Religious School, Boarding School, etc to provide concept clarity and interest based learning. A reflection exercise and critique about different school cultures is provided through these videos.

Snapshot of Schools, presenting concept clarity and interest base learning

2.3.2 School of Engineering

ME DEPARTMENT

ROBOTICS-PBL Mode

In this subject we used a project-based learning approach to teach robotics basics to undergraduate B. Tech-SMA Students. The course coverage includes basic electronics,

robot construction and programming using arduino. Students developed and tested a robot prototype. The project was evaluated using a questionnaire. The evaluation result shows that students developed skills in circuit design, problem-solving and robot development for addressing real world problems and team work. The students had challenges of using limited resources for robot detailed design and construction. The results indicate that robotics education through project-based learning motivates students to learn and implement product design that addresses real world problems.

Kits in classroom learning are valuable in classrooms and they help to attain the following:

1) Hand-on learning and engagement: Students of all ages enjoy hand-on construction activities that involve structure, motion, sensors, programming, and manipulation; these bring opportunities for them to find something that suits their particular interests.

2) Problem solving and training: Robotics enables students to become problem solvers as they develop robots that have well defined tasks to accomplish before the actual construction of the robot begins.

3) The inclusion of computer programming allows for deeper understanding into issues such as remote sensing, control, and autonomous functioning.

- School of Law has an Advisory Board which boasts of Former Chief Justice of India, Former Supreme and High Court Judges, ASG, Former Law Secretary to Ministry of Law and Justice, Senior Advocates, IAS officers and other legal luminaries as its eminent members.

- Every programme includes required industrial training and internships for the students' employability-focused courses.
- Students are exposed to research at the UG level, and faculty members mentor them as they produce review papers, articles, and publish or present their work in conferences and publications.
- To give students enough exposure to their respective fields, periodic industrial visits are organised to research labs, courts, schools, and hospitals. Because the university uses a choice-based credit system, each programme can include open electives, programme electives, and MOOC courses that can earn academic credits.
- For first-year B.Tech students to work on cross-disciplinary projects from the first year, Engineering Exploration is introduced.
- Students get the chance to receive training in the newest technology and software thanks to a centre of excellence's engagement with business.
- In addition to being mentored by professionals from industry to work on the issue statements provided by the industry, students are encouraged to complete minor projects and major projects in industries.
- Training is provided for competitive tests and higher education. GATE/CAT/GRE/NET/Judiciary.
- Most technical courses have tutorial sessions to hone students' problem-solving abilities.
- Slow learners are given special classes.
- Mentoring and teacher-guardian relationships help students recognise their strengths, choose the appropriate electives, and advance along the professional path.
- To improve comprehension, laboratories are furnished with scaled-down models that are realistic and illustrative charts.
- The MHRD-established Innovation & Incubation Centre offers students the chance to learn through experimenting.
- According to the 2019 National Policy of Innovation, the university has a policy for the promotion of innovation and entrepreneurship with unique measures.
- Students are inspired to engage in project work that is socially important.
- Every department hosts expert lectures, workshops, and alumni interactions once a semester to introduce students to the most recent developments in the field.

- Competitions, conferences, workshops, and seminars at the state, national, and worldwide levels are sponsored for students.
- Weekly tests, quizzes, extemporaneous presentations, group discussions, and assignments serve as the primary means of continuous assessment. Open book exams and project-based learning evaluations are encouraged for faculty members.
- To close the gaps between the dissemination of knowledge and learning, student feedback, student satisfaction surveys, and course exit feedback are carried out.

2.4 Faculty Members of the University

MRU FACULTY LIST			
S. No.	**Employee Name**	**Designation**	**Department**
1	Dr. Sangita Banga	Professor	Chemistry
2	Dr. Megha Bansal	Professor	Chemistry
3	Dr. Sudhish Kumar Shukla	Professor	Chemistry
4	Dr. Arpit Sand	Associate Professor	Chemistry
5	Dr. Priti Gupta	Assistant Professor	Chemistry
6	Dr. Ekta Rawat	Assistant Professor	Chemistry
7	Dr. Roopa Rani	Assistant Professor	Chemistry
8	Dr. Vinayak Vandan Pathak	Assistant Professor	Chemistry
9	Dr. Jaya Tuteja	Assistant Professor	Chemistry
10	Dr. Shilpa Sharma	Assistant Professor	Chemistry
11	Dr. Pradeep Kumar Varshney	Professor	Chemistry
12	Dr. Meena Kapahi	Professor	Chemistry
13	Dr. Harsha Devnani	Assistant Professor	Chemistry
14	Dr. Jayamani	Assistant Professor	Chemistry
15	Dr. Deepa Arora	Associate Professor	Mathematics
16	Seema Aggarwal	Assistant Professor	Mathematics
17	Dr. Dinesh Tripathi	Associate Professor	Mathematics
18	Savita Saini	Assistant Professor	Mathematics

19	Ramapati Maurya	Assistant Professor	Mathematics
20	Dr. Aparna Vyas	Associate Professor	Mathematics
21	Dr. Advin Masih	Assistant Professor	Mathematics
22	Dr. Ruchi Gupta	Assistant Professor	Mathematics
23	Dr. Ankita Gaur	Assistant Professor	Mathematics
24	Dr. Yogendra Kumar Sharma	Professor	Mathematics
25	Dr. Kalpana Shukla	Assistant Professor	Mathematics
26	Dr. Kamlesh Kumar	Assistant Professor	Mathematics
27	Bhawna Singla	Assistant Professor	Mathematics
28	Dr. Jai Parkash	Associate Professor	Physics
29	Dr. Dinesh Kumar Sharma	Professor	Physics
30	Dr. Haider Abbas	Professor	Physics
31	Dr. Deepti Maikhuri	Assistant Professor	Physics
32	Dr. Anshuman Sahai	Assistant Professor	Physics
33	Dr. Ananna Bardhan	Assistant Professor	Physics
34	Aditya Sharma	Assistant Professor	Physics
35	Sandeep Kumar	Associate Professor	Physics
36	Bharti Jha	Assistant Professor	Computer Science and Technology
37	Dr. Sachin Lakra	Professor	Computer Science and Technology
38	Hanu Bhardwaj	Professor	Computer Science and Technology
39	Dr. Jyoti Pruthi	Professor	Computer Science and Technology
40	Dr. Prinima	Professor	Computer Science and Technology
41	Agha Imran Husain	Assistant Professor	Computer Science and Technology
42	Neelu	Assistant Professor	Computer Science and Technology

43	Nikita Taneja	Assistant Professor	Computer Science and Technology
44	Shalu	Assistant Professor	Computer Science and Technology
45	Mrinal Pandey	Associate Professor	Computer Science and Technology
46	R Girija	Associate Professor	Computer Science and Technology
47	Ram Chatterjee	Assistant Professor	Computer Science and Technology
48	Deepanshi Gupta	Assistant Professor	Computer Science and Technology
49	Sarika	Assistant Professor	Computer Science and Technology
50	Priyanka Gupta	Assistant Professor	Computer Science and Technology
51	Manoj Kumar	Assistant Professor	Computer Science and Technology
52	Urmila	Associate Professor	Computer Science and Technology
53	Narender	Assistant Professor	Computer Science and Technology
54	Meena Chaudhary	Assistant Professor	Computer Science and Technology
55	Gunjan Chandwani	Assistant Professor	Computer Science and Technology
56	Mamta Arora	Assistant Professor	Computer Science and Technology
57	Riya Sapra	Associate Professor	Computer Science and Technology
58	Anup Singh Kushwaha	Assistant Professor	Computer Science and Technology
59	Shailja Gupta	Assistant Professor	Computer Science and Technology
60	Ankur Kumar Aggarwal	Assistant Professor	Computer Science and Technology

61	Gaganjot Kaur	Assistant Professor	Computer Science and Technology
62	Sanjay Kumar	Assistant Professor	Computer Science and Technology
63	Manpreet Kaur	Professor	Computer Science and Technology
64	Dr. Hardeo Kumar Thakur	Professor	Computer Science and Technology
65	Dr. Parneeta Dhaliwal	Professor	Computer Science and Technology
66	Dr. Susmita Ray	Professor	Computer Science and Technology
67	Anu Priya Sharma	Assistant Professor	Computer Science and Technology
68	Shreya Malhotra	Assistant Professor	Computer Science and Technology
69	Harsh Bhasin	Assistant Professor	Computer Science and Technology
70	Dr. Sanjay Singh	Associate Professor	Computer Science and Technology
71	Alpana	Assistant Professor	Computer Science and Technology
72	Chandni Magoo	Assistant Professor	Computer Science and Technology
73	K.Deepa	Associate Professor	Computer Science and Technology
74	Nitika	Associate Professor	Computer Science and Technology
75	Shiv Kumar Dixit	Assistant Professor	Electronics and Communication Engineering
76	Meenakshi Gupta	Associate Professor	Electronics and Communication Engineering
77	Lokesh Bhardwaj	Assistant Professor	Electronics and Communication Engineering

78	Yogita Gupta	Associate Professor	Electronics and Communication Engineering
79	Bhanu Pratap Chaudhary	Assistant Professor	Electronics and Communication Engineering
80	Vijay Kumar Gill	Assistant Professor	Electronics and Communication Engineering
81	Niharika Thakur	Assistant Professor	Electronics and Communication Engineering
82	Dr. Shruti Vashist	Professor	Electronics and Communication Engineering
83	Dr. Charu Pathak	Professor	Electronics and Communication Engineering
84	Ajit	Associate Professor	Mechanical Engineering
85	Sanjay Taneja	Associate Professor	Mechanical Engineering
86	Joginder Singh	Professor	Mechanical Engineering
87	Dr. Sujata Nayak	Professor	Mechanical Engineering
88	Jai Prakash Sharma	Assistant Professor	Mechanical Engineering
89	Piyush Mahendru	Assistant Professor	Mechanical Engineering
90	Gianender	Assistant Professor	Mechanical Engineering
91	Nazish Ahmad Shamsi	Assistant Professor	Mechanical Engineering
92	Prashant Bhardwaj	Assistant Professor	Mechanical Engineering
93	Pradeep Kumar Mouria	Assistant Professor	Mechanical Engineering
94	Mandeep Bhadana	Assistant Professor	Mechanical Engineering
95	Babita Sharma	Associate Professor	Education
96	Ridhi Khanna	Assistant Professor	Education
97	Rashee Singh	Associate Professor	Education
98	Savita Sharma	Assistant Professor	Education

99	Ritu Sharma	Assistant Professor	Education
100	Geeta R . Thakur	Professor	Education
101	Sharv Datt Anand	Assistant Professor	Education
102	Chandra Prakash Singh	Assistant Professor	Education
103	Pooja Parmar	Assistant Professor	Education
104	Kiran Gupta	Associate Professor	Education
105	Shail Bala Mishra	Assistant Professor	Education
106	Nibedita Hazarika	Assistant Professor	Education
107	Pankaj Mehrotra	Education	Education
108	Kriti Dagar	Assistant Professor	Education
109	R.K Sanayaima Singh	Assistant Professor	Education
110	Sarla Duhan	Professor	Education
111	Vandan Garg	Assistant Professor	Education
112	Reshma Bhown	Assistant Professor	Education
113	Akhilesh Kumar Dwivedi	Associate Professor	Humanities
114	Chhavi Kulshrestha	Associate Professor	Humanities
115	Pragati Chauhan	Associate Professor	Management and Commerce
116	Pooja Kapoor	Associate Professor	Management and Commerce
117	Parul Jhajharia	Professor	Management and Commerce
118	Rashi Banerji	Assistant Professor	Management and Commerce
119	Manmeet Nag	Associate Professor	Management and Commerce
120	Subodh Saluja	Associate Professor	Management and Commerce
121	Srishti Bathla	Assistant Professor	Management and Commerce
122	Animesh Singh	Associate Professor	Management and

			Commerce
123	Dr. Sachita Yadav	Associate Professor	Management and Commerce
124	Yogita Sharma	Associate Professor	Management and Commerce
125	Priyanka Singh	Assistant Professor	Management and Commerce
126	Shweta Goel	Associate Professor	Management and Commerce
127	Vandna Bhat	Assistant Professor	Management and Commerce
128	Versha Vahini	Professor	Law
129	Tarundeep Kaur	Associate Professor	Law
130	Priyanka Maderna	Assistant Professor	Law
131	Dr. Somdutt Bhardwaj	Associate Professor	Law
132	Saratendu Kumar Bose	Associate Professor	Law
133	Sakshi Bahuguna	Assistant Professor	Law
134	Amit Kumar	Assistant Professor	Law
135	Ajay Bhatia	Assistant Professor	Law
136	Kaveri Sharma	Associate Professor	Law
137	Ashima Saxena	Assistant Professor	Law
138	Shashi Kant Yadav	Assistant Professor	Law
139	Shobhit Mohan	Assistant Professor	Law
140	Pooja Trehan	Assistant Professor	Law
141	Shaharyar Asaf Khan	Associate Professor	Law
142	Shivam Gaur	Assistant Professor	Law
143	Akansha Ghose	Assistant Professor	Law
144	Sampriti Phukan	Assistant Professor	Law
145	Simran Singh	Assistant Professor	Law
146	Nidhi	Assistant Professor	Law

147	Seema Gupta	Assistant Professor	Law
148	Bharatendu Agarwal	Assistant Professor	Law
149	Garima Chawla	Assistant Professor	Law
150	Asmita Patel	Assistant Professor	Law

2.5 Students

2.5.1 Enrolment of Students

An institution's growth can be gauged by the number of students enrolled in each of its programmes. More students are enrolling every year, demonstrating how popular university curricula are:

Programme/BRANCH Name	Total No. Of students
School of Engineering	261
Applied Sciences	43
Management	106
Law	68
Education	68
Total Students (UG)	532
Total Students (PG)	49
Total Students PhD.	75

2.6 Scholarship Policy

In the year 2021-22, a substantial sum of more than three and a half crores was awarded as scholarship. Scholarship policy of the University encourages a good number of students every year and kindles the spirit of consistent performance. Elaborative policy details are as follows:

2.6.1 Merit Scholarship: **Schemes 'Utkarsh' and 'Uttam' for the candidates on the basis of MRNAT-2021 Score for UG & PG programmes:**

MRNAT 2021 Score	'Utkarsh' *	'Uttam' **

90.00% & above	100% Tuition Fee Waiver	100% Tuition Fee Waiver
80.00% & above but below 90.00%	50% Tuition Fee Waiver	25% Tuition Fee Waiver
70.00% & above but below 80.00%	25% Tuition Fee Waiver	10% Tuition Fee Waiver

* Scheme 'Utkarsh' is for candidates taking Admission within a period from 31st May 2021 to 15th July 2021)

** Scheme 'Uttam' is for candidates taking Admission within a period from 16th July to 16th August 2021)

2.6.2 Merit cum Means Scholarship

Manav Rachna offers Scholarship based on merit cum means, to the candidates admitted under reservation for Haryana Candidates. Scheme shall be applicable to all Undergraduate and Postgraduate Programs. The Scheme is applicable to all the students whose parents have annual income up to Rs.2.80 Lac from all sources. Under the scheme, the students shall be given fee waiver limited to the tuition fee as per the following scale. Candidates are required to pay other fee as applicable to the programme concerned.

- One fifth of the 25% shall be granted 100% tuition fee concession,
- Two fifth of the 25% shall be granted 50% tuition fee concession,
- The balance two fifth of the 25% shall be granted a 25% tuition fee concession.

2.6.3 Merit Scholarship to Semester/Branch Toppers

In order to motivate the students for better and sustained academic performance, MRU offers 'Merit Scholarship to Semester/ Branch Toppers' for students bagging 1st, 2nd and 3rd positions in the Odd & Even semester exams (Based on the amalgamated SGPA / CGPA) every year for each programme being run at MRU, as under:

a) First position	25% of Tuition Fee or Rs.25,000/- whichever is less
b) Second Position	15% of Tuition Fee or Rs.15,000/- whichever is less
c)Third Position	10% of Tuition Fee or Rs.10,000/- whichever is less

The following are the guidelines for granting these Merit Scholarships:

Any programme must have strength of 90 or more in the semester exam to qualify for first, second and third position scholarship, otherwise only a solitary topper shall be given a solitary first position scholarship.

If the strength of a course is 10 or less no scholarship will be awarded for that course.

A student shall be eligible to benefit from tuition fee waiver only from one source only.

2.6.4 Special Scholarship Awarded

a)**Scholarship to Ph.D. Students:** Faculty members working with MREI for three or more years' duration are entitled for a scholarship while they enroll for their career enhancement and join the doctoral program. It is done to promote a culture of research in the organization and honour the association of employees with MREI.

b)**Scholarship to Alumni of MREI:** Student who is an Alumnus of any of the Manav Rachna Educational Institutions (Schools/ HEI), is eligible for 10% tuition fee waiver (limiting up to maximum of 10000/- per year) during admission to the programs offered by MRU.

c)**Scholarship to the wards of MREI employee:** 25% Tuition fee waiver (limiting up to maximum of 25,000/- per year) to First Child Only. However, if the first child is already getting a scholarship on the basis of merit then this benefit would be passed to the second child, if applicable.

2.6.5 Scholarship Data

2021-22		
Type of Scholarship	**No. of Student**	**Amount**
Tuition Fee Waiver	606	31449073
Merit Cum Means	37	2240750.00
Manav Rachna Student Staff Alumni Welfare Fund & Others	28	116000.00
MREI Student	0	0
Concession to PhD Students on The Basis of Length of Service	22	Rs. 3,55,000/-

BATCH	MERIT SCHOLARSHIP		MERIT CUM MEANS SCHOLARSHIP		BRANCH TOPPERS		MGT APPROVALS		PHD SCHOLARS		MREI STUDENT		TOTAL	
	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT	NO. OF STUDENTS	AMOUNT
2014							1	52400					1	52400
2015	11	747500	8	287500	7	115000	4	238250	15	210000			45	1598250
2016	61	2425500	9	269500	8	157000	7	241500	9	190000			94	3283500
2017	91	3351875	15	390375	10	154625	16	512150	1	15000	1	5000	134	4429025
2018	84	3573875	26	1120000			47	318492	9	80000	21	105000	187	5197367
2019	284	14089250	60	3510750	0	0	112	3159267	32	590000	9	45000	497	21394267
2021	431	23023735	37	2240750	16	288150	159	8137188.00	22	355000	28	116000	671	33805823
Total	531	24188000	118	5578125	25	426625	186	4469659	66	1085000	31	155000	957	35902409

CHAPTER: 3

RESEARCH DEVELOPMENT AND INNOVATIONS

3.1 Research, Publications and Projects

Research is a systematic inquiry aimed at acquiring new knowledge, exploring uncharted territories, and expanding the boundaries of human understanding. It encompasses a wide range of disciplines, including Sciences, Humanities, Engineering, and Technology. As researchers, we at Manav Rachna are seeking answers to questions of great interest to us. Our research problems are multidisciplinary, covering multiple domains creating an impact on society. Through rigorous methodologies, researchers investigate phenomena, analyze data, and draw conclusions to generate new insights. Research serves as the foundation for innovation by providing a solid understanding of existing knowledge and identifying gaps and areas of improvement. University facilitates research through "Research Clusters" in different disciplines serving as the specialized groups. Various 'Centers of Excellence' have been developed in collaboration with Industry, such as: Solar Energy Applications, Atmospheric and environmental sciences, Clean Water Technology, Green Chemistry, Corrosion Science, Communication Technology, Integrated System Design, Soft Computing, Business Process Modeling and Machine Learning.

Office of Dean Research propels and promotes research within various faculties of MRU by providing necessary support for designing and creating new products and conducting experiments, providing advanced training to its faculty members in specialized fields. The Research Integrated UG Program further enhances research acumen in undergraduate students, under mentorship of faculty members generating research papers in Conferences and journals of high repute.

The Research endeavors of the faculty during the academic year 2021-22 are summarized below: -

Category	School	Number	Details
No. of Publication in Journals	Applied Sciences	36	Annexure 3.1
	Education and Humanities	11	
	Management	12	
	SOE	35	

	SOL	11	
No. of Publication in Conference	Applied Sciences	02	Annexure 3.2
	Education and Humanities	02	
	Management	02	
	SOE	09	
No. of Patents (Filed+Published+Granted)	Applied Sciences	05	Annexure 3.3
	Education and Humanities	05	
	Management	04	
	SOE	17	
	SOL	01	
No. of Books/Book Chapters	Applied Sciences	03	Annexure 3.4
	Education and Humanities	02	
	Management	07	
	SOE	06	
	SOL	02	
Seminar, Conference & Workshop Organised	Applied Sciences	04	Annexure 3.5
	Education and Humanities	02	
	Management	08	
	SOE	21	
Consultancy & Corporate Trainings	Applied Sciences	05	Annexure 3.6
	Management	03	
	SOE	03	
Externally Funded Projects	Applied Sciences	62	Annexure 3.7
	SOE	77	
	SOL	25	
Startups	Applied Sciences	03	Annexure 3.8
	Management	03	
	SOE	14	

3.2 Workshops Organized

- Department of Management and Commerce, organized a workshop on "Data Analysis in SPSS" on September 18, 2021, conducted by Dr. Animesh Singh. The workshop covered the basics of data analysis and data visualization using the Statistical Package for the Social Sciences (SPSS).

- School of Education and Humanities, in collaboration with the National Institute for the Empowerment for Persons with Intellectual disabilities, Regional Center, Navi Mumbai, organized an Online CRE Program on 13th ˍ 14th September 2021 on "Research in Special Education" with Mr. Ravi Prakash Singh, Officer In-charge,

NIEPID-RC, as the resource person. The Program aimed to emphasize the need for research in the field of Rehabilitation and to provide research exposure for Pre-service as well as In-service teachers.

- School of Education and Humanities, Manav Rachna University organized a workshop on "Bonanza of Theatrical Performance '' on 5th May 2022. Mr. Kalyan Srinivas Raygalla, Assistant Professor, Department of Journalism and Mass Communication, MRIIRS, was invited as a resource person for the event. He is a former journalist and columnist for The Freedom Press. He is 2 times- TEDx speaker. The objective of the workshop was to make students understand the importance and use of theatre in daily life.

- Department of Chemistry organized a one-day workshop on "Hyperspectral Technology in Remote Sensing" on 21st April, 2022 from 1:00pm onwards in online mode. The workshop was based on the applications of GIS and remote sensing. The resource person was Dr. Karunesh Kumar Shukla, Research Associate, ICAR-National Research Centre for Integrated Management, New Delhi, India.

- School of Education and Humanities, in collaboration with Shiksha Sanskrit! Uthan Nyas organized a national workshop on Vedic Mathematics: Possibilities and Opportunities. The workshop witnessed enthusiastic participation of around 110 participants. It spanned over 8 days with 30 hours of hands-on sessions for the participants. The workshop was appreciated as a welcome step towards empowering Indian traditional knowledge practices.

- IEEE MRU student branch in association with computer society organized a workshop and quiz on "OOPs in Java: An informative hands-on project-based workshop" on 22nd & 23rd January 2022. It was a 2-day online event that lasted for1 hour and 30 minutes on both days. The session had 400+ registrations and 150+ audience was reached through Facebook live stream (https://fb.watch/aK68_dTshY/). Mr. Deepak Panwar (Computer Science Engineer, YouTuber: Smart Programming, Professional trainer and Consultant with 8+ years of experience in the field of IT) was invited as a speaker to guide students for this workshop.

- Department of Mathematics, Manav Rachna University in collaboration with Department of Mathematics, IIT Indore organised a five day Workshop on Wavelets and its Applications: Image Processing, Data Science and PDEs from December 06

- 10, 2021 for academicians, researchers and students. Around 600 participants registered and 400 were selected from various universities/institutions from India and abroad (Nepal, Malaysia, UAE, USA etc).

- Department of Computer Science & Technology, Manav Rachna University, in collaboration with Xebia, organized a workshop on Computer Vision & Data Visualization for 4th Year Students of BTech CSE in specialization with Data Science & Machine Learning on 22/11/2021.The Workshops were managed by Program Manager Ms Niti Kalia and presented by Mr Harshit Dawar, Technical Trainer & Principal Consultant at Xebia.

- Department of Mechanical Engineering, organized a workshop on "Simsolid Software" from 9th to 11th November 2021. The speaker was Mr. Sharad Mahour, Sr. Application Engineer, DesignTech Systems Ltd., New Delhi. Objective of the Workshop was to provide the knowledge of SimSolid Software from Altair by an Industry Expert.

- Department of Electronics and Communication Engineering, MRU conducted an online workshop on "Machine Learning Applications using MATLAB and Simulink" on 28th and 30th Oct, 2021. The resource person for the workshop was Ms. Ayushi, FreeLance Trainer, Sahai Research Labs (OPC Pvt. Ltd.). The workshop covered the fundamentals of machine learning and MATLAB.

- Department of Electronics and Communication Engineering, Manav Rachna University, Faridabad organized a 5-Day online workshop on Automation using Advanced Embedded System Design from 13th September to 17th September 2021. The session had a blend of theory with live working models and projects along with the practical hands-on training (online mode-do along). The Resource Persons was Mr. Pawan Kumar, Sr. Network Specialist, CRIS, Ministry of Railways.

- Department of Management (DMC), MRU in association with National Small Industries Corporation (NSIC) conducted an enriching National Level Awareness Program on Entrepreneurship, floated by Micro Small and Medium Enterprises (MSME) on November 24, 2021. The program was unveiled to spread awareness pertaining to various schemes as well as initiatives undertaken by the MSME ministry & other associated firms in the field of Entrepreneurship. The event was organized by Dr. Yogita Sharma, Associate Professor, Entrepreneurship and Marketing.
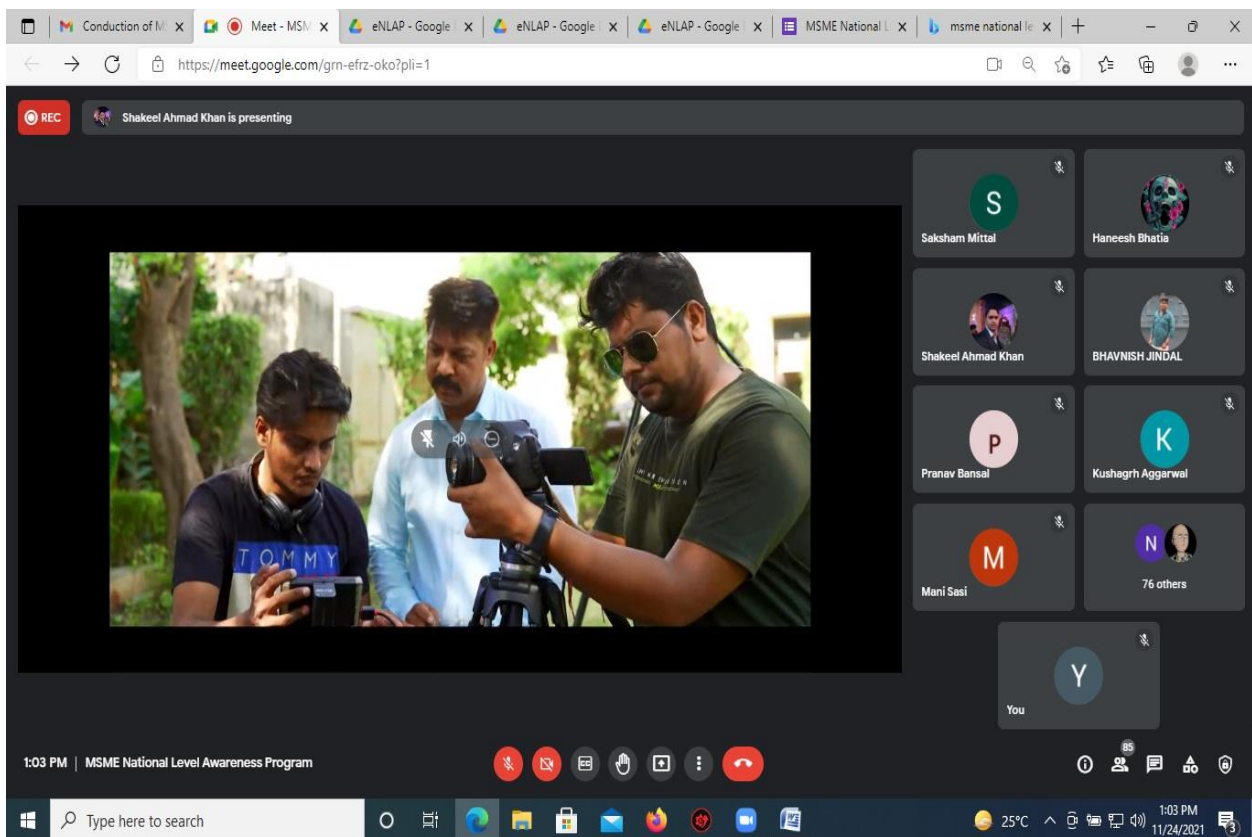
3.3 Research Endeavors, Innovation & Incubation

Committed to the vision of our Founder Dr. O.P. Bhalla, MRU has been actively involved in promoting research endeavors and nurturing startups to foster entrepreneurship among its students and faculty over the years. MRU serves as a platform for interdisciplinary research and innovation through Innovation Clusters and the Centre of Excellence. MRU's Start-up policy is dedicated to nurturing and supporting entrepreneurial ventures. It provides a conducive environment for aspiring entrepreneurs, offering mentorship, networking opportunities, infrastructure, and funding support. Students are provided with opportunities to collaborate with faculty members, participate in research projects, and develop innovative solutions leading to their Startups.

3.3.1 Manav Rachna Business Incubator: Startups at Manav Rachna University

The student and faculty teams are entirely supported by the University for pre-incubation and Incubation. The various Startups commenced in year 2021-2022 at the University are as follows:

- **DskillEd**: It is a platform being developed by **Mr. Vikas Baisoya, ECE 8th Semester and Mr. Sarthak Negi, ECE 8th Semester** under the mentorship of Dr. Yogita Sharma, to provide skilled education in varied domains through their directed reality effect, which will endorse the learner with practical aspects visually at their own pace. This further ahead, plans to build a community of people aspiring to share their insights in various fields like Health and Wellness, Animal telepathy, Apparel Making, Jewellery Designing, Fashion Styling, Dance, Music, Stock & Global Market Courses and Graphic Designing. It started with a team of 20+ mentors and now growing more, who will guide them in their journey to create their hobbies into a passion.
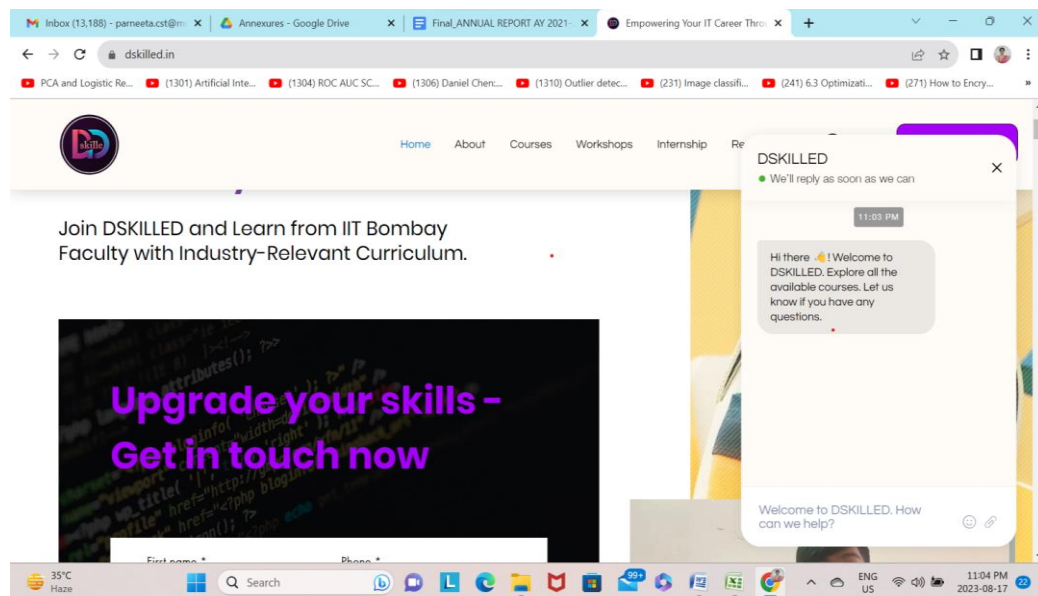
- **Vee12 Auto**: An automobile enthusiast and collector, a student with a motto "We Sell Emotions not Furniture" is developing smart furniture which gives the users a feel of comfort and access to technology on his palms. With electronically adjusted seats to AC vented seats the startup wishes to provide maximum comforts to its customers.It has been started by **Mr. Aditya Pandit, ME 8th Semester** student.
- **F.A.C.T.S-IRIS Scan**: Mr. Kashish under the mentorship of Dr. Yogita Gupta is developing smart IoT camera detection devices for covid to stop/Control the spread of the pandemic in crowded places. With the upcoming Third wave the team has hired interns to help speed up the process**.**
- **Ratiram Limbs**: **Ms. Drishti Uppal, CST 3rd Semester** student and her team under the mentorship of Dr. Parneeta Dhaliwal and Ms. Priyanka Gupta is attempting to create a wearable robotic arm that is controlled by brain waves for people with

special needs in order to assist them with their everyday activities and foster a sense of independence.

- **Modular Batteries**: **Mr. Rudra Nand Sahu, ECE 5th Semester**, under the guidance of Dr. Pradeep K. Varshney, Dr. Yogita Gupta and Mr. J.P. Sharma is working on a solution that ensures each cell in a battery pack should be used in a modular manner. A circuit was also developed through which the team can monitor the health of each cell and its usage. In such a way, we can minimize the wastage of the whole battery when scrapped and also the end user can identify the weak cell and replace it on its own. Through this, there would be an increase in the shelf life of a battery pack.

- **Contract Farming**: **Mr. Tejas, CSE 3rd Semester** student, under the mentorship of Dr. Parneeta Dhaliwal and Ms. Priyanka Gupta, is developing a secure mobile app for Android and IoS devices that would bridge the gap between the land owner (contractee) and the contractor for contract farming. The app would be in Hindi and English. It provides information about the type of soil and type of crop best to be grown. Information about State Govt. schemes. Legal advice on basic land issues is also provided through this app.

- **BIG DADDY CAR WASH LLP**: Auto Car washing is a startup where a team of engineers with a computer science background have joined hands to develop a smart touchless automatic car cleaning system which will focus on Eco-Wash. The idea is to utilize as little water as possible with a comfort contact less cleaning. **Mr. Ankit Dagar 5th Semester** student under the mentorship of Dr. Yogita Gupta is the founder of the Startup with LLP Identification No. ABB-8739.

3.3.2 MRU Institution Innovation Council (MRU IIC)

Manav Rachna University, Faridabad was selected as a member of IIC in the inauguration event of IICs way back in November 2018. It has been working with the vision "To promote innovation, critical thinking, ideation and build an entrepreneurial ecosystem in the Institution". MRU IIC received a rating of 3 by the Ministry of Education in AY 2021-22.

MRU IIC's Mission

- To Conduct periodic workshops/ seminars/ interactions/panel discussions/expert talks/mentoring sessions/field visits/conclave/summit with entrepreneurs, investors, and professionals in order to promote innovative thinking and eventually establish startups by converting innovative ideas to products (with technology solutions from pre-incubation to incubation)/services for solving societal, environmental and economic problems for sustainable development of nation.
- Network with peers and national entrepreneurship development organizations.
- Organize idea competitions/hackathons to showcase the innovative ideas and eventually generate patents ".

The various bodies that function under MRU IIC are as follows:
- IPR Cell
- E-Cell

- Research Cluster of Computing (RCC)
- Pre-Incubation Unit
- Fabrication Centre
- Innovation and Incubation Centre

3.3.2.1 IPR Cell

Intellectual property (IP) encompasses the expression of ideas, information, and knowledge. IP includes scientific inventions and also music, literary and other artistic works, trademarks and trade symbols, geographical indications, and integrated circuit layouts. Intellectual Property Rights (IPR) confer exclusive right over the intellectual property created. The purpose of IPRs is to encourage innovation and development. Academic and Research Institutions not only contribute to the creation of IP but also help the researchers, creators, and inventors to protect their IP rights. Manav Rachna I.P.R. Cell is governed by the University Intellectual Property Rights Policy.

Activities of IPR Cell

● IPR Cell of Institution Innovation Council of Manav Rachna University organized an online webinar on '**Learn Why, What and How of Patents** ' for the faculty and students, on 8th September 2021 with a view to enhance the awareness about protecting one's innovative ideas through Intellectual Property Rights. The speaker of the session was Ms. Latika Khanduja, Founder and Director at IPLOEA.
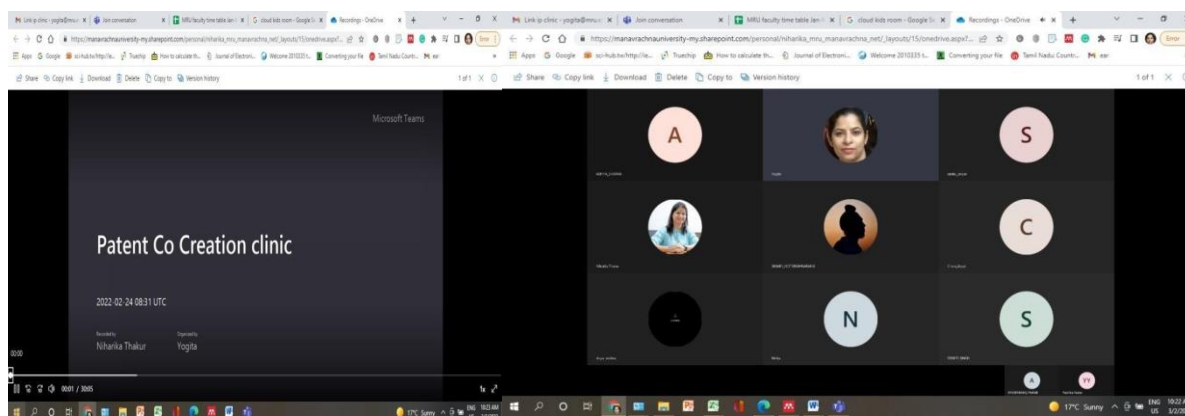

● IPR Team, Manav Rachna University organized an IP Awareness Session on 'IP Awareness Programme' on 20th Jan 2022. The Resource Person of the session was Dr. D. Usha Rao, Assistant Controller of Patents & Designs, IPO Delhi. Dr. Rao explained each and every aspect of the patent through various national and international examples and

also demonstrated how to operate the website portal of Indian patents. It was an eye-opening session for the participants and the speaker made the session interactive for the maximum benefit of the participants.
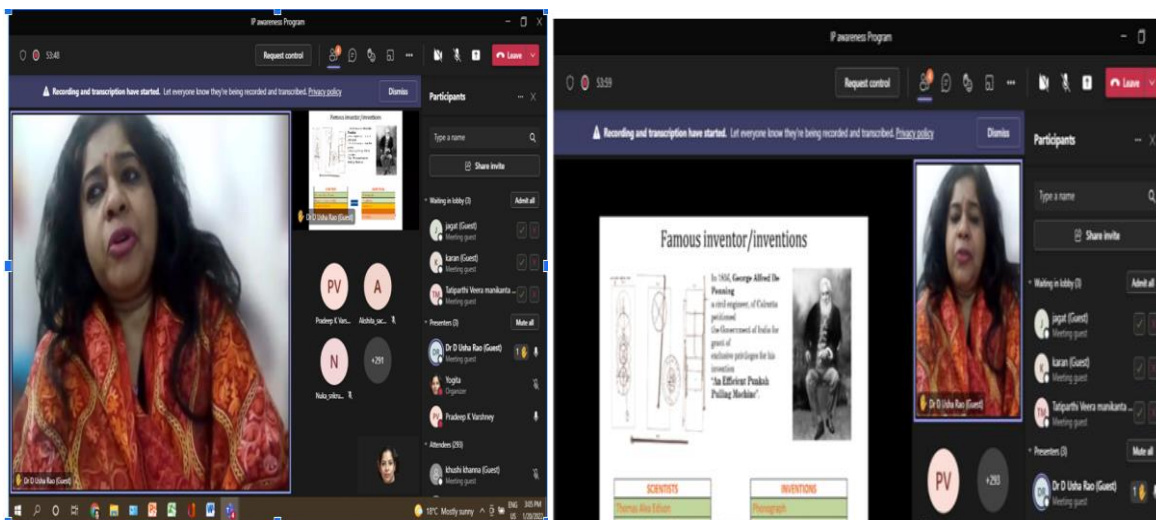
● IPR Cell of Institution Innovation Council (IIC) of Manav Rachna University in association with the Center for New Product Development Trade and Transfer conducted a Patent Co-creation Clinic on 24th February 2022. The resource person for the Patent Co-creation clinic was Mr. Mohit Mahajan who has a vast experience of IPR as he has worked for CSIR and other IPR firms across India and abroad. The aim of this clinic is to provide University students/ faculty an opportunity to clear all doubts /apprehensions regarding their Ideas. Mr. Mohit Mahajan Explained the 30-day patent clinic process.

● IPR Cell of IIC of Manav Rachna University organized a Patent Workshop on 21st April, 2022. with IPLOEA, IPR Partner. The resource person for the workshop was Ms. Latika Khanduja, Founder and Director of IPLOEA. The workshop focussed on the one-to-

one session with Inventors of IP and the queries were taken up to resolve the issue regarding filling and the claim points

●   IPR Team, Manav Rachna University organized an IP Awareness Session on 'IPR' on 23 Augúst 2022, a one-day workshop for IPR to give hands-on experience to the first-year Engineering students. The Resource Person of the session was Mr. Mohit Mahajan, IPR Expert, Ex-Principal IPR Consultant of CSIR, Govt. of India, New Delhi.


3.3.2.2 E-Cell

Activities Under E-Cell

●   Institution Innovation Council of Manav Rachna University organized a **webinar on Entrepreneurship Skill, Attitude and Behaviour Development** on 19th February 2022. Workshop was conducted by Dr. Subodh Saluja, Associate Professor, SMC-MRU.The lecture emphasized on four parameters namely Passion, Purpose, Expertise and Market Opportunity which are very important for an entrepreneur and the right skillset and characteristics required to be successful.

● IIC organized a **Workshop on Entrepreneurship and Innovation As Career Opportunity** on 24th February 2022 which was conducted by Dr Subodh Saluja wherein he explained that Career Entrepreneurship (CE) is the process of designing, launching and transitioning to the next steps in career just like a business venture.
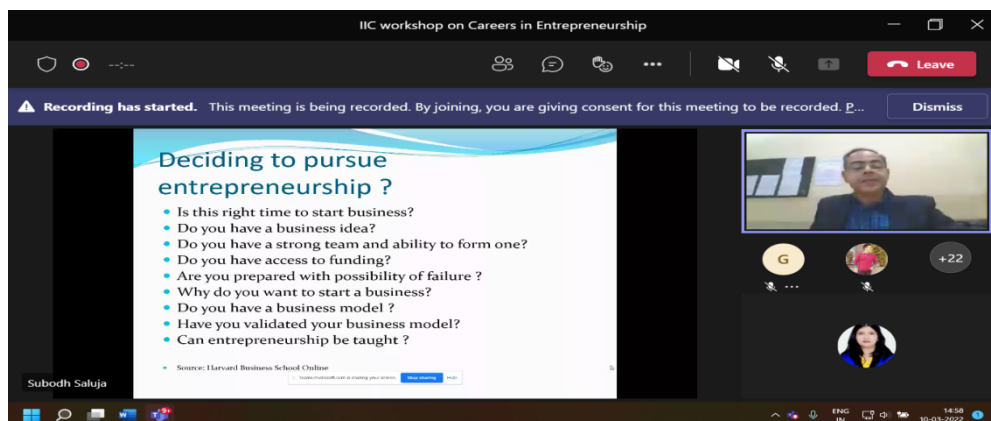
● **TED Talk on Entrepreneurship - "Entrepreneurship-A Step Towards Promising Future Post Pandemic"** was hosted on 15th, March, 2022 by Entrepreneurship (E-Cell). **Dr. Himanshu Talwar**, International TEDx Speaker, Celebrated Author was the guest speaker.

● **Entrepreneurship Zenith: Panel Discussion** was organized on 26th April, 2022 by Entrepreneurship (E-Cell). **Ms. Gurrit Kaur Sethi**, Founder Mindmymind and Chief Operating Officer at CARE Hospitals, **Ms. Sartaj Lamba**, Founder & CEO of 'Be sure' Buddy Pvt, Chairperson of AJ Group of companies and a Traffic Marshall, **Ms. Suvarna Raj**, International Para Athlete and Medalist and Founder of Women with Disabilities Network, and MD at Sugamya - Accessibility & Inclusion, **Ms. Aarti Bindra** MD at ACPL Systems, Klassify Technology, AttackFence and a Cyber Security Specialist and **Ms. Prachi Kaushik**, Founder & Director of Vyomini Social Foundation (VSF) and a TEDx

speaker were the notable panelists. Keynote speaker for the panel discussion was Mr. **Shubham Maheshwari,** Founder, Being Chef.

● IIC Faculty members and School of Management & Commerce of Manav Rachna University organized a two-day (over 17th & 18th May 2022) **Mentor Development program in the campus in association with Bhartiya Yuva Shakti Trust** (BYST) Faridabad.Team BYST with its Key Mentors- Mr J P Malhotra Chairman, BYST Faridabad & Chapter President, DLF Industrial Association, Maj Gen S K Dutt and Mr S K Dua –Key Mentor & Facilitator BYST interacted with the faculty participants.

● MRU E cell organized its **Entrepreneurship -week "Sanrachna"** from 16th - 20th Sep 2021.First event was "**PICK-UP**" was offline discussion event, followed by an online quiz "**Know Your Entrepreneurs**" held on 18th September. Last event was "**Salvnation**" which was an online debate competition held on the 20th of September. The topic of the event was "Terrorism and its Effects on Trades and Business in India" with the theme being marketing and trade. The event brought light to one of the sustainable development goals, i.e., **SDG 16: Peace, Justice and Strong Institutions** which aims to promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

● Idea Generation Workshop for Sustainable Solutions - Idea generation and Creativity tool, SCAMPER tool. The workshop was conducted on 26 october 2021 introducing the Idea generation and Creativity tool, SCAMPER, for BBA students of Manav Rachna University. The activity aimed at developing the thinking faculties of various students by confronting them with a task of generating ideas, and having individuals work in collaboration to produce solutions that are not only innovative, easily implemented but are sustainable as well.

● Manav Rachna University E-CELL organized संRACHNA 3.0, the annual fest, with a total of 6 events from 2nd to 6th March 2022. Under the guidance of Dr. Pragati Chauhan six such events were conducted under संRachna 3.0 consisting of various contests and cooperative processes. The goal was to emphasize entrepreneurship and innovation, to help pitch ideas more effectively, exhibit creativity and knowledge, to learn goal setting, teamwork and persistence. Starting with the event "**LOGOGLANCE**" – a logo making competition, **"Spill the Ink**" – A creative writing competition, **"JumpIn LinkedIn"** - webinar on social networking through LinkedIn based on

SDG 9, **"SUSTAIN TALKS"** – a Problem-Solution Extempore, **"Pitch It Up"** – A virtual entrepreneurship event. For this fest, more than 200+ students registered from various Universities, Colleges and Schools as well, namely St. Xavier's, Manav Rachna University, Ramjas' College, HRM and many more.
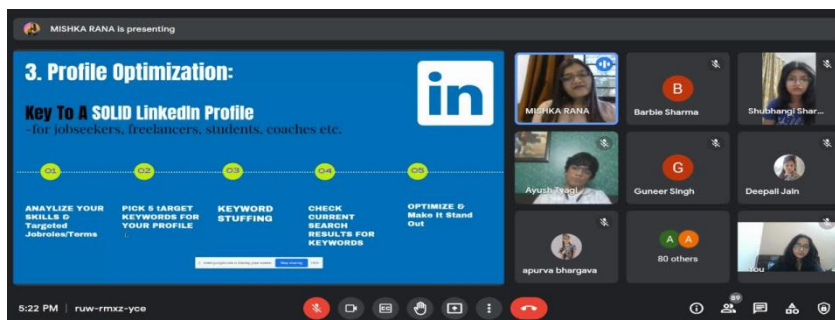
● A "**Business on Campus**" day was hosted by the Department of Management and Commerce, Manav Rachna University on 14th March 2022. The event lived up to its theme of "Empowering Women in Business" by providing a platform to young female entrepreneurs to demonstrate their talent and expertise. Many stalls were put up throughout the campus, selling a variety of commodities such as handicrafts, bakery items, street food, and other fun games. On the same day, a group of three BBA students debuted their new coffee brand.


3.3.2.3 Research Cluster of Computing (RCC)

● Research Cluster and Computing, Manav Rachna University, organized a workshop on "API Implementation with Python", a pathway to learning how to utilize API in real-world scenarios at a beginner's level on 5 May 2022. Mr. Roman Ojha, Student Coordinator, RCC

and Mr. Ujwal Ray Bhatta, Student Coordinator, RCC were the resource people having extensive experience with interfaces and APIs.


● A Hands-on session on "APP Development" a pathway to understand and interact with various native and cross-platform mobile applications was organized on 29.01.2022. Mr. Sanchit Bajaj, Student Coordinator, RCC was the mentor for the training and had extensive experience in different web technologies and completed numerous projects and internships. A total of 14 students attended the session.
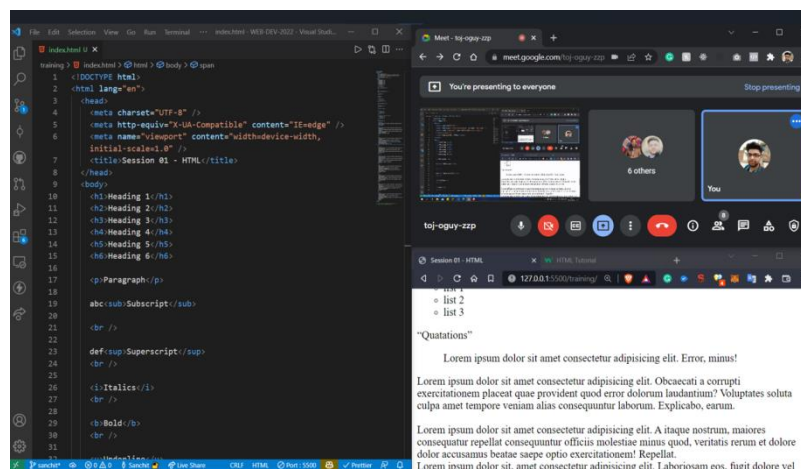
● **RCC team** organized a 3-Days workshop on BlockChain a pathway to knowing about Blockchain at beginner's level from 2nd March to 4th March 2022. The sessions of the workshop were taken by Kola Teja (2k19CSUN04013), Rishabh(2k19CSUN04019) and Siddharth (2k19CSUN04025). A total of 15 students attended the workshop.

● A 5-Day workshop on Flutter based Application Development was organized from 1st August to 5th August,2021 in online mode. Akash Dubey, student Coordinator, RCC and Harsh Chhikara, Student Coordinator, RCC were the resource persons of the workshop.
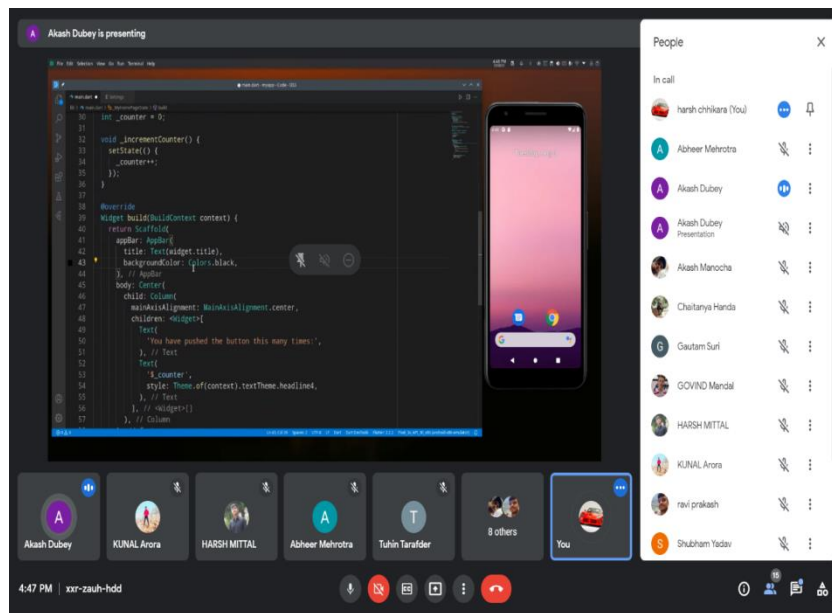
● **Research Cluster and Computing team** organised a session on **"Data Structures and Algorithms",** a pathway to solving problems using the data structure on 16.03.2022. Mr. Anish, student Coordinator, RCC and Mr. Nipun Gera, student Coordinator, RCC were resource persons and have extensive experience and completed numerous projects in the data structure. A total of 35 students attended the session.

● **Research Cluster and Computing** organized a workshop on **"Web Development"** a pathway to understand and interact with websites and web applications on 3rd Feb.,2022. Mr Sanchit Bajaj was the mentor for the training and had extensive experience in different web technologies and completed numerous projects and internships.10 students attended the session.
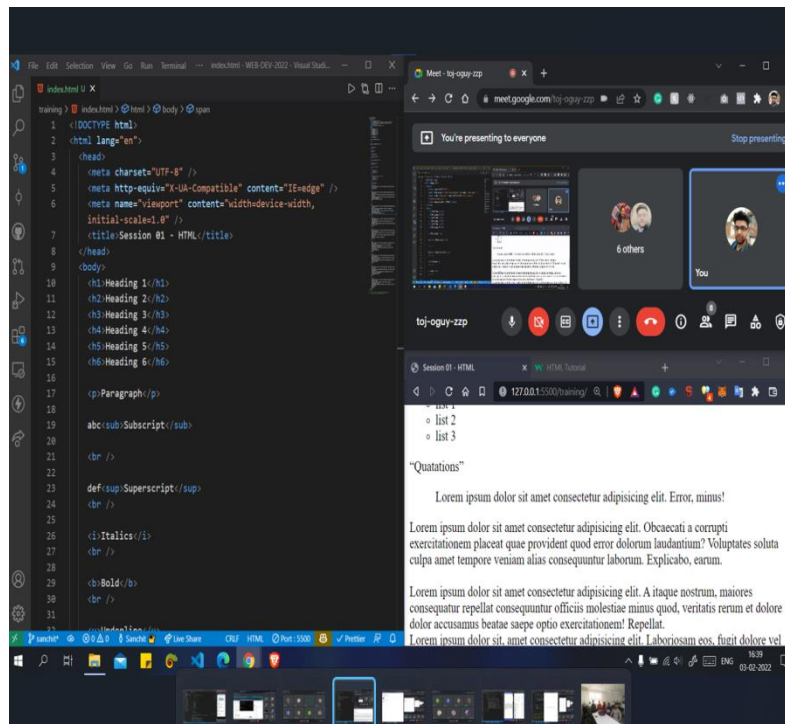
● **Research Cluster and Computing** organized a 3-day workshop on Web development from 22nd to 24th July 2021 on google meet in online mode. The main speakers of the workshop were Ravi Prakash and Harsh Mittal, student Coordinators, RCC

under the mentorship of Dr. Parneeta Dhaliwal, Associate Professor, CST department. A total of 39 students attended the workshop. On the last day, a competition was conducted where students were given certain topics on which they had to make a website. E-certificates were issued to all the participants and the winners. In the competition Kunal Arora, Arsh Lakhania and Ambika Sharma bagged 1st, 2nd and 3rd position respectively.

● **RCC in collaboration with MRU-IIC** organized an Expert Talk event on the topic "How to Plan for a Startup-Legal & Ethical Steps" on 28th April 2022. Dr Manoj Mishra,

CEO & Co- Founder of the holding and flagship company Gen-Next Biz Ventures & Consultants (www.gnbvc.in) engaged in Growth, Strategy and Start up consulting and also Angel investing, conducted the Expert Talk session. A total of 25 students participated very enthusiastically in this session with many questions which were all addressed by Dr Manoj.

● **Research Cluster and Computing** organized a Two-Day workshop on "**X-ray Image Classification using Machine Learning**" a pathway to knowing about how to do image classification at beginner's level on 2nd March, 2022 and 9th March, 2022.The resource person was Mr **Harsh Bhasin**, Asst. Professor, CST, MRU. A total of 30 students attended the workshop.

● The Computer Science & Technology Department and RCC, in association with Sofocle Labs conducted a workshop on Blockchain Technology on 9th February 2022. These Blockchain courses/workshops are tied to rapid changes happening in the core technology as well as its applications in the industry Workshop by Sofocle Labs continued from 9 am to 2 pm for the students of B. Tech CSE students. Mr. Jeevan and Mr. Ghan of Sofocle Labs discussed the technological aspects with the students and talked about a variety of projects being done in the field of blockchain technology. They also showcased the platform of Zeeve Labs for students to work on their projects as well. They discussed smart contracts and their applicability in projects.

3.3.2.4 Other IIC Team Activities

● Idea Generation Workshop for Sustainable Solution was conducted in Manav Rachna University on 13 th October 2021. It was organized by IIC faculty members from the Department of Management and Commerce (DMC) of Manav Rachna University. "A sustainable idea is like a play which needs a good producer and a good promoter even if it is a masterpiece". The activity aimed at developing the thinking facilities of various students by confronting them with a task of generating ideas, and having individuals work in collaboration to produce solutions that are not only innovative, easily implemented but are sustainable as well. Around 80+ students participated in the event.


● IIC Faculty members of Department of Mechanical Engineering and Electronics and Communication Engineering of Manav Rachna University (MRU) organized
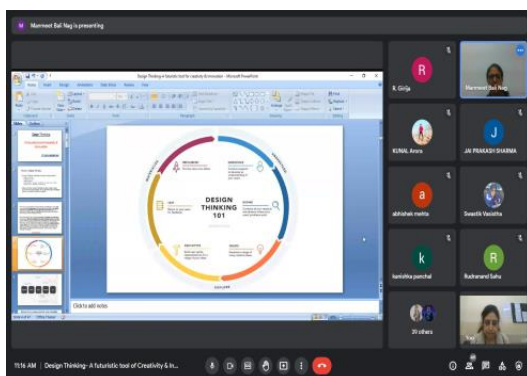
an **International Conference on "Robotics, Automation & Communication Engineering for Industry 4.0" on 4th - 5th February, 2022**. On day 1&2, 60 papers were presented in four parallel sessions on the theme Smart Manufacturing & Automotive Industry for Industry 4.0, Internet of Things & Machine Learning respectively. Chief Guest of the session along with Hon'ble Vice Chancellor, Prof.(Dr.) I.K. Bhat, congratulated the team of the conference. Six papers from various sessions received best paper award, followed by the conclusion remarks and vote of thanks.
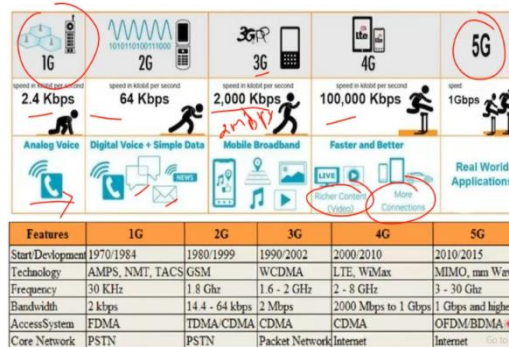
● Institution Innovation Council of Manav Rachna University organized a webinar event in the form of a Workshop on Design Thinking – A Futuristic Tool of Creativity & Innovation on 23rd February 2022. Workshop was conducted by Dr. Manmeet Bali Nag, Associate Professor, Department of Management and Commerce of Manav Rachna University. In this webinar, various facets of Design Thinking as a new paradigm of Innovation with Customer Empathy were deliberated upon.

● Internal Hackathon AVISHKAR 2022 Event of Smart India Hackathon (SIH) 2022 was conducted in Manav Rachna University on 15th March 2022. As per MHRD Innovation Cell- AICTE directive, a team of technical experts from industry were invited as judges to

MRU to evaluate the idea solution and its implementation and other parameters to specific problem statements demonstrated by several competing teams of our Engineering students and selected top teams will be further nominated for SIH 2022 registration for final competition at National level. Each team had 6 students with at least one female student in each team. More than 10 teams participated in the internal Hackathon held at Manav Rachna University.

3.4 Innovations and Competitions Won

● Shivam Minz, CSE 6th Semester student of Department of Computer Science & Technology won the 1st prize in a hackathon held at IMS Ghaziabad on 22nd May 2022. He developed a "Robo Fire Extinguisher" with the help of which fire is extinguished robotically at near proximity using a water pump and nozzle. The project featured a microcontroller, Bluetooth module, flame-response relay, and gear motor, and it was controlled by a mobile phone.

● Kolla Teja, CSE DSML 6th Semester Student of DoCST won judges prize in INNOSKILL under vertical Srijan in March 2022. He made the cryptocurrency named Manav Rachna Coin which resembles some of the properties of famous digital asset Ethereum.

● Harsh Singh Vashisth, Liza Kansal, Anoushka Pandey, Department of CST, were recognized as Xebia Academic Excellence Editors by Xebia.

● Sahil Jhangar, Department of CST, selected for Google Summer Code 2022 program with a $3000 stipend by Google.

● Saurav Kumar Srivastava, Department of CST, bagged Best Innovation Certificate in Water Rocket and 1st prize in Aeromodelling.

● Gourav Vashist, Department of CST, was awarded as Outstanding Student Volunteer by IEEE.

● Khushi Kathuria, Department of CST, was awarded as Outstanding WIE Student volunteer by IEEE.

● Rudranand Sahu, Vinay Kumar, Prajwal Paul, Chirag Sindhu for their outstanding achievement in the e-Yantra competition. Swatchhta Bot (SB) team has emerged as the champion, for exceptional skills, dedication, and innovative approach and won a cash prize and 3 months paid internship in IIT BOMBAY.

● Srijan, Department of CST, selected as Global Trainee – Data Science in Sloan Technologies FZCO, UAE (technology division of Ureka Education Group, UK) under Tech in Residence Programme, Silicon Valley Promotion.

● 8 students from the Department of Management & Commerce were selected for internship at Atal Incubation Centre(AIC)- BIMTECH Noida. They successfully completed

their internship in the month of July. Mr Pryansh Sikka was greatly appreciated for his work in an interaction with Dr Abha Rishi, CEO, AIC-BIMTECH & Chairperson, Centre for Innovation & Entrepreneurship Development.

● Wajid Ali, student of B.Sc. (H) Mathematics 6th semester, bagged first position in the Animation event in Innoskills 2022 organized by Manav Rachna Educational Institutions, Faridabad on April 11 & 12, 2022.

● Harsh Chaudhary, **Department of Computer Science and Technology** was Blogthon event winner, INNOSKILL-MREI on 12-APR-2022.

● Vidhi Singh, student of BA LLB at Manav Rachna University bagged a gold medal at the Khelo India University Games 2021 in Bangalore.

● Saurav Kumar Srivastava, **Department of Computer Science and Technology** was Aeromodelling Winner, 1st position certificate + 2000/- cash, INNOSKILL-MREI on 12-APR-2022.

● Saurav Kumar Srivastava, **Department of Computer Science and Technology** received the Best innovation certificate for Water Rocket event on 12-Apr-22, INNOSKILL-MREI.

● Gunjeet Kumar, Gorakh Nath Sharma and Aryan Sirohi from Department **of Computer Science and Technology, were aeromodelling winners for batch 2020-2024 received CERTIFICATE/CASH on 12-Apr-22, INNOSKILL-MREI.**

● Kunal Arora, Deven Chaudhary, Priyanshi and Lakshay Bajaj were **VALORANT LAN TOURNAMENT winners for batch 2020-2024 held on 12-Apr-22, INNOSKILL-MREI.**

● Shivank Solanki, **Department of Computer Science and Technology**, VALORANT(GAMING) won 2nd Position on 12-Apr-22, INNOSKILL-MREI.

● Amareswara Reddy, Nagarjuna Reddy, Venkata Ramana Murari, Dhamaruka Siva Sai **Department of Computer Science and Technology** were winners of **E-TREASURE HUNT on 12-Apr-22, INNOSKILL-MREI.**

- BC Sai Kiran Reddy, K. Satwik, K.Rahul, Sudeep Batra and Teja Siva Shankar Guru Sai, **Department of Computer Science and Technology** won **BEST OUT OF E- WASTE on 12-Apr-22, INNOSKILL-MREI.**

- Surbhit Chopra, **Department of Computer Science and Technology** won 3rd Position in ROOMS EVENT on 12-Apr-22, INNOSKILL-MREI.

- Pratyush Mishra, **Department of Computer Science and Technology** won 1st Position in YUVA Fit on 12-Apr-22, INNOSKILL-MREI.

● Pratyush Mishra, **Department of Computer Science and Technology,** won 1st Position Cash Prize, Rs. 1000 in Infographics for Sustainable Future on 12-Apr-22, INNOSKILL-MREI.

● Mukul Sharma, **Department of Computer Science and Technology,** 2021-2025, Infographics for Sustainable Future Winner, won 1st Position Cash prize Rs. 2000 on 12-Apr-22, INNOSKILL-MREI

● Aadi Dhiman, **Department of Computer Science and Technology** won 1st Position **in** Infographics for the Sustainable Future event on 12-Apr-22, INNOSKILL-MREI.

● Vishwa Kundu and Vidhi Singh, students of BA LLB at Manav Rachna University put up a brilliant show at the ongoing Khelo India University Games 2021 in Bangalore and earned a Gold Medal in Trap Mixed Team.

3.5 Centers of Excellence (COEs) at Manav Rachna University

3.5.1 Centre for Legislative Studies and Research (CLSR)

● **Webinar on the Art and Science of Legislative Drafting**

A webinar was held wherein Dr N Raju, Secretary, Legislative Department, Government of India was invited as the Chief Guest and Keynote Speaker and Mr Satyaprakash, the Legal Editor, The Tribune graced the occasion as Guest of Honour. Mr PK Malhotra, former Law Secretary, Government of India who is the Executive Chairperson of CLSR made the opening remarks. The event was attended by more than 350 people from different parts of India and abroad.

- **Online Appreciation Course on Legislative Drafting - First Edition**

The centre for Legislative Studies and Research (CLSR) at School of Law, Manav Rachna University in collaboration with Suveeksha has recently launched "A four Day Online Appreciation Course in Legislative Drafting from 20th March-28th March 2021. The course commenced on 20th of March 21, and the first session was conducted by Mr PK Malhotra, Executive Chairman, CLSR and former Law Secretary, Ministry of Law and Justice, Govt. of India on the topic: "Public Engagement with Law making Process" followed by the second session from 4.00pm to 6.00 pm which was taken by Dr SK Bose, Course Director & Centre-in-charge, CLSR on the topic: "Salient Features of Indian Constitution".Day two session was conducted by Dr Daksha Sharma, External Faculty, Asst. Professor, Bennett University on the topic: Concept of Legislative Drafting and session-2 from 4.00 pm to 6.00 pm on the topic: Principles of Legislative Drafting. There were total 29 participants comprising advocates, law teachers, PhD scholars, law students from various institutions including some students from our own university pursuing this course. The valedictory ceremony was attended by Pro IK Bhat, VC, MRU as Chief Guest & Mr Shashank Garg, Convener, Board of Advisory, MRU as Guest of Honour.

- **Online Appreciation Course on Legislative Drafting - Second Edition**

The Online Appreciation Course in Legislative Drafting 2nd edition commenced on 23rd of August 2021 and completed on 29th august 2021. There were 45 participants in the course who successfully completed their course. The course was curated by Dr SK Bose under the guidance of MR PK Malhotra and taught by top level officials and experts from Legislative Department, Government of India.

- **Slogan Writing Competition**

A Slogan Writing Competition was organized by Centre for Legislative Studies and Research, on Christmas Eve, 24th December 2021, Friday, at the School of Law, Manav Rachna University. Four broad themes were given to participants upon which they had to write slogans. These themes were, "Need for Justice", "Access to Justice", "Legal Awareness" and "People's Welfare". Students from the Department of Law, and Department of Education participated in the competition. Unnati Aggarwal from BA LLB 1st Year, bagged the First Prize by writing slogan on the topic 'Need for Justice', her slogan was, "Rats and Roaches live by competition under the law of supply and demand; It is the privilege of human beings to live under Law of Justice." Sonal Arora from B.Ed. Semester-1 got the Second Position by writing slogan "Deal cautiously with a person who is legally aware", on the topic 'Legal Awareness'. Aishwarya Sareen from BALLB Hons. 1st Year

bagged the third Position with the slogan, "It is a duty of the living to ensure time bound justice as the dead cannot cry out for justice", on the topic 'Need for Justice'.

● **Panel Discussion on the topic "Independence of Judiciary"**

A Panel Discussion on the topic "Independence of Judiciary" was held on 15th January 2022, Saturday. It was organized **by LLM Batch 2021, School of Law, Manav Rachna University, in collaboration with Centre for Legislative Studies & Research.** The Panel Discussion was attended by around 50 participants from the undergraduate programme.The panelists discussed various aspects related to independence of judiciary like institutional and decisional independence, separation of powers and rule of law.

Panelists also discussed National Judicial Appointments Commission and various cases. LL.M students Dhiraj Philip and Swapnil Garg, moderated the discussion. Anushka Tyagi, Ayush Chibber, Chaya Gaur, Deepanshi Singhal, Keshav Roy, Preeti Choudhary, Prerit Nain, Rohit Kumar Singla, Ruchi Bhardwaj, Shagun Rai, Shalu Shrivastava, Shireen Singh, Vibhanshu Singhal, Yamini Nayyar, and Yash Batra participated as panelists.

- **Webinar held at CLSR on 19th January, 2022**

A Webinar was held on 19th January 2022, Wednesday, with Padma Shree Awardee Prof Upendra Baxi as the Chief Guest and Keynote Speaker, Prof DS Sengar Pro Vice Chancellor & Dean, School of Law, Manav Rachna University as the Special Invitee, and Mr. PK Malhotra, Former Law Secretary & Executive Chairperson, CLSR as the Guest of Honour. Approximately 160 participants registered and attended the webinar. The list of attendees includes law teachers, law students, PhD Scholars, lawyers and other legal professionals from various institutions. Prof Baxi said that Legislative Drafting is the least studied subject in India, despite it being the most important subject. He also gave the principle of 3 Prudences- Legisprudence. Jurisprudence, and Demosprudence. Prof Baxi also suggested that the laws should have a "Sunset Clause", where a law should get expired after a few years, or after it serves its purpose. That the laws should be renewed by the Legislature, and should be weeded out when they turn obsolete.
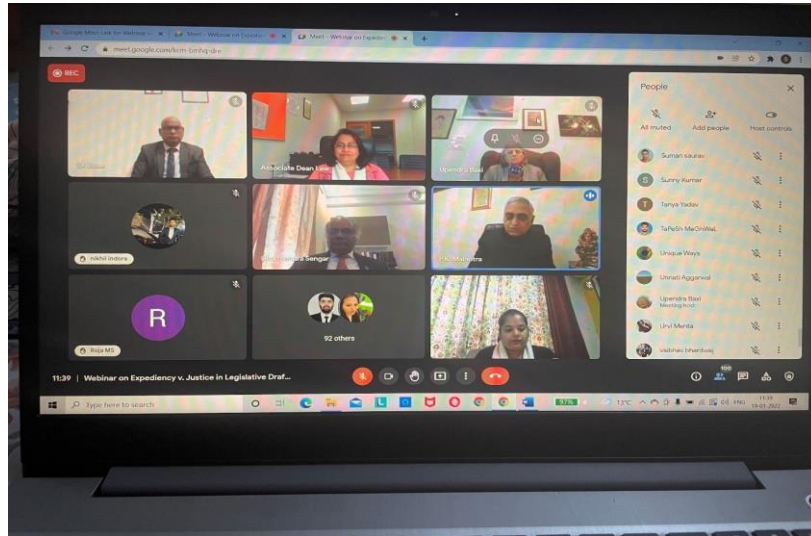
● **Panel Discussion on Data Protection Bill**

A Panel Discussion was held on 25th February 2022, on Data Protection Bill, organised by Centre for Legislative Studies & Research (CLSR) and School of Law, Manav Rachna University. The distinguished panelists were Mr. Amit Kumar Dubey, Author and National Security Expert in the field of Cyber Security, Ms. Rashmi Arora AVP- Litigation, SBI Card & Payment Services Ltd., Mr. PK Malhotra, Former Law Secretary & Executive Chairperson, CLSR, and Ms. Sunanda Tewari, Senior Research Fellow at Centre for Trade and Investment Law. The discussion was moderated by Dr SK Bose, Director CLSR. Approximately 75 participants registered and attended the webinar. Mr PK Malhotra made the audience aware of the topic and why is data protection important. Mr Amit Kumar Dubey said that awareness is very important in the field of data protection, and it is the government's responsibility to spread awareness about it as much as possible, because unless and until the end user knows and understands how his data could be used, the whole exercise to protect data could prove futile. Ms. Rashmi Arora explained the difference between data sharing and essential data sharing. Mr. Malhotra was of the same view that law is not able to keep pace with the swiftly developing technology. Ms. Sunanda Tewari apprised us of the concept of Data localisation and the conflict of interest with trade agreements.
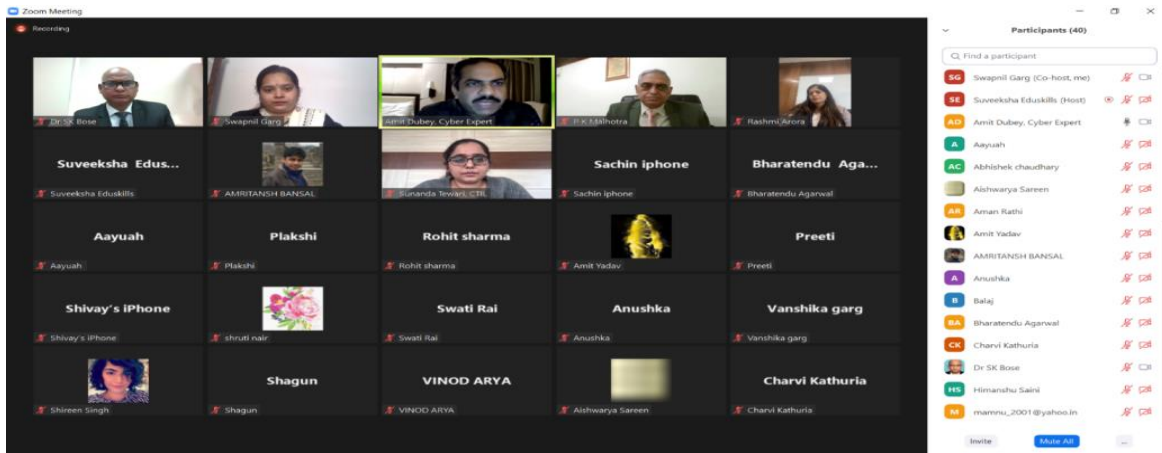
● **Inaugural session of Online appreciation course in legislative drafting 3rd edition**

The 3rd edition of Online Appreciation Course in Legislative Drafting was inaugurated on 9th April 2022, with Dr.Reeta Vasishtha, Secretary, Legislative Department, Ministry of Law and Justice as the Chief Guest and Keynote Speaker. The event was organised by Centre for Legislative Studies & Research at School of Law, Manav Rachna University in collaboration with SuveekshaEduskills Limited. Opening Remarks were made by Mr. PK Malhotra, Former Secretary, Ministry of Law and Justice, and executive chairperson CLSR. More than 50 participants registered and attended the event. Dr.Reeta Vasishtha explained how a law is made, and apprised us of all the nuances of drafting of law. She said Legislative Drafting is both science and art, and a legislative draftsperson is an important key between legislature and executive. Mr PK Malhotra shared the same view and said that this is the reason why training in the field of legislative drafting holds the utmost importance, and thus this CLSR was established with a view to train the professionals in this field and prepare draftspersons of very high calibre.
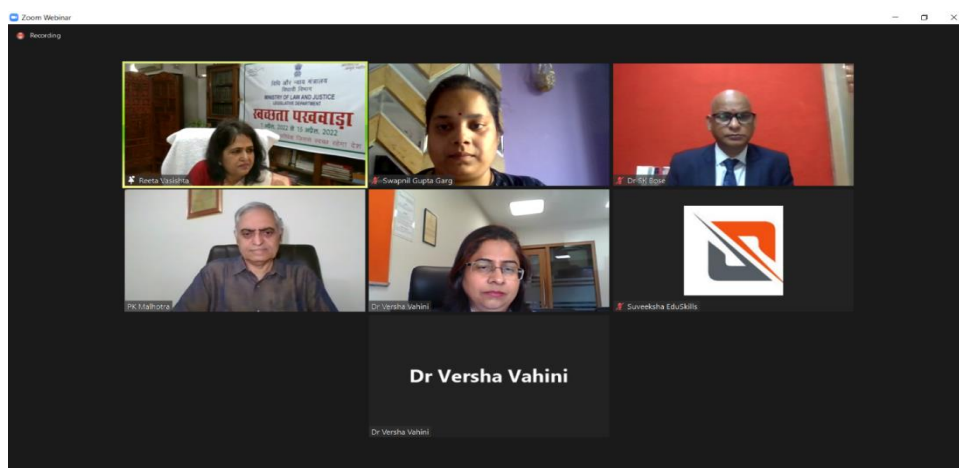
- **Online appreciation course in legislative drafting 3rd edition :9th, 10th, 16th, 17th April 2022**

The 3rd edition of Online Appreciation Course in Legislative Drafting was inaugurated on 9th April 2022, with Dr.Reeta Vasishtha, Secretary, Legislative Department, Ministry of Law and Justice as the Chief Guest and Keynote Speaker. The event was organised by Centre for Legislative Studies & Research at School of Law, Manav Rachna University in collaboration with SuveekshaEduskills Limited. There were 28 participants who registered and attended the course. The participants included students as well as professionals. First Session of the first day was taken by Mr. PK Malhotra, Former Secretary, Ministry of Law and Justice, and Executive Chairperson CLSR. He talked about 'Public Engagement with the Law Making Process'. Ms Daksha Sharma, Assistant Professor, Bennett University, Noida detailed about the 'Concept of Legislative Drafting'. On 10th April, Dr SK Bose, Course Director and Director, CLSR took the course lecture on 'Salient Features of the Indian Constitution'. Dr KV Kumar, Additional Legislative Counsel, Legislative Department, Ministry of Law & Justice, explained 'Principles of Legislative Drafting'. On 16th April, First Session was taken by Ms Arti Chopra, Deputy Legislative Counsel, Legislative Department, Ministry of Law & Justice, on the topic 'Drafting of Principal Legislation'.Second session was taken by Dr RJR Kasibhatla, Deputy Legal Adviser, Department of Legal Affairs, Ministry of Law & Justice, on 'Legislative Drafting in India: A Comprehensive Exercise'.

On 17th April, First Session on 'Drafting of Subordinate Legislation' was taken up by both Ms Swapnil Garg, Research Fellow, Centre for Legislative Studies & Research, and Ms Daksha Sharma Assistant Professor, Bennett University, Noida. Mr P.K. Malhotra formally released the certificates to the participants during the valedictory function.
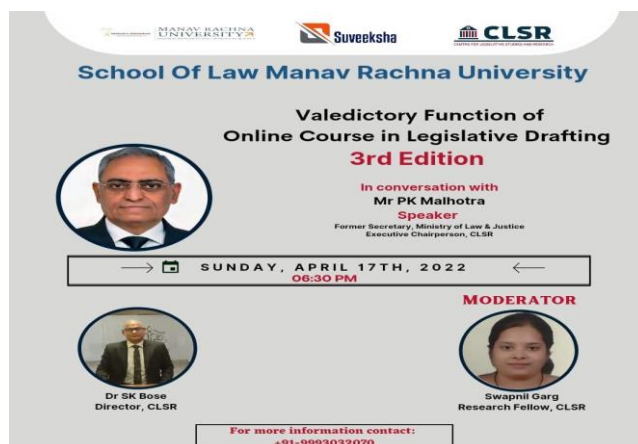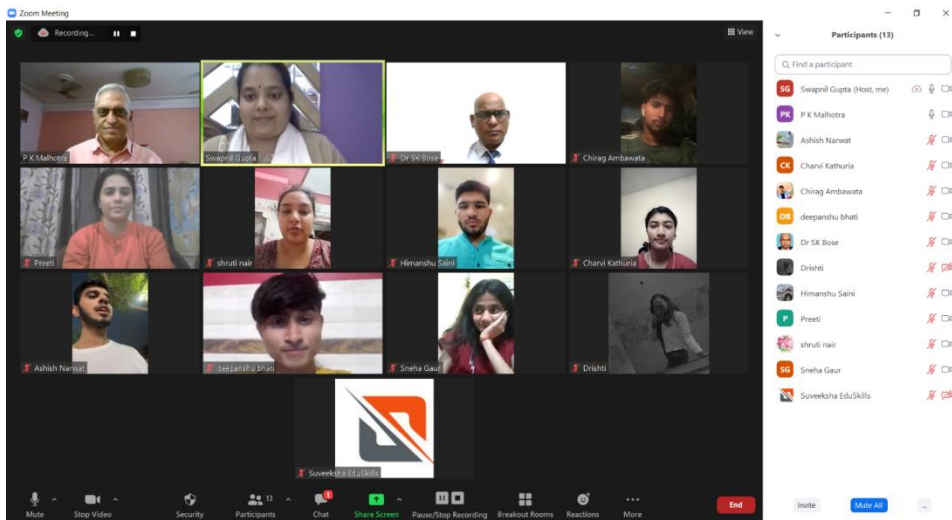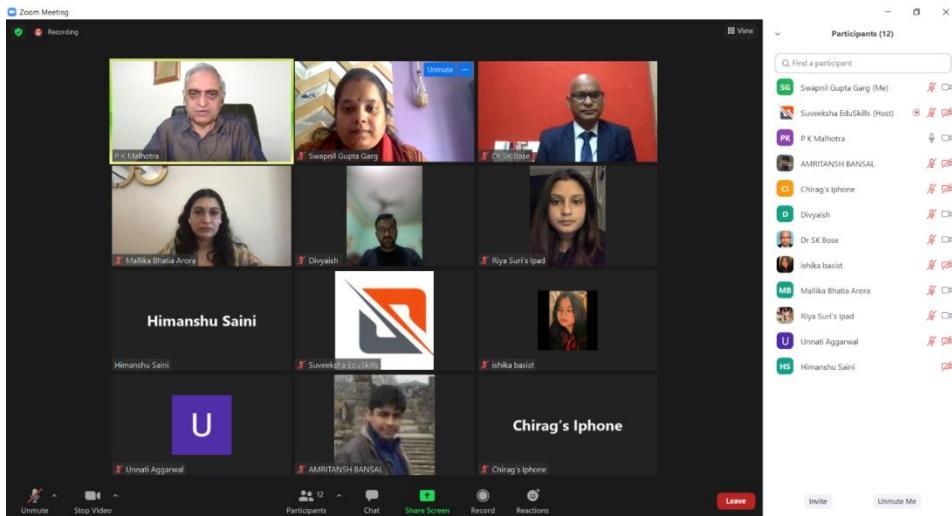
- **CLSR Participation in InnoSkill 22- 11th& 12th April, 2022**

3.5.2 Center of Excellence on Alternative Dispute Resolution (CADR)

Event Date	Event Type	Topic	Speakers
15 June 21 to 21 Aug 21	Ten-week *Certificate Course*	Practice of International Arbitration https://www.barandbench.com/news/online-certificate-course-on-practice-of-international-arbitration	- Nakul Dewan, Senior Advocate, Supreme Court of India - Sharan Jagtiani, Senior Advocate, Bombay High Court - Rajendra Barot, Senior Partner, Azb& Partners - Promod Nair, Founding Partner, Arista Chambers - Shreyas Jayasimha, Founding Partner, Aarna Law - Sheila Ahuja, Partner, Allen & Overy - Shashank Garg, Partner, Advani and Co. - Moazzam Khan, Partner, Nishith Desai Associate - Sonali Mathur, Partner, Azb& Partners
23 Nov 21	Competition	Client Counselling Competition	● Bharatendu Agarwal, Faculty-in-charge, CADR

05 April 22	Webinar	Relevance of the New Mediation Bill https://manavrachna.edu.in/latest/webinar-on-relevance-of-new-mediation-bill-organized-by-school-of-law-mru/	● Ms. Sakshi Vijay, Associate Professor, Jindal Global Law School

● **Ten-week Certificate Course on Practice of International Arbitration**

The course dealt with the structure of the international arbitration framework in India and comparative analysis of the legislative and procedural framework in an international setting. It provided practical guidance on the conduct of the arbitral process, particularly with the use of technology in virtual arbitrations. It introduced contemporary topics in international arbitration involving emergency arbitrators, third party funding, valuation/ damages expert evidence, introduction to the world of investment treaty arbitrations and their impact on India. Session were taken by senior practitioners - Nakul Dewan, Senior Advocate, Supreme Court of India, Sharan Jagtiani, Senior Advocate, Bombay High Court, Rajendra Barot, Senior Partner, Azb & Partners, Promod Nair, Founding Partner, Arista Chambers, Shreyas Jayasimha, Founding Partner, Aarna Law, Sheila Ahuja, Partner, Allen & Overy, Shashank Garg, Partner, Advani and Co., Moazzam Khan, Partner, Nishith Desai Associate and Sonali Mathur, Partner, Azb & Partners.

● **Client Counselling Competition**

Interviewing and advising comprise a vital part of a lawyer's work. It is often assumed that lawyers have the listening and questioning skills required to conduct an effective interview with a client. However, these skills are not inherent and need to be developed. Accordingly, client counselling competition was scheduled, on 23 November 2021, as a part of Law Week 2021 to inculcate among students of law, a greater knowledge of and a spirit of enquiry and counselling functions of law practice. The competition encouraged law students to develop interviewing, planning and analytical skills necessary to build and maintain a relationship between a lawyer and their client.

● **Webinar on Relevance of the New Mediation Bill**

The Centre of Excellence on Alternative Dispute Resolution (CADR), School of Law organized a webinar on Relevance of the New Mediation Bill on 05 April 2022. The Guest Speaker was Ms. Sakshi Vijay, Assistant Professor, Jindal Global Law School. Ms. Vijay,

an ILS Pune graduate did her Masters in International Disputes Resolutions from University of Melbourne, Australia. Trained as a Mediator in Australia and a Tribunal Secretary in Hong Kong, she is an accredited mediator and the Joint-Secretary of Maadhyam, Council for Conflict Resolution. Having made representation at the Rajya Sabha before the Parliamentary Committee for amendments to the Mediation Bill, 2021, Ms. Vijay was welcomed by Prof. Versha Vahini, Associate Dean, School of Law. After opening remarks by Mr. Bharatendu Agarwal, Assistant Professor, School of Law, Ms. Vijay dived into the background and importance of the new mediation bill.

3.5.3 Centre for Academic Leadership

Centre for Academic Leadership is established with the vision of empowering the academic fraternity to make future generations to be responsive, responsible and productive and assume active roles locally and globally.

This centre aims to empower the academic fraternity academically, professionally, and technically using systemic approach to play their   respective roles, to conduct research in latest pedagogies and educate academic fraternity of its impact and to connect the leading experts working in latest technologies to the academic community for up gradation of their knowledge and skills. CAL conducts various Academic Quality Enhancement Programme to train the faculty to acquire knowledge and develop skill to enhance quality of teaching of faculty. Various Faculty Development Programmes are conducted to upgrade digital skills to augment the competencies to teach in online mode. Sessions to update the knowledge are organized regularly.

3.5.3.1 Academic Quality Enhancement Program

● **Training on "Designing Outcome based Education"**

Training on "Designing Outcome Based Education" was conducted during 23rd December to 27th December 2021 with the aim of making faculty competent to use Outcome based education for their programme.

By attending the training, the faculty participants understood the concept of Outcome Based Education, could formulate vision, mission of their departments/programme, frame program objectives, course objectives, develop skills of mapping and creating program

matrix, formulated instructional objectives for their instructional practices and further could learn to create blue print and formulate question papers. The Faculty from Department of Education, Department of Humanities, Department of Management and Department of Law participated in this training.

Training was conducted by Hon'ble Vice Chancellor Dr. I K Bhat. He threw light on the role of teacher in university. Sir explained the importance, concept of 21st century education and what are the responsibilities are shouldered on university teacher. Sir envisioned the 21st century faculty for Manav Rachna. Sir expressed the need of making changes in curriculum, evaluation system, classroom system. He emphasized on the need of paradigm shift which is required towards student centric education and Outcome Based Education system.

Other trainers for this programme were Ms. Rachna Misra, Academic Head, MRIS, Dr. Dipali Bansal, Associate Dean, MRIIRS and Dr. Geeta Thakur, Professor and Head, MRU.

3.5.3.2 Identify, Implement and Promulgate (IIP) Program

The purpose of the initiative "IIP' is to enhance the quality of teaching, learning and assessment. This initiative is for identifying, implementing and promulgating unique strategies by faculty and department. The first phase of this initiated with sessions on innovative teaching strategies and assessment strategies Dr. Savita Manchekar, Principal, Lords Universal College, Dr. Agnes D'Costa, Pushpanjali College of Education, Dr. Pratima Pradhan, Fakir Mohan University, Orissa, Dr. Nandita Deb, Shishuramdas college, West Bengal, Dr. Savita Sharma and Mr. Ram Chatterjee, Dr. Geeta Thakur from Manav Rachna University conducted sessions on various innovative pedagogies.

3.5.4 Center of Excellence on Product Design and Development with Altair Engg. and Design Tech Systems

- **Short Term Training Programme (STTP) on "Structural Analysis"**

To Commemorate 25 Years of Transforming Education and celebrate Silver jubilee under Academics Activities, the Department of Mechanical Engineering, Manav Rachna University, Faridabad organized a 3-days Short Term Training Programme (STTP)

on "Structural Analysis" in collaboration with Industry Partner Altair-DesignTech on 17th - 19th August, 2021. The trainers for the workshop are Mr. Sarad Mahour, Application Engineer, Design Tech and Mr. Pradeep Mouria, ME faculty, who have expertise in the area of Structural analysis. The entire session was coordinated by ME faculty, Mr. JP Sharma. The first day session was taken by Mr. Pradeep Mouria, ME faculty on "basics of structural and Model analysis ". The fundamental session covered the bending of beams, trusses and its analysis, force and displacement methods. Subsequent 2 days session was taken by Mr. Sharad Mahour, Application Engineer, Design Tech on "Altair Software and its Application". He has well explained about the exploration of various tools of Altair such as hyper mesh, hyper view & Hyper graph etc. From these sessions, students learnt and practiced the steps for solving structural problems through Hyper mesh and reviewed its result in Hyper view. Hand-on session covered geometry import techniques, mesh generation, topology optimization, structural and modal analysis. The session was very informative and interactive. Around 60 participants attended the session and clarified their doubts on the same. Please find the attached pics of the STTP session for your reference.
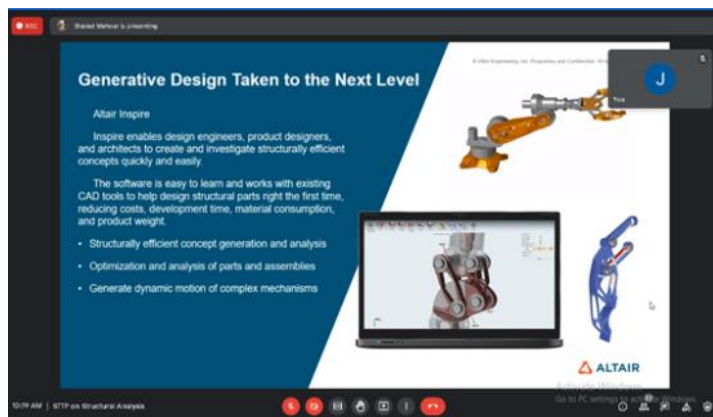
3.6 Research Integrated UG Programs

Manav Rachna has a well-established teaching and learning process guided by the global best practices and a culture of academic excellence promoting research, innovation & entrepreneurship. So, to inculcate the research practices in UG students such courses are incorporated in the curriculum.

The following courses are incorporated in UG programs to enhance research activities:

● Introduction to Research

● Research and Innovation

● Scientific Research

- Research Methodology
- Research Colloquium
- Research Seminar
- Promoting Research Based Teacher Education

Outcome of these courses is in terms of student's participation in conferences and publications in journals. All such student contributions in research are mentioned below:

Students Participation in Conferences & Research Publications

Category	School	Number
No. of Publication in Journals	Applied Sciences	08
	Management	03
	SOE	01
	SOL	07
No. of Publication in Conference	Applied Sciences	03
	SOE	04
	SOL	01

- Tanisha Gautam, Anjali Sharma of M. Sc Physics published a research paper on "XANES Investigations on Electronic Structure and Magnetic Properties of GaFeO3 Nanocrystals" in J. Ele. Materials journal.

- Kuldeep Mehta, Research Scholar, Department of Physics published a paper on "Ca Doping Concentration Induced Enhancement in Dielectric and Magnetic Properties of Bi1−xCaxFeO3 (x = 0.2 and 0.4) Ceramics" in J. Ele. Materials journal.

- Anshul Tripathi, Pritam Das, Tushar Aggarwal, Sahil of Department of Mechanical Engineering published a research paper "Efficiency Enhancement of a Hybrid Vertical Axis Wind Turbine by Utilizing Optimum Parameters" in Materials Today journal.

- Punam Rani student of PhD Chemistry published an article in Current Research in Green and Sustainable Chemistry entitled with "Co-digestion of wheat straw and animal manure pretreated with calcium hydroxide for biomethane production: Kinetic study" in 2021

- Punam Rani student of PhD Chemistry published an article in Current Research in Green and Sustainable Chemistry entitled with "Experimental and Kinetic Studies for Improvement of Biogas Production from KOH Pretreated Wheat Straw" in 2021

● Somya Tanwer, student of PhD Chemistry, published an article in International journal of Science, Engg. and Management entitled "An Overview: Drugs Used as corrosion inhibitor" in 2021.

● Somya Tanwer, student of PhD Chemistry, published an article in Progress in Color, Colorants and Coatings entitled "Corrosion Inhibition Activity of Cefixime on Mild Steel Surface in Aqueous Sulphuric Acid" in 2022.

● Somya Tanwer, student of PhD Chemistry, published an article in Journal of the Turkish Chemical Society Section A: Chemistry with "Evaluation of Corrosion inhibition properties of pharmaceutically active compound Cefotaxime sodium on mild steel surface in sulfuric acid medium" in 2022.

● Research paper titled "Significance of Forensic Evidence in Sexual Offences" authored by Amit Singh BBA.LL.B. 2018 batch published in the Indian Journal of Health and Medical Law Vol 5 Issue 1 (April 2022).

● Research paper titled "Constitutional Validity of Deception Detection Test " authored by Priyank Pareek B.Com.LL.B. 2018 batch published in the Indian Journal of Health and Medical Law Vol 5 Issue 1 (April 2022).

● Research Paper titled PROTECTION OF CHILDREN UNDER INTERNATIONAL HUMANITARIAN LAW published by Jagriti BA.LL.B. 2017 Batch in Law Column (November 2021).

● Research paper on Globalization and Dispute Settlement Mechanism in International Trade Law by Shagun Sharma, LLM Student in International Journal of Law Management & Humanities, Volume 5, Issue 1 (2022).

● Research paper Published on Impact of Globalization on Human Rights by Yamini Nayyar, LLM Student in International Journal of ALL Research Education & Scientific Methods, Volume 10, Issue 1 (2022)

● Research paper published on Problems in Arbitration in India by Anushka Tyagi, LLM Student in International Journal of All Research Education & Scientific Methods, Volume 10, Issue 1 (2022).

● Research paper published on "Locating Liability in AI: Framework for Future" by Vibhanshu Singhal in Quest Journal of Research in Humanities and Social Science, Volume 10, Issue 1 (2022).

● Research Paper published on "Impact of Globalization on Human Rights" by Preeti in Supremo amicus, Volume 28, January 2022.

● Research Paper on "Violence and Torture - A stigma of Human Rights of women" by Tanya in International Journal of Advances in Engineering and Management, Volume IV, Issue 2, February 2022.

● Research paper titled "Firearms in Forensic Science: A Comparative Study" authored by Sneha Ranjan BA.LL.B. 2018 batch published in Burnished Law Journal Volume 3 Issue 2 ISSN 2582-5534 (May 2022).

● Somya Tanwer, student of PhD Chemistry, published an article in Current Research in Green and Sustainable Chemistry with "Recent Advances in the Applicability of Drugs as Corrosion Inhibitor on Metal Surface: A Review" in 2022.

● Naveen and Kunal, ECE 6th Semester presented a paper titled "Automation Contactless Switch for Smart Home Automation", International Conference on "Robotics, Automation & Communication Engineering for Industry 4.0" on 4th - 5th February, 2022.

● Naman Gupta, Department of Mathematics, presented a paper in 2022 Fifth International Conference on Computational Intelligence and Communication Technologies (CCICT), IEEE Explore on "Russia against the World Tweets".

● Deeksha Bhardwaj Ph. D scholar, presented a paper entitled "Number of zeros of a Polynomial in a disc" in International Conference on Contemporary Research on Mathematics and Computer Science (ICCRMCS -2022) held on 29 -30 April 2022 at SRMS College of Engineering and Technology, Bareilly (U.P) India.

● Ritik Kadian , student of B.Sc. (H) Mathematics 6th semester, presented a paper entitled"A Mathematical Model for Diet Optimisation Using Linear Programming" in International Conference on Metamorphosis of Engineering Sciences Towards Sustainable Smart Cities (MES3C),held at FET, Manav Rachna International Institute of Research and Studies, Faridabad Haryana India(June 23rd -24th,2022).

● Aishvarj Gupta, ECE 6th Semester presented a paper titled "EVOLUTION OF BLOCKCHAIN: From Bitcoin, Ethereum to Polkadot", International Conference on "Robotics, Automation & Communication Engineering for Industry 4.0" on 4th - 5th February, 2022.

● Poorav Panchal, Tushar, ECE 6th Semester, presented a paper titled "Blood Oxygen with Heart Rate Monitor and Data Saving", International Conference on "Robotics, Automation & Communication Engineering for Industry 4.0" on 4th - 5th February, 2022.

● Kartik Rastogi, Shubham Panwar, Ayush Thakral, ECE 6th Semester, presented a paper titled "Review paper: Traffic Light Control System", International Conference on

"Robotics, Automation & Communication Engineering for Industry 4.0" on 4th - 5th February, 2022.

● Case comment on "Selvi v. State of Karnataka & Anr." authored by Garima Rexwal BA.LL.B. 2018 batch published in Lawyerscript.com (May 2022).

3.7 MOU's Signed

The School of Education & Humanities signed a MOU with **Armaan Special Education School** (Asda), Sector-16, Faridabad, Haryana & **Manav Rachna Schools.** The purpose of these Memorandum of Understanding (MOU) is to establish a framework for collaboration and to address the quality of education in the teacher training program (B. Ed. Special Education) and to empower children with special needs. In addition, the MOU will provide a mechanism to assist parents of children with special needs. The organizations share a goal of quality education and human resource development in the field of rehabilitation to respond to diverse educational needs. This MOU defines, in general terms, the basis on which these Departments will work together to strengthen and expand inclusive education to ease students in mainstreaming and to develop academic skills that will last a lifetime and coping skills to help the successful adult independent living.

Activities conducted under previous MOUs in AY 2021-22

Workshop conducted on SimSolid Software on 09-11 Nov 2021 (3 Days). It was delivered by Sharad Mahour, Sr. Application Engineer, DesignTech Systems Ltd., New Delhi. The workshop was attended by Prof. (Dr.) Joginder Singh and Mr J P Sharma. Modules Covered during the workshop were Structural Linear,   Structural Non-Linear, Multi Load Cases, Modal Analysis, Dynamics, Transient, Frequency Response, Random Response, Thermal Analysis, Fatigue Analysis, SN Time, SN Sequential, EN Time and EN Sequential.
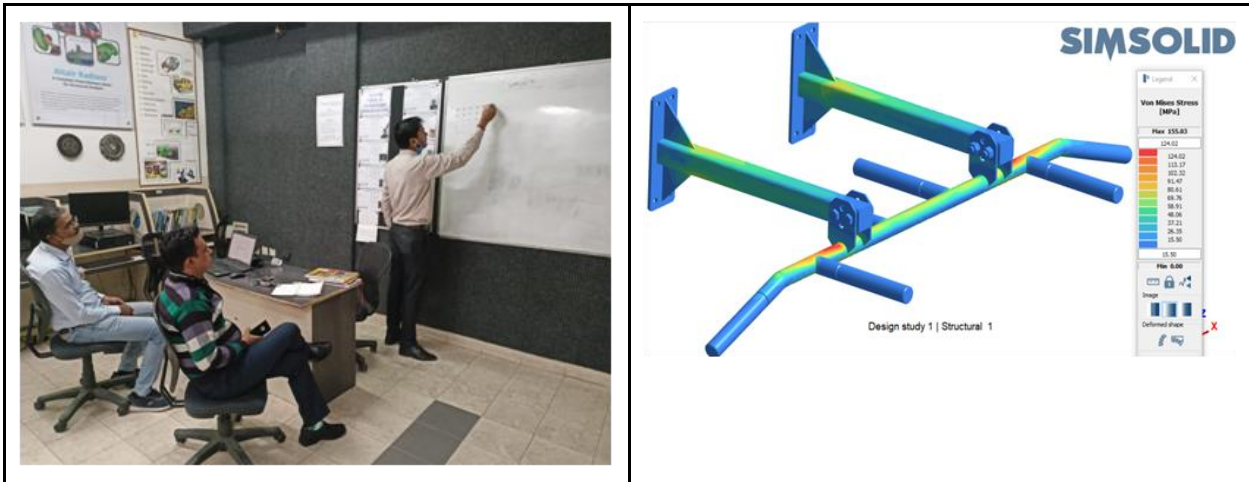
3.8 Institutional Social Responsibility (ISR)

- **Social Media Awareness Campaign on Paper Bag**

The Department of Student Welfare, MRU in collaboration with Dr. O.P. Bhalla Foundation organized a Social Media Awareness Campaign on Paper Bag. The motive was to promote adoption of friendly choices to 'Go Green' and reduce environment pollution. The participants were sensitized about the hazards of plastic pollution created each day and were sensitized how they could make a difference simply by changing the usage of paper bags in place of plastic. After this a quick DIY of paper bag making was shared. Fifty three students actively participated in the activity and paper bags at home and encouraged their friends and family to do the same.

- **Adoption of new villages**

Under Unnat Bharat Abhiyaan from July 2021, the following new villages were adopted:

- Chhainsa

- Atali

- Mothuka

- Dayalpur

- Gadkheda

Team Foundation visited all the adopted villages on 13th July 2021 along with Dr. Shruti Vashist Dean DSW who represented MRU. The team comprising seven students and two faculty members spoke to the Sarpanchs of these villages and understood their requirements in terms of the plants needed for the plantation drives. The Sarpanchs shared the challenges and the requirements in terms of flowering/non-flowering plants and fruit and other trees.

- **SUMMER OASIS: Fund Raiser (15.7.21 to 18.7.21)**

The Team Foundation organized a 4-days fest (15.7.2021 to 18.7.2021) named Summer under Twin Fundraiser Duology which was done in collaboration with DSW, MRU. Twin Fundraiser Duology is a series of bi-annual fundraiser events: Polar Express and Summer Oasis. The aim of Twin Fundraiser Duology is to collect funds in kind or cash from potential participants, sponsors, to increase the awareness of Dr. O.P. Bhalla Foundation through Youth festivals and using the collected funds for the charity purposes. Summer Oasis was a follow up to the first fundraiser fest, Polar Express. The event in the online fest originated from various disciplines like literary, art, gaming, and e-sport. Each of the events was coordinated by student representatives from respective Clans and Team Foundation. Various events included Frontier 2.0: Revival – Battleground Mobile India Tournament, Meme-o-Logy: The Meme Quiz, MG's Craftsvilla – Dot Mandala Workshop, Project A: Valorant Tournament, Coin Flip: Turncoat Debate and Filmistaan: Bollywood Quiz.The competitions were organized through Google Meet and Zoom while gaming events were

organized on the official Discord server of our creative partner, Parallax India, Vibe Nutrition-Nutrition Partner, Oye Busy India – Service Partner and Ecrivons – Gifting Partners.
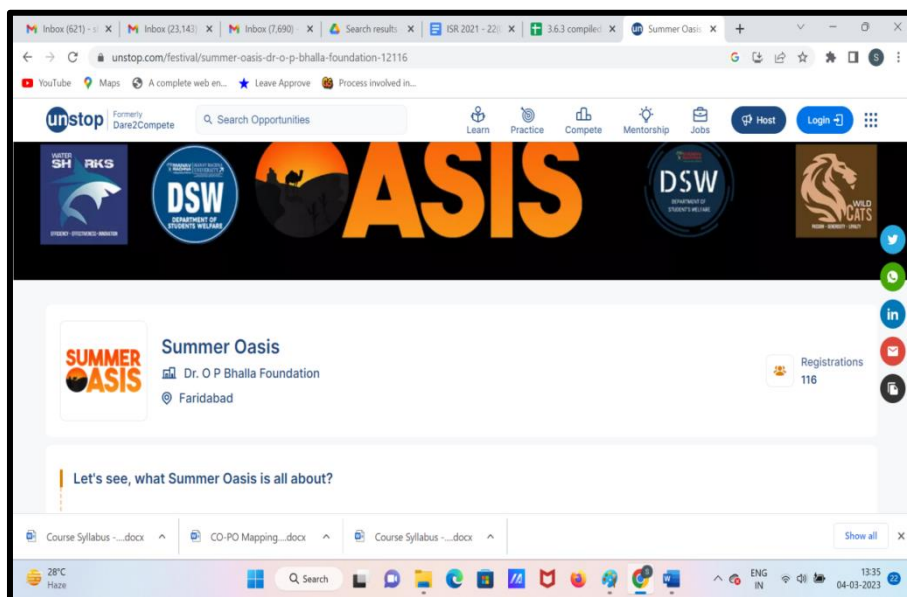
- **Mega Plantation Drive**

Dr. O.P. Bhalla Foundation in association with Clans under Department of Student Welfare Manav Rachna University organized MEGA Plantation drive on 20.8.2021 under Paryavaran Sanrakshan Gatividhi in all the adopted villages Dayalpur, Gadkheda, Atali, Chhainsa, Mothuka. Three faculty members and twenty-three students participated in the drive. As per the requirements of each village trees and saplings of Peepal, Banyan, Jamun, Neem, Gulmohur, Amaltas, and Amrood, were donated in large numbers. Around 1500 plants were planted.

- **Workshop on Solid Waste Management**

Dr. O.P. Bhalla Foundation organized a Workshop on Solid Waste Management with Manav Rachna Center of Peace and Sustainability on 26.8.2021 with an aim to make

people aware about the rising problem of solid waste and how to manage the issue. The guest speaker of the event was Ms. Kalpana Andhare, a professional counselor, trainer, and environmentalist. Ms. Kaplana detailed the participants about the hazards caused by the solid waste menace and the sustainable solid waste management practices. Faculty members and 34 students participated in the workshop. The event ended with the Q/A round with the expert.

- **Teacher on Call**

Dr. O.P. Bhalla Foundation has been personally visiting the Government Schools of the adopted villages and speaking with the Principals/Head-Masters and motivating their Students to utilize the Teachers on Call Program. Three faculty members and twenty two students of Manav Rachna University were part of the team to tutor the students on call. Foundation has held Nine Special Scholarship Case Meetings till date where Financial Assistance of about 50 lakhs has been provided to the Underprivileged Students of Manav Rachna Schools and Universities.

- **Ek Mutthi Daan:Grain donation drive**

MRU collaborated with Dr. O.P. Bhalla Foundation to organize the Ek Mutthi Daan: Mega Grain Donation Drive on 16 Sep 2022 in which with diligent support from students and teachers, Dr. O.P. Bhalla Foundation was able to collect more than 27000 kgs of dry grain. The distribution ceremony was graced by the presence of Chief Guest, Krishan Pal Gurjar, Minister of State of Power and Heavy Industries, Sh. Narinder Gupta, MLA, Old Faridabad, Esteemed Madam Satya Bhalla Ji, Chief Patron-MREI, Dr. Prashant Bhalla, President-MREI, Dr. Amit Bhalla, Vice President, MREI, and Dr. NC Wadhwa, Director General, MREI. It was distributed among Old Age Homes, Orphanages, Rescue homes, Animal Shelters and Housekeeping, transport staff along with construction workers at the campus. Seven hundred and twelve students and all the faculty members contributed to this noble cause.

- **Waste Segregation**

An orientation and training program on the topic of Waste Segregation was organized by Dr. O.P. Bhalla Foundation, in partnership with Manav Rachna Educational Institutions and the Way of Life Foundation, with the support of the Municipal Corporation of Faridabad. The program was aimed at school students and was attended by 2500 participants from 04.10.21 to 07.10.21.

- **Donation of Oxymeters to BK Hospital**

On November 16, 2021, Dr. O.P. Bhalla Foundation and Manav Rachna Educational Institutions partnered with BK Hospital to support elderly patients by donating 125 oxygen meters. The donation drive was a collaboration between Team Foundation, Sh. HK Batra, and Sh. BR Bhatia, and was made possible through the contribution of CSR funds from their organizations. Keeping in view the covid protocol.

- **Hands on Heart**

Manav Rachna University and Dr. O.P. Bhalla Foundation organized 'Hands-on Heart – Learning Cardio-Pulmonary Resuscitation & Basic Life Skills Workshop on 30.11.2021. Dr. N.C. Wadhwa, DG, MREI opened the event with an inspiring opening note on the importance of learning basic first-aid, healthcare and life skills in case of future uncertainties. Renowned cardiologist Dr. Sameer Gupta, an Interventional Cardiologist/ Healthcare Advocate/Health Care Administrator in Delhi/ NCR along with his Team from Metro Group of Hospital taught students and faculty on the basic yet important technique of CPR in case of Cardiac Arrest.

- **Be a Santa to Someone**

Students and faculty members of MREI and volunteers Dr. O.P. Bhalla Foundation visited Kids Community Study Center in BPTP, the Resort, Sector-75, Faridabad where a group of enthusiastic ladies have started taking classes for the Children of Househelps in the

Society on Dec 2, 2021. Under the 'Be a Santa to Someone' initiative, the Team Foundation donated gifts like Whiteboards, pens, pencils, art materials, books, and games which were collected from different faculty members and staff members.

- **Mask Donation Drive cum Awareness session**

Mask donation drive cum awareness session was conducted by Leo Club in association with Dr. O.P. Bhalla Foundation. The team volunteers from MRU donated masks to the house keeping staff of Manav Rachna Campus spread over three days (7.2.2022 to 9.2.2022) and sensitized them about the importance of wearing masks in our daily life especially during the new wave of COVID-19 pandemic.

- **Legal Aid and Awareness Camp (FEBRUARY 21 and 23, 2022)**

To recognize and provide a solution for the issues faced by the people residing in the villages mentioned above situated in Faridabad, the District Legal Service Authority (hereinafter DLSA) was directed by the Haryana State Legal Services Authority, Panchkula to spread Legal Awareness. SoL, MRU, took the initiative to organize the village visits on two dates, i.e., February 21, 2022 and February 23, 2022.

A questionnaire consisting of 20 (Twenty) questions related to the issues that were provided in the letter shared by DLSA was prepared by the Legal Aid core-committee members. The major topics on which questionnaire was based were education, sanitation, caste, unorganized labor, health, transportation, gender inequality, drug abuse, domestic violence, sexual assault, child abuse, and human trafficking.

- **Donation Drive in Mohna Village**

Under the aegis of Dr. O.P Bhalla Foundation, Team Foundation visited Mohna Village on 4th March 2022 to distribute 450 sanitary pads to Village girls and sensitize them about menstrual hygiene through monologues and discussions.

- **Visit & Donation Drive at NGO Earth Saviour Foundation (22.11.2021)**

The Department of Management & Commerce, MRU organized a visit to "**EARTH SAVIOUR FOUNDATION**" for the students of BBA their location Bandhwari Village, Haryana. The faculty members and students interacted with them and the elderly were very happy to meet all of them. The elderly shared their life stories with the students and

provided inspiration to them to be better global citizens. The entire visit consisted of collection, visit and donation of useful items like clothes, daily essentials, food items which were donated to this NGO.

- **Baisakhi Celebration with Elderlies at SHEOWS**

On the joyful occasion of Baisakhi, Student Volunteers of Dr. O.P. Bhalla Foundation visited SHEOWS, an old age home and partner NGO. Students from MRU spent time with the residents and bonded with them. They also put up a musical performance for them. The residents also joined them in singing and dancing. It was an emotional experience for the Students to learn and empathize with the residents.

- **Plastic waste awareness drive at Govt. Sr. Sec. School, Ankhir, Faridabad (30.05.2022)**

A plastic waste management awareness drive to Govt. Sr. Sec. School, Ankhir, Faridabad, was conducted by Manav Rachna University in collaboration with the Hazardous Substances Management Division, Ministry of Environment, Forest & Climate Change, under the Central Sector Scheme. The drive consisted of an awareness session on plastics and solid waste management accompanied by the following events:

1. Slogan writing competition
2. Poster-making competition
3. Best out of the waste competition
4. Signature campaign on Single-use Plastics
5. Pledge - "Say No to Plastics."
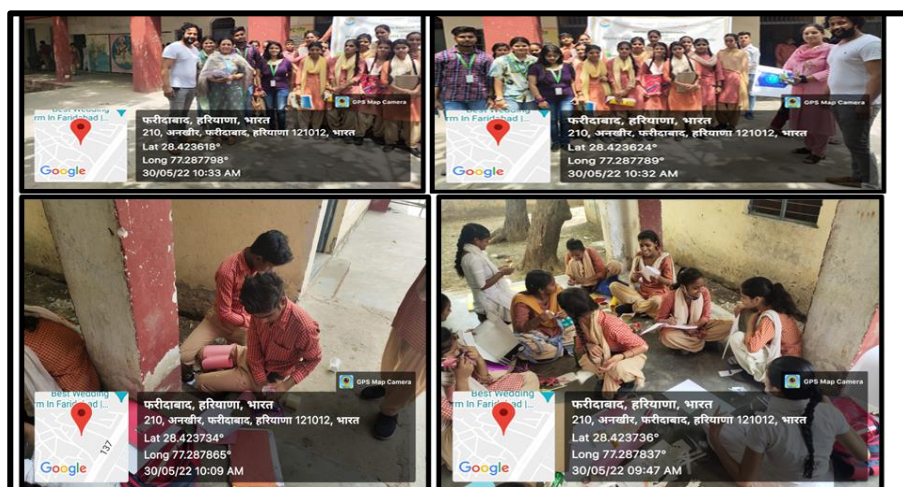
- **Cleanliness drive and installation of dustbins at Mata Mandir, Anangpur, Faridabad**

A cleanliness drive including dustbin installation was conducted by Manav Rachna University in collaboration with the Hazardous Substances Management Division, Ministry of Environment, at Mata Mandir, Anangpur, Faridabad. It involved cleaning the temple, front space and backyard of the temple. The dustbins were installed in the temple premises to initiate the segregation of dry and wet wastes. The entire event was appreciated by the temple administration.

- **Swachh Bharat Harit Bharat Green Pledge**

Swachh Bharat Harit Bharat Green Pledge ceremony was organized by Manav Rachna University in collaboration with the Hazardous Substances Management Division, Ministry of Environment, for the students and faculty members and community in the offline and online mode.

- **Plastic waste awareness session at Lakshya ForDevelopment**

An awareness drive on plastic waste pollution and its impact was conducted by MRU in collaboration with the Hazardous Substances Division, Ministry of Environment, Forest and Climate under the Central Sector Scheme at Lakshya ForDevelopment NGO - Committed for social upliftment and environment conservation through education and waste management practices.

- **Awareness Campaign "Creating Clean and Green Minds" at Jagriti Sewa Trust**

An awareness drive "Creating Clean and Green Minds" was conducted at the school run by the NGO Jagriti Sewa Trust, Sec 16, Faridabad in collaboration with the HHSMD, MOEFCC under the Central Sector Scheme and Brahmakumaris and MRCPS - Sadhbhav. The event consisted of the following activities.

CHAPTER: 4

SUMMER TRAINING/ INTERNSHIPS

Competition in the employment market is growing more stringent day by day. Passing semester exams and completing academic projects is a significant aspect, but summer training and internship are also vital as they provide industrial exposure to students. It is essential and helps to attain in-depth knowledge. Today all organizations are looking for those graduates/degree holders who are technically sound, creative, and analytical. A quality solution for this problem is to take industrial exposure very seriously and gain practical knowledge. Manav Rachna University takes every possible effort to give industrial exposure to students. Students also put their best efforts into attaining summer internship in order to be ready to face challenges in their career ahead. Summer training in a university can provide valuable learning opportunities and enhance skills in a specific field. Modules covered for In House summer training by the departments are mentioned below:

4.1 Summer Training Modules (In House Summer Training)

4.1.1 Department of Chemistry

Summer Training: B.Sc. 2nd Semester Chemistry

Module: Wastewater Treatment in Decentralized System and its Local Reuse

2 credits (100 marks)

Mode of training:

This training course comprises self-study, technological learning tools such as presentation, videos of case studies available on various platforms, interaction of students with experts, group discussion etc.

Topics covered:

1. Chemistry of Water and its Distribution
2. Global Water Footprint
3. Wastewater Generation and Characteristics
4. Wastewater Parameters and its Analysis
5. Water Quality Standards (WHO, BIS)
6. Water Quality Index (calculation)
7. Monitoring of Water Quality (secondary data)

8. Conventional Wastewater Treatment Process

9. Concept of Decentralized Wastewater Treatment

    a) Anaerobic Treatment

    b) Aerobic Treatment

    c) Bioremediation

    d) Solar Desalination

10. Case Studies on Decentralized Wastewater Treatment System.

4.1.2 Department of Education and Humanities

Post B. Ed Sem-III + B. A/B.SC B. Ed-III

Duration: 30 Hours

Module: Communication Skills

Topics Covered

1. Listening Famous Speech

2. Picture Analysis

3. Telephonic Conversation

4. Movie Review

5. Group Discussion

6. Report Writing

7. Mock Interview

8. Paraphrasing

9. PPT Presentation

10. Short Story Reading

4.1.3 Department of Computer Science & Technology

Modules

·   Arduino Module for Engineering Exploration

·   Duration: 7 Weeks

·   **Strength: 300 students (ECE + SMA + CSE + AIML+ CDFS + CSTI + R&AI+ B.Sc. Physics from 2nd semester)**

Week	Module/Topic Name
Week 1	Basics of Arduino Uno, LED Blinking and different Patterns using Loops
Week 2	Potentiometer, Ultrasonic Sensor and LED interface with Arduino Uno, LCD (16X2) interface with Arduino Uno
Week 3	Bluetooth interface with Arduino Uno, Motor and H-Bridge(L-293D) interface with Arduino Uno
Week 4	Using Matric Keypad Password Protection implementation with Arduino Uno, Temperature Sensor, Gas Sensor etc. interface with Arduino Uno
Week 5	Servo Motor and Infrared Sensor Interfacing with Arduino
Week 6	Bluetooth Car control Android App design using MIT App Inventor2
Week 7	Android App for Data Uploading on Cloud

4.1.4 Department of Electronics and Communication Engineering

Modules Covered

Course Title/ Code	Summer Training 2022 (Engineering Exploration Syllabus)

Day	Module/Topic Name
Day 1	Basics of Arduino Uno, LED Blinking and different Patterns using Loops

Day 2	Potentiometer, Ultrasonic Sensor and LED interface with Arduino Uno, LCD (16X2) interface with Arduino Uno, Bluetooth interface with Arduino Uno,
Day 3	Motor and H-Bridge(L-293D) interface with Arduino Uno , Using Matric Keypad Password Protection implementation with Arduino Uno,
Day 4	Temperature Sensor, Gas Sensor etc. interface with Arduino Uno , Servo Motor and Infrared Sensor Interfacing with Arduino,
Day 5	Bluetooth Car control Android App design using MIT App Inventor2, Android App for Data Uploading on Cloud
Day 6	Basic of 3D Modeling
Day 7	Designing, Drafting and Assembling of Model (Part 1)
Day 8	Designing, Drafting and Assembling of Model (Part 2)
Day 9	Designing, Drafting and Assembling of Model (Part 3)
Day 10	Additive Manufacturing

The list of Industries where students have completed their internships is mentioned as **Annexure 4.1**

4.2 Placement Opportunities

The placement cell of Manav Rachna University plays a pivotal role in facilitating career opportunities for students. By providing a range of services, including job listings, career counseling, skill development, campus recruitment drives, networking events, alumni engagement, internship assistance, and feedback mechanisms, the placement cell empowers students to thrive in their professional lives. The academic session of 2021-22 was fruitful with respect to the placements. With a remarkable escalation in the number of recruiters and the number of offers made, the session ended on a high note.

Even in an already glum job market wherein the current Covid-19 outbreak has taken a significant toll on the economy, the Cell observed recruiting a considerable number of students from our campus.

● Department of Computer Science & Technology witnessed esteemed recruiters including Accenture, Sagacious, Urvija, Adani Digital Labs, Infollion Research Services, Sonalika Tractors, Xebia, TCS, INFOGAIN, IBM, Capegemini, KPMG, Coforge, TechMahindra and many more.

● ·Students of Electronics Communication Engineering and Mechanical Engineering were successfully employed by NIIT Technologies, True Chip, Sagacious IP, International Tractors Ltd., Tata Technologies, Deloitte Touche Tohmatsu India Pvt Ltd Dyson Technologies.

● School of Management and Commerce could get recruiters like Accenture Solutions, Honda logistics etc. The students from the School of Sciences got placed in Jubliant, Infollion, NCERT PAC, Lido Learning and many more.

● Teacher trainees of School of Education and Humanities got opportunity to be appointed as teachers in various reputed schools like Manav Rachna International School Charmwood, Faridabad, St Anthony's Sr. Secondary School, Faridabad, Planet Spark Teacher, Khazani Women Vocational Institute, Faridabad, KVM Public School, Delhi, DAV Public School, Faridabad etc.

● Students from the Law Department were placed as advocates in the Supreme Court, Delhi High Court, Kerala High Court, District Court Satara etc.

● The list of Employers where students have secured their placements is mentioned in **Annexure 4.2**

CHAPTER: 5

FACULTY ACHIEVEMENTS AND CONTRIBUTIONS

In the pursuit of knowledge and the betterment of education, our faculty members have consistently surpassed expectations, setting new benchmarks for themselves and their peers. Their achievements have not only earned them recognition within our institution but have also garnered appreciation from esteemed academic circles far and wide.

Throughout the year, our faculty members have demonstrated excellence in various areas, including but not limited to research, publication, grants, awards, and honors. They have presented groundbreaking research at national and international conferences, securing a prominent position in their respective fields.

Acknowledging the relentless pursuit of excellence and the unwavering commitment to their profession, various prestigious certificates and accolades have been awarded to our faculty members. These certificates not only recognize their individual achievements but also underscore the collective success of our institution.

Our faculty has also been at the forefront of embracing technology in education. Through their efforts, they have developed digital learning resources, interactive content, and online modules that have expanded the horizons of learning and catered to the diverse needs of our student community.

5.1 Faculty's Certifications and Awards

S. No.	School	Dept.	Name of Faculty Member	Name of the Award	Name of Award Issuing Organization	Brief about the award
1	School of Education and Humanities	SoEH	Prof., (Dr.) Babita Prashar	Dr. APJ Abdul Kalam Award	International Council For Education, Research and Training	Excellence In Education, Contribution To Society/Nation With Her Distinguished Services, Innovations, And Most Outstanding Work & Achievements

2	School of Engineering	ME	Dr.Joginder Singh	NPTEL DISCIPLINE STAR	NPTEL, SWAYAM, AICTE	* Candidates should have completed courses whose duration totals to 50 weeks or more. * All courses should be in a particular discipline. * The final score in every course must be >=55.
3	School of Engineering	CST	Dr. Hardeo Thakur Dr. Riya Sapra	Machine Vision and Augmented Intelligence Appreciation for being Business Blaster Coach	National Institute of Technology, Jamshedpur State Council of Educational Research and Training, Delhi	
4	School of Engineering	CST	Dr. Parneeta Dhaliwal	Young Tycoons Business Challenge (YTBC) 2022	Young Tycoons Business Challenge (YTBC)	
5	School of Engineering	CST	Dr. Manpreet Kaur	Honorary Women in Engineering Recognition	IEEE	For Contribution as IEEE Chair, WIE Delhi Section
6	School of Engineering	CST	Dr. Manpreet Kaur	Approved funding of 300USD from IEEE Asia Pacific for organizing WIE Symposium 2021	IEEE R10 (Asia-Specific)	Special Funding Scheme by IEEE R10

7	School of Engineering	CST	Dr. Manpreet Kaur	Got approval for receiving 500 USD funding from IEEE for organizing two days capacity building workshop on 'Outcome Based Education Framework and preparing institution for NBA SAR'	IEEE	Cash Funding
8	School of Engineering	CST	Ms. Hanu Bhardwaj	Outstanding contribution for saving lives with Blood Contribution	Mahavir International Social Fund	Certificate
9	School of Engineering	CST			Dr Suraj Prakash Aarogya Kendra	
10	School of Engineering	CST	Ms. Dimple Chehal	Secured runner up position in the 10th Manav Rachna Inter Faculty & Staff Badminton & Table Tennis Tournament 2022 at Manav Rachna Sports Academy Sector-14 held on 29-30 June 2022.	MREI	Trophy
11	School of Law	Law	Dr SK Bose	Judge in Law Mania	Career Launcher	Invited to Judge Law Mania

12	School of Law	Law	Dr SK Bose	Membership Granted with an International Association	International Criminal Court Bar Association, Netherlands	Affiliate Membership Granted to International Criminal Court Bar Association, Netherlands
13	School of Law	Law	Dr SK Bose	Received Scroll of Honour from Justice Indira Banerjee	Indian Law Institute, All India Lawyers Forum, Tilak Nagar, Delhi	Received Scroll of Honour from Justice Indira Banerjee, Judge Supreme Court of India, on the occasion of International Women's Day
14	School of Law	Law	Dr SK Bose	Best Paper Presenter	School of Law, Galgotias University, Greater Noida, Uttar Pradesh	Best Paper Presenter for Paper on " An Insight into Clinical Legal Education and Project Based Learning" at the International Conference on Clinical Education: Pedagogical innovation and Teaching Practices, Challenges & Opportunity
15	School of Law	Law	Dr SK Bose	Judge in Legislative Drafting Competition	ILS, Law College, Pune	Invited to Judge National Legislative Drafting Competition organized by ILS Law College, Pune
16	School of Engineering	ME	Dr.Joginder Singh	Mechanics of Fiber Reinforced Polymer Composite Structures	NPTEL, SWAYAM, AICTE	Faculty Development Program Funded By Ministry Of Education, Govt. Of India

17	School of Engineering	ME	Dr.Joginder Singh	Manufacturing Automation	NPTEL, SWAYAM, AICTE	Faculty Development Program Funded By Ministry Of Education, Govt. Of India
18	School of Engineering	ME	Dr.Joginder Singh	Product Design and Development	NPTEL, SWAYAM, AICTE	Faculty Development Program Funded By Ministry Of Education, Govt. Of India
19	School of Engineering	ME	Mr.Gianender Kajal	Manufacturing Automation	NPTEL, SWAYAM, AICTE	Faculty Development Program Funded By Ministry Of Education, Govt. Of India
20	School of Engineering	ME	Mr.Mandeep Bhadana	Manufacturing Automation	NPTEL, SWAYAM, AICTE	Faculty Development Program Funded By Ministry Of Education, Govt. Of India
21	School of Engineering	CST	Mr. Ram Chatterjee	Certificate on PH526x:	HarvardX, an online learning	Certificate of MOOC Course Completion from edX
22	School of Engineering	CST	Mr. Ram Chatterjee	Using Python for Research (MOOC Course)	initiative of Harvard University	Certificate of MOOC Course Completion from edX
23	School of Engineering	CST	Ms. Gaganjot Kaur	Microsoft Certified Azure Fundamentals Certified	Microsoft Azure	MS AZ 900 exam and has received Microsoft Certified: Azure Fundamentals certificate.
24	School of Engineering	CST	Dr. Manpreet Kaur	Co-Chair, Innovation & Entrepreneurship Track. IEEE Returning mothers conference, August 2021	IEEE WIE Section	Organized by IEEE WIE Sections of India

25	School of Engineering	CST	Ms. Gaganjot Kaur	Certificate of Appreciation	EICT Academy - IIT, Kanpur	For organizing and coordinating the Faculty Development Program
26	School of Engineering	CST	Ms. Gaganjot Kaur	Certificate of Appreciation		on Advance Excel with Data Visualization
27	School of Engineering	CST	Ms. Gaganjot Kaur	Certificate of Appreciation		from 30 Nov 2020 till 05 Dec 2020
28	School of Engineering	CST	Ms. Gaganjot Kaur	Certificate of Appreciation		and delivered by EICT Academy - IIT, Kanpur
29	School of Engineering	CST	Prof. Dr. Susmita Ray	Mentoring	11-Aug-21	Internship Engagement of B.Tech CSE Data Science & Machine Learning 6th Sem Students with Xebia
30	School of Engineering	CST	Dr. Manpreet Kaur	Certificate of Recognition	IEEE, Region 10	Certificate of Recognition
31	School of Engineering	CST	Dr. Manpreet Kaur	Joint-Secretary, IEEE Delhi Section	IEEE Delhi Section	Elected for 1 year, Jan -Dec 2022
32	School of Engineering	CST	Dr. Hardeo Thakur	Session Chair of International Conference on Machine Vision and Augmented Intelligence (MAI-2022) held on 4-6 March,2022	National Institute of Technology, Jamshedpur	Certificate
33	School of Engineering	CST	Dr. Riya Sapra	Appreciation for being Business Blaster Coach	State Council of Educational Research and Training, Delhi	Certificate

34	School of Engineering	CST	Dr. Manpreet Kaur	IEEE Special Mention Award-Branch counselor award	IEEE Delhi Section	IEEE Special Mention Award-Branch counselor award
35	School of Engineering	CST	Chandni Magoo	Certificate of Appreciation for student mentoring in the cultural exchange academic program for students of Manav Rachna University from India and Seikei University in Japan	Oracle Volunteering	Certificate
36	School of Engineering	CST	Dimple Chehal	Certificate of Appreciation for student mentoring in the cultural exchange academic program for students of Manav Rachna University from India and Seikei University in Japan	Oracle Volunteering	Certificate
37	School of Law	Law	Dr SK Bose	Special Invitee to International Conference	International Criminal Court Bar Association, Netherlands	Special Invitee to International Conference on representing Child Victims
38	School of Law	Law	Dr SK Bose	Best Paper Presenter	NAAC Bengaluru & NTVS Law College, Nandurbar,	Best Paper Award for Rationale and Relevance of NAAC Criteria 3 in National Law

					Maharashtra	Universities
39	School of Applied Sciences	Maths	Dr.Ruchi Gupta	Primary Evaluator in Toycathan	Ministry Of Education Ministry of Information and Broadcasting Ministry OF MSME	Certificate OF Primary Evaluator in Toycathan 2021
40	School of Applied Sciences	Maths	Dr.Ruchi Gupta	Chaired the technical session in 6th International Conference of Recent Advances in Computational Mathematics and Applied Sciences(IC-RA-CMAS-2022)	Chaired the technical session IC-RA-CMAS-2022 at the Conference of Vijnana Parishad of India (VPI) MRIIRS	Certificate OF Chaired the technical session IC-RA-CMAS-2022 at the Conference of Vijnana Parishad of India (VPI) MRIIRS
41	School of Education & Humanities	Edu	Dr. Nibedita Hazarika	Certificate of Appreciation	Manav Rachna Dental College	for valuable contribution in the 5th Inter-college Dental Fest Xuberance 2022

5.2 E-Content Developed

S.No	Name	Deptt	Topic/Area of Content	Platform used	Date
1	Dr. Savita Sharma	SoEH	Three Week Online Course onMindfulness for Psychological Well-Being	Canvas	1st September -21st September 2021
2	Dr. Savita Sharma	SoEH	Four Week Online Course on Constructivism in Online Learning	Canvas/ Google Meet/Zoom/ Google Classroom	18th July, 2022
3	Dr Rashee Singh & Mr Chandra Prakash	SoEH	Four week online course for UNESCO OER4BW 'Shaping young adults through transition phase'	Canva	July, 2022

5.3 Webinars and Workshops organized by Faculty:

S. N o.	School	Deptt	TITLE OF THE PROGRAMME	Duration	Date(s)	
				No. of Day (s)	From	To
1	School of Applied Sciences	Chemistry	Waste Resources: Recovery, Utilization and potential Applications	1	24.06.2022	24.06.2022
2	School of Applied Sciences	Chemistry	Awareness session on plastic waste management	1	10.06.2022	10.06.2022
3	School of Applied Sciences	Chemistry	Workshop on " Hyperspectral Technology in Remote Sensing	1	21.04.2022	21.04.2022
4	School of Applied Sciences	Chemistry	Workshop on "Advancement of Chemistry in Building Materials"	1	03.03.2022	03.03.2022
5	School of Applied Sciences	Chemistry	Webinar on " Chitosan Coated Nano and Microdevices for Anticancer Drug Delivery"	1	28.02.2022	28.02.2022
6	School of Applied Sciences	Chemistry	Webinar on "Biobased, recyclable and/or degradable polymers for environmental, biomedical and packaging applications"	1	20.10.2021	20.10.2021
7	School of Applied Sciences	Chemistry	Webinar on " Synthesis and applications of polymers based on CO2 and CS2"	1	19.08.2021	19.08.2021
8	School of Engineering	ME	Workshop on Robotics	1	01-APRIL-2022	01-APRIL-2022
9	School of Engineering	ME	Workshop on Industry 4.0	1	07-April-2022	07-April-2022

10	School of Engineering	ME	Workshop on 3D Printing	1	15-April-2022	15-April-2022
11	School of Engineering	SoE	Workshop on Block-Chain Technology and Application	1	August 7, 2021	August 7, 2021
13	School of Engineering	SoE	Online Course on Automation using Advanced Embedded System Design	5	13, September 2021	17 September 2021
14	School of Engineering	SoE	Online workshop on "Machine learning applications using MATLAB and Simulink"	2	29 Oct 2021	30 Oct 2021
16	School of Engineering	CST	Workshop on OOPS in JAVA	2	22 Jan 2022	23 Jan 2022
17	School of Engineering	CST	IEEE: DIG-IT-DEEP, webinar on digital transformation	1	5th February, 2022	5th February, 2022
18	School of Engineering	CST	IEEE: HerIdeas-Ideathon	1	11th March,2022	11th March, 2022
19	School of Engineering	CST	Seminar - MINDFULNESS: A Critical Skill for 21st Century Learners	1	12th January, 2022	12th January, 2022
20	School of Engineering	CST	Technical training for amazon drive	2	14th February, 2022	18th February, 2022
21	School of Engineering	CST	RCC:Orientation of Sofocle Lab	1	9th February, 2022	9th February, 2022
22	School of Engineering	CST	Coding Ninjas Screening	1	5th February,2022	5th February, 2022
23	School of Engineering	CST	Amazon Interview Preparation	1	2nd March, 2022	2nd March,2022
24	School of Engineering	CST	International cultural exchange event between Indian and Japanese students	1	26th March, 2022	26th March, 2022
25	School of Engineering	CST	X Ray Image Classification	2	2nd March, 2022 and 9th March,	2nd March, 2022 and 9th March,

					2022	2022
26	School of Engineering	CST	Workshop on Blockchain	3		
27	School of Engineering	CST	Placement Awareness Session	1	15-Apr-22	15-Apr-22
28	School of Engineering	CST	Machine Learning Workshop, DSAC Club EUREKA	1		
29	School of Engineering	CST	Workshop-API Implementation using Python	2	13-Apr-2022, 05-May-2022	13-Apr-2022, 05-May-2022
30	School of Engineering	CST	Workshop- session on DSA	2	16.03.2022 to 29.04.2022	16.03.2022 to 29.04.2022
31	School of Engineering	CST	Coding Fundamentals	5	23-May-22	27-May-22
33	School of Engineering	CST	STTP on ML using Python	5	19.07.2021	23.07.2021
34	School of Engineering	CST	Continuous Integration	5	05-Jul-21	09-Jul-21
35	School of Engineering	CST	Workshop on Blockchain under Ureka Data Science, Analytics & Cyber Security DSAC Club	1	17-Sep-21	17-Sep-21
36	School of Engineering	CST	Probability and Statistics	1	15-Sep-21	15-Sep-21
37	School of Engineering	CST	GRE/GMAT Session : Tips & Strategies for a test taker	1	04-Sep-21	04-Sep-21
38	School of Engineering	CST	Women in Motion initiative of Axis Bank	1	26-Oct-21	26-Oct-21
39	School of Engineering	CST	Cyber Security & Ethical Hacking	1	30-10-2021	30-10-2021
40	School of Engineering	CST	Panel Discussion	"Global Landscape of Women In STEM"	1	29-10-2021	30-10-2021

				IEEE WIE-Symposium 2021			
41	School of Engineering	CST	IEEE Tech Fest "TECH KRANTI" & "WIE SYMPOSIUM"	3	26-10-2021	28-10-2021
42	School of Law	Law	Webinar on Relevance of New Mediation Bill	1	04-05-2022	05-05-2022
43	School of Law	Law	Mithara : Good Food for Better Health : Webinar on Intersection of Food Safety and Health	1	07-04-2022	07-04-2022
44	School of Law	Law	Webinar on Understanding and Achieving sustainable development goals through Education	1	13-08-2021	13-08-2021
45	School of Law	Law	Webinar on Issues in Competition Law in India	1	13-08-2021	13-08-2021
46	School of Law	Law	Panel Discussion on Independence of Judiciary	1	15-01-2022	15-01-2022
47	School of Law	Law	Information Technology Law & COVID-19 Pandemic	1	16-07-2021	16-07-2021
48	School of Law	Law	Arsenal of International Justice on Standby: The Role of the ICC, Fair Trial Defence Perspective - Talk by Beth S Lyons , Defence Council International Criminal Court	1	17-03-2022	17-03-2022
49	School of Law	Law	Webinar on Expediency Vs Justice in Legislative Drafting	1	19-01-2022	19-01-2022
50	School of Law	Law	Workshop on Professional Communication and Personal Branding	1	24-09-2021	24-09-2021

51	School of Law	Law	Webinar "International Arbitration in the Commonwealth a Gamble or a Chance"	1	26-07-2021	26-07-2021
52	School of Applied Sciences	Physics	Webinar on Microscopic Techniques: Deep insights into Nanomaterials		31-05-2022	31-05-2022
53	School of Applied Sciences	Physics	A Research-webinar on "Numerical models of Particle acceleration in Astrophysical Plasmas"	1	06-01-2022	06-01-2022
54	School of Applied Sciences	Physics	A Research-webinar on "Powerful sources of Submillimeter waves radiation: "Filling The THz gap" by	1	22-07-2022	22-07-2022
55	School of Applied Sciences	Mathematics	Workshop on Vadic Ganit: Facts & Mission	1	28-03-2022	28-03-2022
56	School of Applied Sciences	Mathematics	Introduction to R	1	25-02-2022	25-02-2022
57	School of Applied Sciences	Mathematics	International Workshop on Wavelets and its Applications: Image Processing, Data Science and PDEs	1	06.12.2021	06.12.2021
58	School of Applied Sciences	Mathematics	International Webinar on Advanced Symbolic models for Linguistic Decision Making	1	27.10.2021	27.10.2021
59	School of Applied Sciences	Mathematics	International Webinar on Wavelet Approximation in Orlicz Spaces	1	27.09.2021	27.09.2021
60	School of Education and Humanities	Education	Workshop on Learning and Achieving in the Field of Education	1	26-08-2021	26-08-2021

61	School of Education and Humanities	SoEH	e Workshop on Inclusive Practices	5	22-August-2022	26-August-2022
62	School of Education and Humanities	SoEH	Webinar on Ensuring Inclusion Through Differentiated Instruction	1	24-March-2022	
63	School of Education and Humanities	SoEH	Online Workshop on Reflective Teaching - A Tool for Teaching - skill –enhancement for Teachers'	1	22- May-2021	
64	School of Education and Humanities	SoEH	Online National Webinar on "Understanding and Achieving Sustainable Development through Education"	1	13- August-2021	13- August-2021
65	School of Education and Humanities	SoEH	Online Workshop on "Yoga: A wellness tool to combat pandemic"	1	12- August-2021	12- August-2021
66	School of Education and Humanities	SoEH	Workshop on "How to prepare for Board Exams"	1	30- October-2021	30- October-2021
67	School of Education and Humanities	SoEH	Workshop on "Leadership Mastery through Self-Management"	5	27-December-2021	31-December-2021
68	School of Education and Humanities	SoEH	Workshop on Yoga and Meditation - A Panacea for all the Problems faced by Learners	1	3- March-2022	3- March-2022
69	School of Education and Humanities	SoEH	Workshop on "Theatre: An effective tool for Communication"	1	19- April-2022	19- April-2022
70	School of Education and Humanities	SoEH	Workshop on "Conjecture, Creativity & amp; Celebration: A Path to Ecstasy & quot;	1	21- April-2022	21- April-2022
71	School of Education and	SoEH	Workshop on Vedic Mathematics :Possibilities and	7	8- April-2022	15- April-2022

	Humanities		Opportunities			
72	School of Education and Humanities	SoEH	Workshop on "A Bonanza of Theatrical Performance	1	5- May-2022	5- May-2022
73	School of Management and Commerce	BBA	Career Workshop in Association with IMS Learning Resources	1	18-04-2022	18-04-2022
74	SoE	ECE	Workshop on Block-Chain Technology and Applications	1	07-08-2021	07-08-2021
75	School of Education and Humanities	SoEH	Workshop on Climate Change Awareness and Action Plan	1	12-08-2021	12-08-2021
76	School of Management and Commerce	BBA	Hands-on workshop on "Hands on Heart – Learning Cardio-Pulmonary Resuscitation & Basic Life Skills"	1	30-11-2021	30-11-2021
77	SMC	SMC	A webinar on "Digitization in Supply Chain"	1	22-11-2021	22-11-2021

5.4 Extracurricular Activities organized by Department of Student Welfare:

- Department of Student Welfare, Manav Rachna University organized the event "YAARO KA YAAR " on the occasion of friendship day 2021 on 5th Aug 2021. A friend is the one who walks in when the rest of the world walks out and to this beautiful bond this event is organized. So many people participated with their friends as a team in the event.

- First round of the event consisted of "Guess the song name via emoji" in which participants actively participated and gave the right answers. Different emotions

were used and put together in Accordance with the song and participants had to guess which song it was. In between many participants shared their fun-loving moments with their friends and dedicated poetries. Last round of the event consisted of rapid fire, there were four questions asked to every team about each other. Two questions were asked to one member of the team and two questions were asked to another member of the team. These questions were related to themselves such as what is your dream job, what is the date of birth of your friend, best memories with your friend and many more.

- Department of Student Welfare, Manav Rachna University organized the e-poster event "SDG Artify " on 17th Aug, 2021.The participation was received from Students of various schools, other universities and MRU Students as well.
- Themes:
    - Gender Equality
    - Affordable Clean Energy
    - Quality Education
    - Peace, Justice & Strong institutions
    - Climate Action (Choose any one of them)

- The Mathematics department organised an art competition for the students of BSc & MSc Mathematics on 9 September, 2021 in the presence of all the faculty members of the Mathematics Department. The students' excitement was clearly visible around the theme of sketching portraits of renowned mathematicians.

- Department of Student Welfare, Manav Rachna University organized a Poster Making Competition based on theme "Stop Female Foeticide" on 24 September, 2021 at 2.00 p.m.

- Students were asked to make the posters using various cut outs on the given theme. The competition aimed to create awareness about the issue of female foeticide and encourage students to take a stand against it.
- The competition saw an enthusiastic participation from the students, who put forward their creative and innovative ideas on how to stop female foeticide. The posters submitted by the students were both informative and thought-provoking, and they effectively conveyed the message of the harmful effects of female foeticide.

- On the Occasion of Diwali, Department of Chemistry, MRU organized a Clan Activity entitled **"Jashn-ae-Diwali"** on 28 October 2021 for the students of MRU. Two different activities .i.e. Rangoli Competition and Best out of Waste were organized. Students actively participated in large numbers. The event was followed by Prize Distribution by Judges and the Head of the Department.

- Department of Student Welfare, Manav Rachna University recently organized an Inter-Departmental Cricket Match for 1st year students on **11 November 2021**, which was a great success. The objective of this event was to encourage the students to participate in sports and promote a healthy lifestyle among them.

- The teams were formed based on the department they belonged to, and each team was given a unique name. The matches were held on weekends, and the entire campus was buzzing with excitement. The teams were well-prepared, and the matches were fiercely contested. The students displayed great sportsmanship, and the games were played in a competitive yet friendly spirit.

- Department of Student Welfare, Manav Rachna University organized an event on the occasion of National Handwriting Day.

- This event was a submission Competition with submission date 21st January, 2022 as the event was successful with a good strength of more than 70 participant.In this event participants were told to write one page on "what is your perspective toward quality education in India".

- Through this event the main motive is to spread awareness of quality education which 'Prakarsh' is known for, by twisting the event with writing style and creativity.
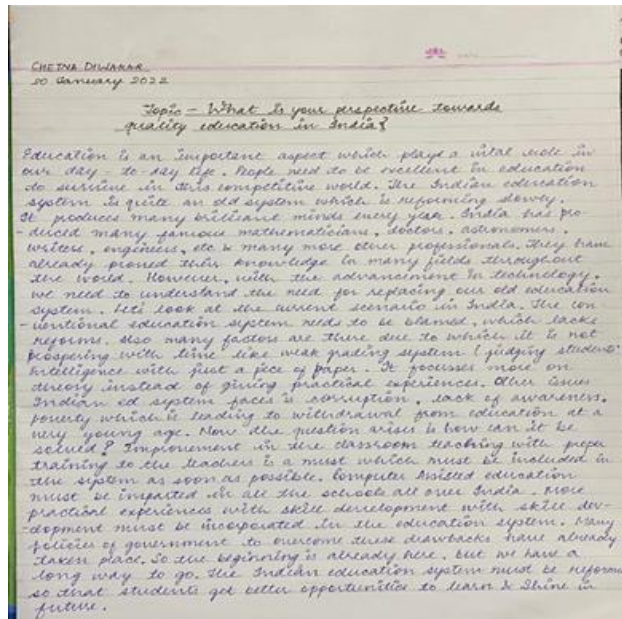
- To instill a feeling of patriotism into the minds of youth & make them inculcate a sense of nationalism & pride for the country, Manav Rachna University organized the event 'MAA TUJHE SALAAM' on 26th January 2022. It was an online event in which all the participants had to turn on their cameras & pay tribute to the nation by singing the national song 'Vande Mataram'. After which all the participants saluted as a mark of respect for the nation & sang the National Anthem.
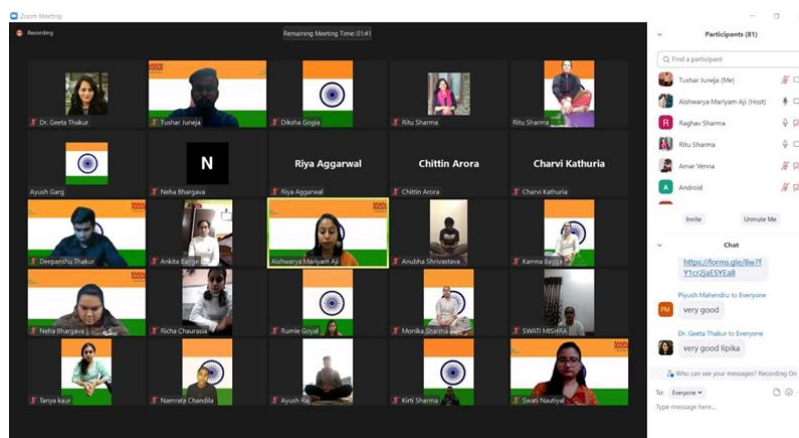
- Department of Student Welfare, Manav Rachna University organized the event **'Taboo Boom'** on 3rd Feb, 2022 at 2 pm.
- The theme of the event was 'Myth v/s Reality of Gender Stereotypes.' The aim of the event was to differentiate between the myths of gender stereotypes created by the earlier society & its present case scenario followed by the current society.
- The participants were allotted their respective groups by the coordinators & were called accordingly for the discussion. They were asked questions related to gender

stereotype myths & they had to discuss it. All the participants put forth some very valuable & thought provoking points & presented their opinions very vividly.
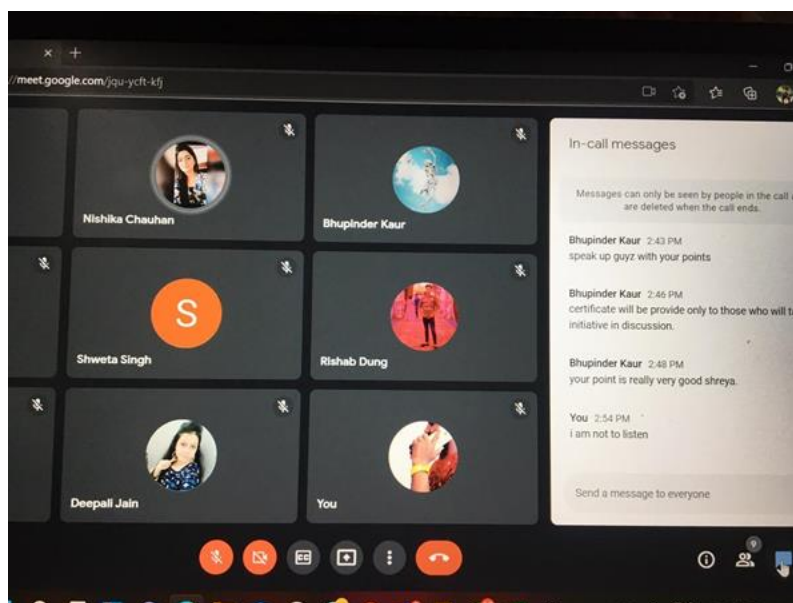
- Department of Student Welfare, Manav Rachna University organized the event Language Matters on presenting your mother tongue while wearing your traditional attire on 21st February 2022. The Event was completely submission based. The participants were supposed to submit a video of them speaking in their Mother language in their respective traditional outfits Participantation was pretty active; around 50 responses were gathered and in the languages mentioned belowEnglish ,Hindi ,Bhojpuri ,Malayalam ,Haryanvi ,Punjabi ,Gujarati ,Marathi ,Bengali ,Braj bhasha ,Angika ,Awadhi ,Urdu ,Orissi ,Gadhwali, Himachali. The event was organised and headed with a tagline "If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart. "

- On the occasion of National Science Day on February 28, 2022, Department of Student Welfare, Manav Rachna University hosted an Inter-Quiz Competition on the topic 'Integrated Approach in Science and Technology for a Sustainable Future'.

"Integration of techniques entails not only collaboration between different types of people, but also collaboration between academia and industry!" In India, February 28 is observed as National Science Day to commemorate the discovery of the 'Raman Effect' by one of India's most illustrious physicists, Sir CV Raman.

- Department of Student Welfare, Manav Rachna University organized an **Open Mic Event on 3rd March 2022 where students can express themselves via their musical talent.**

- Manav Rachna University's Athletics, a sports society is a place where students with a healthy body and mind, as well as those pursuing the same, can demonstrate their abilities in the field of athletics. Athletes, in partnership with the Department of Student Welfare, organized a six-sport inter-departmental sports league (cricket, volleyball, basketball, football, table tennis, and badminton).Four departments (BTech, BBA, Law, and bsc/B.Ed) competed in this league to win the title in each sport. It was organized from 7th to 14th March, 2022.

- Department of Student Welfare organized a solo singing competition for Western vocal performances that took place on March 10th, 2022 at the G Block Mandala Auditorium.

- The competition aimed to provide an opportunity for students to showcase their musical talents and promote a healthy competitive spirit. The participants were judged based on their vocal ability, stage presence, and overall performance. The event was a huge success, and it was enjoyed by all who attended.

- Department of Student Welfare organized an **Art Exhibition & Traditional Dress-Up Competition on 14 March 2022 in which participants were able to show their skills through Indian Art Forms based on the theme provided to them.**

- The Department of Student Welfare organized Movie Mania Scam 1992 on 14 March 2022 in two rounds on the movie "Scam1992" in collaboration with the Watershark clan.
  - Take a live quiz
  - Discussion in a group

- The Department of Student Welfare organized a Dance Competition on "Best foot forward" on 14th April, 2022 where students get a chance to express their moves and feelings through dance.

- Department of Student Welfare organized a Spot Photography Competition- on theme Nature at its best on 28 April, 2022 at 2 pm. It was a Submission Based event in which the participants were asked to submit their entries to the event coordinator through Whatsapp.Judging criteria included the technical skills of the photographer, such as composition, lighting, and focus, as well as the creativity and originality of the photograph. Judges may also consider the emotional impact of the image and its ability to convey a sense of awe or wonder.

CHAPTER: 6

STUDENT CENTRIC PROFESSIONAL ACTIVITIES AND ACHIEVEMENTS

Our commitment to student-centricity extends beyond the confines of the classroom. From community service projects to outreach programs, our students have demonstrated dedication to creating a positive impact on the world around them.Beyond the classroom, our students have showcased exceptional talent, innovation, and leadership in various professional arenas.

6.1 Student Achievements

Students at Manav Rachna have achieved many accomplishments in the area of sports, arts, cultural activities along with technical domains like IEEE, Hackathons etc. Recognizing accomplishments across various domains encourages a well-rounded education that goes beyond academics and motivates students to explore their passions and talents beyond the traditional curriculum.

Extracurricular Activities

● **Karan Khanduja, Department of Mechanical Engineering, w**as declared 4th in team open equestrian championship at Sagar Equestrian Academy, Jaipur on 3rd Sep. 2021

● **Karan Khanduja, Department of Mechanical Engineering** has participated in Young Master Amateur Golf Tour Gurgaon Championship from 9th to 11th Feb. 2022 held at Classic Golf & Country Club Gurgaon and finished 25th in the men's division with a score of 280.

● **Karan Khanduja, Department of Mechanical Engineering** won Group winner in Fia-Jcb tournament held at Aravali golf course on 20th Feb 2022, Faridabad

● **Wajid Ali, B.Sc. (H) Mathematics**, bagged first position in the Animation event in Innoskills 2022 organized by Manav Rachna Educational Institutions, Faridabad on April 11 & 12, 2022.

● **Nandini, B.Sc. (H) Mathematics**, participated in ASIAN TRACK CYCLING CHAMPIONSHIP held from 18th June to 22nd June 2022 at Indira Gandhi Sports Complex, New Delhi.

● **Prakash Sharma, B. Sc (H) Mathematics** won Bronze Medal in Point Fight in Senior Category of weight 68 kg in CADET, Junior and Senior WAKO INDIA National Kickboxing Championship 2021 held from 27-30 Dec 2021 at Shri Shiv Chhatrapati Shivaji Maharaj Sports Complex, Balewadi, Pune.

● **Harsh Bainsla, B.Sc.(H) Mathematics** has won **Gold medal(Senior Category)** in 34th Haryana State Junior & Senior Boys & Girls Kyorugi Taekwondo Championship-2022 held at Ambala Cantt from 12th-14th August 2022.

● **Co-curricular Activities**

● **Anjali Mohapatra, Department of Education and Humanities** successfully completed a 4 week **Online NPTEL Course** titled Design Thinking - A Primer funded by Ministry of HRD, Govt. of India dated Feb- March, 2021.

Elite

NPTEL Online Certification
(Funded by the Ministry of HRD, Govt. of India)

This certificate is awarded to

ANJALI MOHAPATRA

for successfully completing the course

• **Design Thinking - A Primer**

with a consolidated score of **90** %

| Online Assignments | 23.75/25 | Proctored Exam | 65.88/75 |

Total number of candidates certified in this course: 702

Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Feb-Mar 2021
(4 week course)

Prof. Andrew Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No:NPTEL21MG04S23381060

To validate and check scores: https://nptel.ac.in/noc

SEPTEMBER 24

● Srijan**, Department of Computer Science and Technology** is selected as Global Trainee – Data Science in Sloan Technologies FZCO, UAE (technology division of Ureka Education Group, UK) under Tech in Residence Programme, Silicon Valley Promoton.

● Gauri Verma, **Department of Computer Science and Technology** is selected in Level-1 of Extempore Elocution and GD Competition, Apropos to the National Environment Youth Parliament-2022 competition, organized on the theme, "PARYAVARAN CHETNA - ENVIRONMENT AND SUSTAINABILITY", by DoCST and Dean Students' Council.

● Sarthak Rastogi, **Department of Computer Science and Technology** is selected in Level-1 of Extempore Elocution and GD Competition, Apropos to the National Environment Youth Parliament-2022 competition, organized on the theme, "PARYAVARAN CHETNA - ENVIRONMENT AND SUSTAINABILITY", by DoCST and Dean Students' Council.

● Khushi Kathuria, **Department of Computer Science and Technology** anchored the session on debate competition WIECHAR organized by IEEE WIE AG Delhi Section at the International conference IEEE DELCON 2022.

● Harsh Singh Vashisth, Liza Kansal, and Anoushka Pandey, **Department of Computer Science and Technology** were the **Editors of the Xebia newsletter by Xebia Academic Alliance on 1st March, 2022**

- Kolla Teja, **Department of Computer Science and Technology** received Judges prize in INNOSKILL under vertical Srijan for Manav Rachna Coin, From Research Cluster computing (RCC) on 12-Apr-2022.

- Bhim Vashsisth, **Department of Computer Science and Technology** received acknowledgements from NCIIPC for finding vulnerabilities in the Indian Govt. website. He has also receivedInternship at Gurugram Police Cyber Cell.

- He got 100$ Bounty for reporting a security vulnerability from a company at Electronics Team and an Appreciation letter from Cambridge University and Harvard University for reporting security issues in their website

● Gourav Vashist, **Department of Computer Science and Technology** received Outstanding Student Volunteer Award by IEEE Delhi Section on 16-APR-2022.

● Khushi Kathuria, **Department of Computer Science and Technology** selected as WIE COÖRDINATOR and Outstanding WIE Student volunteer award by IEEE Delhi Section on 16-APR-2022.

● Anuj Singh Govind, **Department of Computer Science and Technology** was awarded with the J.K Pal Memorial award by IEEE Delhi Section on 16-APR-2022.

● Harsh Chaudhary, **Department of Computer Science and Technology** was Blogthon event winner, INNOSKILL-MREI on 12-APR-2022.

● Saurav Kumar Srivastava, **Department of Computer Science and Technology** was Aeromodelling Winner, 1st position certificate + 2000/- cash, INNOSKILL-MREI on 12-APR-2022.

● Saurav Kumar Srivastava, **Department of Computer Science and Technology** received the Best innovation certificate for Water Rocket event on 12-Apr-22, INNOSKILL-MREI.

● Gunjeet Kumar, Gorakh Nath Sharma and Aryan Sirohi from Department **of Computer Science and Technology, were aeromodelling winners for batch 2020-2024 received CERTIFICATE/CASH on 12-Apr-22, INNOSKILL-MREI.**

● Kunal Arora, Deven Chaudhary, Priyanshi and Lakshay Bajaj were **VALORANT LAN TOURNAMENT winners for batch 2020-2024 held on 12-Apr-22, INNOSKILL-MREI.**

● Shivank Solanki, **Department of Computer Science and Technology**, VALORANT(GAMING) won 2nd Position on 12-Apr-22, INNOSKILL-MREI.

● Amareswara Reddy, Nagarjuna Reddy, Venkata Ramana Murari, Dhamaruka Siva Sai **Department of Computer Science and Technology** were winners of **E-TREASURE HUNT on 12-Apr-22, INNOSKILL-MREI.**

● BC Sai Kiran Reddy, K. Satwik, K.Rahul, Sudeep Batra and Teja Siva Shankar Guru Sai, **Department of Computer Science and Technology** won **BEST OUT OF E- WASTE on 12-Apr-22, INNOSKILL-MREI.**

● Surbhit Chopra, **Department of Computer Science and Technology** won 3rd Position in ROOMS EVENT on 12-Apr-22, INNOSKILL-MREI.

● Pratyush Mishra, **Department of Computer Science and Technology** won 1st Position in YUVA Fit on 12-Apr-22, INNOSKILL-MREI.

●   Pratyush Mishra, **Department of Computer Science and Technology,** won 1st Position Cash Prize, Rs. 1000 in Infographics for Sustainable Future on 12-Apr-22, INNOSKILL-MREI.

●   Mukul Sharma, **Department of Computer Science and Technology,** 2021-2025, Infographics for Sustainable Future Winner, won 1st Position Cash prize Rs. 2000 on 12-Apr-22, INNOSKILL-MREI

●   Aadi Dhiman, **Department of Computer Science and Technology** won 1st Position **in** Infographics for the Sustainable Future event on 12-Apr-22, INNOSKILL-MREI.

●   Sahil Jhangar **Department of Computer Science and Technology** Selected for Google Summer Code 2022 program and will be given a $3000 Stipend from June to September 2022.

6.2 Expert talks Organized

S.No.	School	Deptt	Title/Topic of the session	Name of Expert	Details of Resource person
1	School of Engineering	ME	Introduction of Green Buildings	Mr. Waliullah Siddiquee	CEO and Founder of M/s Limbra Consulting Engineering Services.
2	School of Engineering	ECE	Innovation to Entrepreneurship	Mr. Shivansh Sharma	Founder, TVINE

3	School of Engineering	ECE	Understanding Opportunities in Electronics and Communication Industry	Mr. Aditendra Jaiswal	Srijan Sanchar
4	School of Engineering	CST	Career Opportunities after B.Tech	Mr. Shankar Jarasandh Wadne	Sr. Faculty Member at ACE Academy
5	School of Engineering	CST	Talk on "Serve the Underprivileged"	Jas Kalra	President, Earth Saviour Foundation
6	School of Engineering	CST	Artificial Intelligence and its applications in the real world	Prakash Narayanan, Kasam Shaikh, Anvita Bajpai	Prakash Narayanan - Head of Digital RPA & Automation CoE, Cyient Digital,Hyderabad Kasam Shaikh - Lead Cloud Architect- Senior Manager, Capgemini, Mumbai Anvita Bajpai- Master Principal Cloud Architect, JAPAC, Oracle
7	School of Engineering	CST	Data Science for All	Dr. Parneeta Dhaliwal	MRU, Faridabad
8	School of Engineering	CST	Speaker, International Women In Engineering Day (INWED) 2021 Celebratory Session titled "Engineering Heros" jointly organized by on Wednesday, June 23, 2021	Dr. Manpreet Kaur	MRU, Faridabad
9	School of Engineering	CST	Career Opportunities in Indian Navy	Gaurav Saini	Lieutenant Commander Gaurav Saini, Deputy Director (Cyber Protection Wing)
10	School of Engineering	CST	Internships: What They are and How to Get	Prof. M.Raja Reddy,	IIT Madras

			Them		
11	Engineering	CST	Today is Your Opportunity to Build the Tomorrow You Want	Mr.Vishal Bhatta	Padron Technologies, Chandigarh
12	School of Law	Law	Keynote Address on Law as a Career	Mr. Ravindra Srivastava,	Senior Advocate, Supreme Court of India
13	School of Law	Law	Session on Opportunities and Career Options in Legal Profession	Ms. Ojasvita Srivastava	General Counsel, Securitas (AMEA) and Founder-Project Abhimanyu
14	School of Law	Law	Career Guidance & Training Session on How to use Legal Databases such as SCC Online and Hein Online	Mr. Mohit Singh	SCC Online Trainer, Learning Center Eastern Book Co. Pvt. Ltd.
15	School of Engineering	CST	Seminar on Roadmap to Achieve your Goals	Mr. Himanshu Mangla	Lead Application Engineer-Cadence Design System, Noida
16	School of Law	Law	Career Enhancement Online Appreciation Course in Legislative Drafting: 3rd Edition	Dr. Reeta Vasishtha	(Secretary, Legislative Department, Ministry of Law and Justice)
17	School of Management and Commerce	BBA	Training Session on Science of FMCG Sales and Distribution	Sandeep Zutshi, Vivek Bhatnagar	Principal Consultant at ZA Consulting and Partner – Consumer Business at ZA Consulting
18	School of Applied Sciences	Math	Matrix Norms and Related Inequalities	Emeritus Prof. (Dr.) P. N. Agarwal	Department of Mathematics, IIT Roorkee
19	School of Applied Sciences	Math	Data Science : A Futuristic approach in Research and Development	Prof. Dr. N. Kumar	ICFAI University , Jaipur
20	School of Applied	Math	Some Identities for Partition	Dr. Abhash Jha	IIT , BHU, Varanasi

	Sciences		Function		
21	School of Applied Sciences	Math	Applications of Matrices in: Cryptography & Quantum Computing	Dr. Bhupedra Singh	DRDO, Banglore
22	School of Applied Sciences	Chem	Waste Resources: Recovery, Utilization and potential Applications		24.06.2022
23	School of Applied Sciences		Online training programme (CRE) on "Research in Special education"	Prof. Preeti Verma Dr. R. Shilpa Manogna Dr. Gyanendra N. Tiwari Dr. Yogesh Kumar Dr. Sumeet Bakshi Dr. Babita Parashar Dr. Rashee Singh Dr. Kiran Gupta Dr. Savita Sharma Mr. Ravi Prakash Singh"	SNDT University,Mumbai, NIEPID, Secunderabad, Amity University, Noida, RHMS, Uttar Pradesh, Atlanta, Georgia,USA, Manav Rachna University, NIEPID, Navi Mumbai"
24	School of of Education and Humanities	SoEH	"Career Opportunities in the field of Education "	Mr. Chandra Prakash Singh Mr. Sharv Datt Anand	Manav Rachna University
25	School of of Education and Humanities	SoEH	Career Opportunities in the field of Special Education	Shri B V Ram Kumar Mr. Ravi Prakash Singh Dr. Babita Parashar Mr. Sharv	National Institute for the Empowerment of Person with Intellectual Disabilities

				Datt Anand	
26	School of of Education and Humanities	SoEH	Low Vision Awareness	Dr. Rajiv Prasad Dr. Yogendra Pandey Ms Reshma Bhown	Vice President, Asia Pacific Council of Optometry Governing Board Member, World Council of Optometry Associate Professor, faculty of Education, BHU Assistant Professor, 36 Manav Rachna University
27	School of of Education and Humanities	SoEH	Future of Skill Development and Critical Thinking in Higher Education	Ms. Preeti Arora	Senior Head of Educational Initiatives of National Skill Development Council
28	School of of Education and Humanities	SoEH	Expert Lecture on Autism Awareness - Parents Perspective	Madhusudh an Srinivas	Retd TV Anchor , NDTV , Freelance Journalist
29	SOMC		Session on Stress Management	Mr. Nitin Jain	Soft Skills Expert
30	School of Engineering		Session on Emotional Intelligence	Mr. Nitin Jain, Soft Skills Expert	
31	School of of Education and Humanities	SoEH	An Interactive Session on Gender Sensitization	Dr. Archana Bhati	Associate Professor & Dean, Commerce Department, DAV Centenary College, Faridabad.
32	School of Engineering		Session on Extempore- I	Ms. Antara Guha Thakurta	Career Skills Expert
33	SOMC		Session on Extempore- II	Ms. Antara Guha Thakurta	Career Skills Expert
34	School of Engineering		Session on Enhancing GD Skills	Ms. Antara Guha Thakurta	Career Skills Expert

35	SOMC		Session on The Brand U	Dr. Parul Jhajharia	OB HR Specialist
36	School of Engineering		Session on Moderating your Rate of Speech	Mr. Nitesh, Trainer, Soft and Communication Skills- Expert	, Soft and Communication Skills- Expert
37	School of of Education and Humanities	SoEH	Talk on Psychological Impact of Covid on Students Education : A Perspective	Dr. Brig Arvind Gupta	Chairman and Head, Dept of Pediatrics and Neonatology, Asian Institute of Medical Sciences. Dr Reva Raina, Dean School of Education, Rishihood University
38	School of of Education and Humanities	SoEH	Session on Youth Empowerment for Peace and Sustainability	Dr. Markendey Rai	Executive Chairman, IIEE National Chancellor, IAEWP Chancellor, The Global Open University Nagaland chancellor, IGTAMS University, INDIA Senior Advisor, UN-Habitat
39	School of Applied Sciences		Invited Talk on Applications of Matrices in Cryptography & Quantum Computing	Dr. Bhupedra Singh;	Senior Scientist, CAIR, DRDO, Bangalore
40	School of Law	SOL	Panel discussion on Draft Mediation Bill	Dr. Subir Bikas Mitra	Advisor (Law) GAIL, India and Ms. Reena Singh, FR Additional Advocate General and Governing Council member, ICADR, Mr PK Malhotra, Former Law Secretary and Executive Chairperson, CLSR

41	School of Law	SOL	Manav Rachna Law Dialogues, Panel Discussion on Constitutionalism and Secularism	Prof. Russell Powell, Mr. PK Malhotra, Dr. Asad Malik	Seattle University School of Law Retired Secretary, Ministry of Law & Justice and; Faculty of Law, Jamia Millia Islamia, New Delhi
42	School of Engineering		Invited Talk on Data Science : A Futuristic approach in Research and Development	Prof. Dr. N. Kumar	Professor, Department of Science and Technology, ICFAI University , Jaipur
43	School of Applied Sciences	Phy	Academia-Industry interaction on Field-emission electron microscope (FE-SEM)	Mr. Anand Gunjotikar and Mr. Susheel Kumar,	Senior Engineers, Lab-India Pvt. Ltd., Gurgram
44	School of Law	SOL	Panel Discussion on Data Protection Bill	Dr. James Nedumpara ,; Mr. Amit Kumar Dubeyand Ms. Rashmi Arora ;Mr. PK Malhotra,	Dr. James Nedumpara, Prof. and Head, Centre for Trade and Investment Law; Mr. Amit Kumar Dubey, Author and National Security Expert; and Ms. Rashmi Arora, AVP-Litigation, SBI Card and Payment Services ltd., Mr. PK Malhotra, Former Law Secretary and Chairperson, CLSR
45	School of Applied Sciences	Phy	Expert Talk on X-ray Technologies	Mr. Ananta Chaudhary	Senior Engineer and product specialist,Bruker-India Scientific Pvt. Ltd., New Delhi Email Id: ananta.chowdhury @bruker.com
46	SMC	SMC	Guest Lecture on Strategic Issues in Supply Chain & Management	Ms. Smita Coakley	Head- Operations, Jiffy Ship Cargo Technologies Pvt. Ltd.

47	School of Applied Sciences	Chem	An Online Awareness session on Plastic Waste Management	Dr. BC Sabata	Ex-director; Mahatma Gandhi Institute of Combating Climate Change (MGICCC), Department of Environment Govt. of NCT of Delhi, Alipur, Delhi
48	School of Applied Sciences	Chem	Technical session on the **generation and classification of solid waste**	Dr. Richa Kothari	Associate Professor, Department of Environmental Sciences Central University of Jammu

Extempore Speech Competition (YOUTH PARLIAMENT PRELIMS)

Department of Management & Commerce, MRU on **13th January 2022** organized an extempore competition Level-1 on the Theme: *Environment Conservation and Management under* **National Environment Youth Parliament 2022**. The objective of the competition at different levels is to help students start thinking and expressing about different ways of Environment conservation. Such competitions provide a great platform to develop communication skills and time management. This is in fact a very big opportunity for students to represent their university and skills at a national level.

Theme: Environment Conservation and Management

Platform: Google Meet (Online)

Timing: 11:30AM - 12:30PM

Date: 13th January 2022

Department organized Round 1 where students from the BBA Program participated out of which 3 students got nominated for Round 2. After being selected at the university level students will participate in the Regional event at Kurukshetra University and the ones who get selected at Regional Event, will participate in the National Level which will be conducted in the Parliament House in Feb 2022.

Names of the Student – Nominated for Round II

1. Priyanshu Sharma – BBA HCM 4 Sem
2. Shiv Khanna – BBA BA SEM 2
3. Isha Garg - BBA FAA 6 SEM

BUSINESS ON CAMPUS: Celebrating Women Leaders

Department of management and commerce, organized "Business on Campus" day on 9th of March 2022 in the MRU Campus. It was an enthralling day event where everyone enjoyed their hearts out.

The event fulfilled its motto of "empowering business by women" to the best by giving a chance to young women entrepreneurs to showcase their talent and capabilities. Many stalls were set up in the campus displaying different goods including handicraft goods, bakery items, street food and other interesting fun games. A team of 3 BBA students launched their new coffee brand on the same day.

The event was inaugurated by our respected Vice Chancellor Dr. I K Bhatt and Pro Vice Chancellor Prof. D. S. Sengar and our faculty who motivated the student entrepreneurs with full enthusiasm. Students and faculty from all the departments joined in large numbers and enjoyed it to the fullest. It was no less than a carnival.

Kudos to all the student entrepreneurs for putting in their ideas, creativity and efforts and making the event successful.

The School of Law, Manav Rachna University organized the 1st Manav Rachna Law & Technology National Moot Court Competition on April 28 and 29, 2022. The event saw the participation of 12 teams, and over 25 participants, from law schools across India. The first edition of the moot was held online. The purpose of the moot was to stimulate the study of Law and Technology. The participants were expected to interpret the statutory provisions in light of the legal concerns arising from the ongoing WhatsApp and Facebook privacy policies. The School of Law believes that this Moot will provide future lawyers a platform to explore and understand the relationship of the internet with the current political, cultural, and social environment.
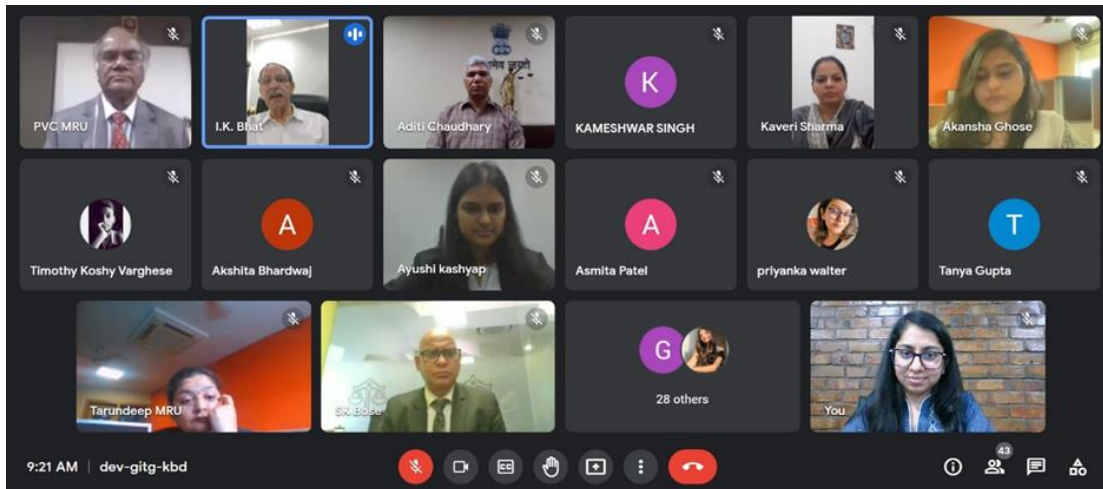
The esteemed bench for the final rounds constituted of –

· Justice V B Gupta, Retd. Judge Delhi HC

· Justice Rajesh Tandon, Retd. Judge, Uttarakhand HC

· Raushan Tara Jaswal, Asst Prof Jindal Global Law School, and alumna of Cambridge University
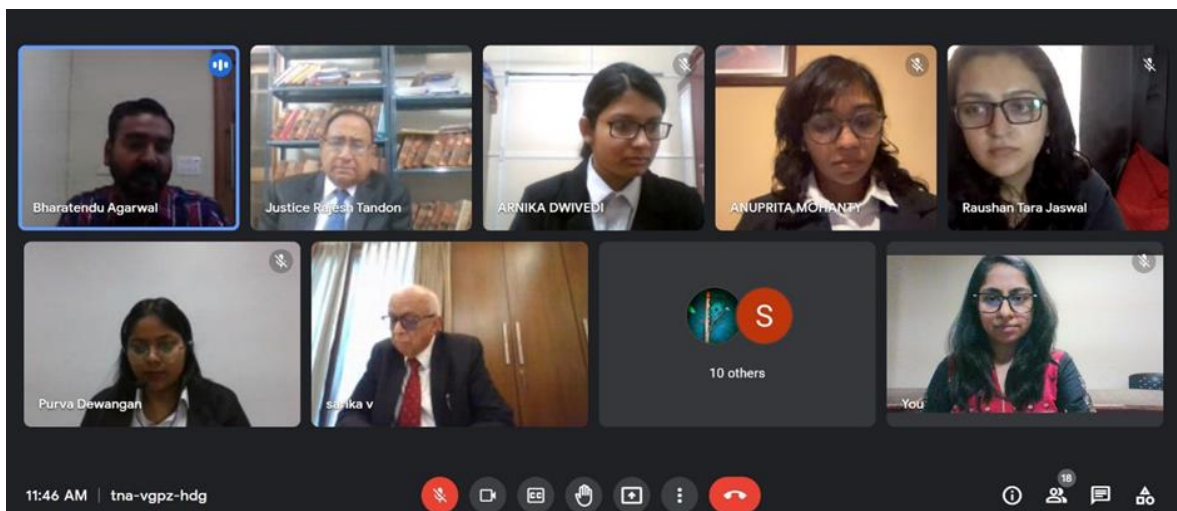
6.3 Visit to Industries and Exhibitions

Industrial visits and exhibitions are crucial for university students as they provide practical exposure to real-world industrial processes and technologies, bridging the gap between theoretical knowledge and practical application. These visits and exhibitions offer students an opportunity to interact with industry professionals, enabling networking and potential career opportunities. The students can gain insights into industry trends, innovations, and

best practices, fostering a broader understanding of their chosen field. Ultimately, these experiences enhance students' overall learning and skill development, preparing them for the demands of the professional world.

S.No	Faculty Organiser	Deptt	Name of the factory/ Organization	Date	Outcome
1	Mr. J P Sharma	ME	Govt. Poly Technical College, Maruti Suzuki CoE	OCT-2021	Observed the level of technical education of students in the state.
2	Mr. Pradeep	ME	7th PLASTASIA-2022, PRAGATI MAIDA, NEW DELHI	APRIL-2022	Observed the latest technology and machinery used in the manufacturing of plastics and petrochemicals with participation from different parts of the world.
3	Mr. Ajit Katiyar, Mr. Piyush Mahendru, Mr. Pradeep Kr. Mouria, Mr. Mandeep Bhadana	ME	National Environment Youth Parliament, NEW DELHI	APRIL-2022	Paryavaran Chetna-Environment and Sustainability
4	Mr. Pradeep Kumar Mouria Mr. Balbir Singh Mr. Kasi Ram Mr. Yogesh Mr. Devender Thapa	ME	400th Prakash Parv of Guru Tegh Bahadur	APRIL-2022	To celebrate the occasion take a look at the religious leader's life, teachings, and popular works.
5	Dr. Joginder Singh, Mr. Ajit Katiyar, Dr. Prashant Bhardwaj, Mr. J P Sharma	ME	KUKA Robotics, Gurugram	MAY-2022	TO CHECK THE DIFFERENT TYPES OF ROBOTS
6	Dr. Urmila	CST	National Environment Youth Parliament, NEW DELHI	APRIL-2022	Pryavaran Chetna-Environment and Sustainability
7	Ms Priyanka Gupta	CST	400th Prakash Parv of Guru Tegh Bahadur	APRIL-2022	To celebrate the occasion take a look at the religious leader's life, teachings, and popular works.

8	Ms Priyanka Gupta	CST	KUKA Robotics, Gurugram	MAY-2022	TO CHECK THE DIFFERENT TYPES OF ROBOTS
10	Dr. Pradeep Kumar Varshney, Dr. Dinesh Kumar Sharma, Dr. A Jayamani, Dr. Deepti Maikhuri, Dr. Harsha Devyani, & Dr. Anshuman Sahai	Physics & Chemistry	CSIR- National Physical Laboratory, New Delhi	Sept, 2022	To celebrate the CSIR-National Open Day, New Delhi
11	Dr. Shilpa Sharma and Dr. Priti Gupta	Chemistry	IIT-Delhi	April, 2023	to motivate students to learn computational skills in order to keep up the pace with research activities in the field of Drug Discovery.
12	Dr. Ritu Sharma	SoEH	Surajkund International Trade Fair	31-March-2022	To explore the Indian Culture

6.4 ORIENTATION 2K21

The Manav Rachna family warmly welcomed students from the disciplines of Engineering, Sciences, Law, Education, and Management, as they embarked on a three-week program designed to introduce them to the work culture at the University. Due to the ongoing COVID-19 pandemic, the program commenced in an online mode, ensuring the safety and well-being of all participants. The sessions focused on familiarizing the students with various academic processes and systems.

To initiate the program, a special welcome was extended to the new entrants and their parents. A comprehensive presentation showcased the diverse and enriching environment of Manav Rachna Educational Institution, highlighting the regulations and academic philosophy of the Institution. In order to foster a sense of belonging and familiarity with the University, an introduction session was conducted, introducing the new entrants to the Deans, Directors, Heads of Departments, Faculty members, and Administrative staff.

The program aimed to provide a unique blend of learning, fun, and self-realization, facilitating a smooth transition for the students into their new academic environment. Bridge courses were conducted to equip the students with introductory knowledge about their respective departments as well as interdisciplinary courses. Furthermore, industry talks were organized, where experts from various industries shared their technical expertise and shed light on the growing demand for skilled engineers in the corporate world. Alumni talks were also arranged, allowing former students to share their experiential learning at Manav Rachna University and discuss their journeys beyond graduation. The Corporate Relations and Career Management Centre team provided valuable insights into placement prospects, ensuring that students were well-informed about their future career opportunities.

The program concluded with a session delivered by the esteemed Vice Chancellor of Manav Rachna University. His address served as a source of motivation, inspiring the students to embrace perseverance and self-belief as they embark on their educational journey. The Vice Chancellor's words instilled a sense of purpose and determination, empowering the students to navigate challenges and strive for excellence in their chosen fields.
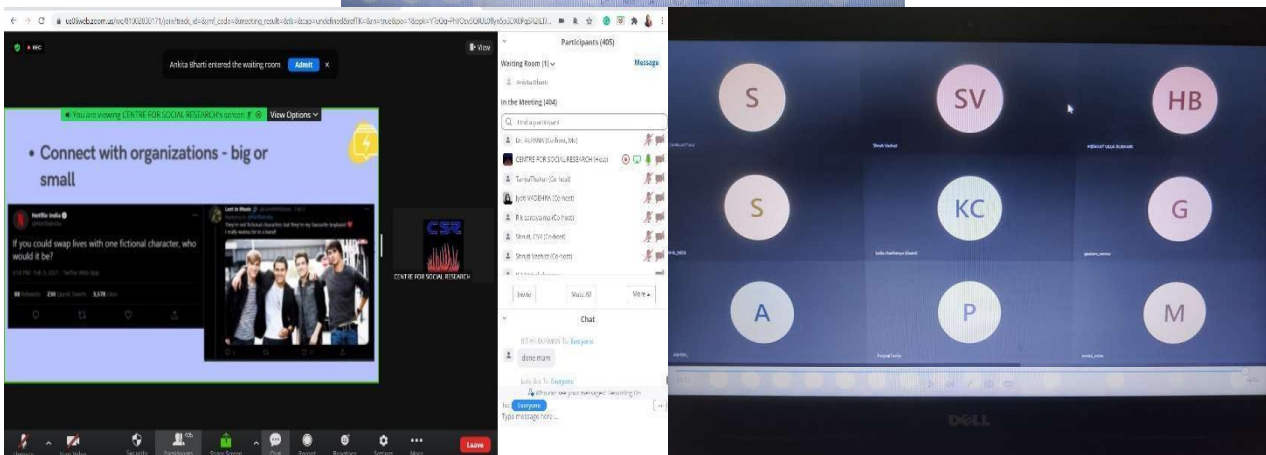
6.5 Seventh Convocation Ceremony

The Convocation of 2021 was a momentous day filled with immense joy and excitement for the graduands and their parents as they reminisced about their university days and reunited with friends and their beloved Alma Mater. The presence of esteemed guests, including Shri Mahendra Nath Pandey, Hon'ble Minister of Heavy Industries as the Chief Guest, and Shri Ch. Krishan Pal Gurjar, Hon'ble Minister of State for Heavy Industries & Power as the Guest of Honour, added to the grandeur of the occasion. Smt. Satya Bhalla, Chief Patron, MREI; Dr. Prashant Bhalla, President, MREI; Dr. Amit Bhalla, VP, MREI; Dr. I K Bhat, Vice Chancellor, MRU; Dr. Sanjay Srivastava, VC, MRIIRS, and several dignitaries from the academic, corporate, government, and administrative sectors were also present to grace the event. This was the sixth convocation of Manav Rachna University.

The convocation ceremony served as a platform to recognize and honor the outstanding achievements of the graduands. Students were bestowed with prestigious awards such as the President's Medal, Vice President's Medal, Patron's Medal, Vice Chancellor's Medal,

Student Leadership medals, and Outstanding Academic Achiever Medals. These accolades celebrated the hard work, dedication, and exceptional performance of the students throughout their academic journey.

Additionally, the convocation provided an opportunity for Manav Rachna University to confer Honoris Causa degrees upon six distinguished individuals. Among the recipients was Dr. Anil Kakodkar, who had served as the chairman of the Atomic Energy Commission of India and the Secretary to the Government of India. Mr. Prithvi Shergill, an experienced Corporate Business Officer, was also honored for his contributions. Shri Saurabh Govil, Chief Human Resources Officer at Wipro, Smt. Aarti Khosla, a renowned humanitarian in India, and Shri Krishan Pal Gurjar Ji, Hon'ble Minister of State for Power & Heavy Industries, were among the other notable recipients. These honorary degrees were a testament to the remarkable accomplishments and significant contributions of these individuals in their respective fields.

During his address at the convocation, Dr. Prashant Bhalla, President of Manav Rachna Educational Institutions, urged the students to uphold the values of honesty and emphasized the virtues of patience and passion. His words served as a guiding light for the graduands as they prepared to embark on their professional journeys.

Adhering to the strict COVID-19 protocols, the ceremony was conducted through a combination of offline and online events. The safety and well-being of all attendees were of utmost importance, and the convocation was organized in a manner that ensured the health guidelines were followed.

6.6 Alumni Network Events

● Department of Mechanical Engineering, Manav Rachna University organized an Online Career Counseling Session on Different Career Prospects of Mechanical Engineering and Making College life worth with the alumni Mr. Ayush Tanwar on 29 July 2021 at 9.30 am through Google Meet. The session started with an introduction of the alumni. He started his talk by explaining the importance of different career prospects of Mechanical Engineering. After that he shared his academic and industrial experiences and demonstrated to all mechanical engineering students to groom their life in university by enhancing skill level and participating in different activities. He also demonstrated the

usefulness of utilizing facilities in university premises which includes developing a reading habit, seriousness in summer training/internship, preparation for GATE and UPSC exams etc. A total of 44 students from the ME department attended the session.
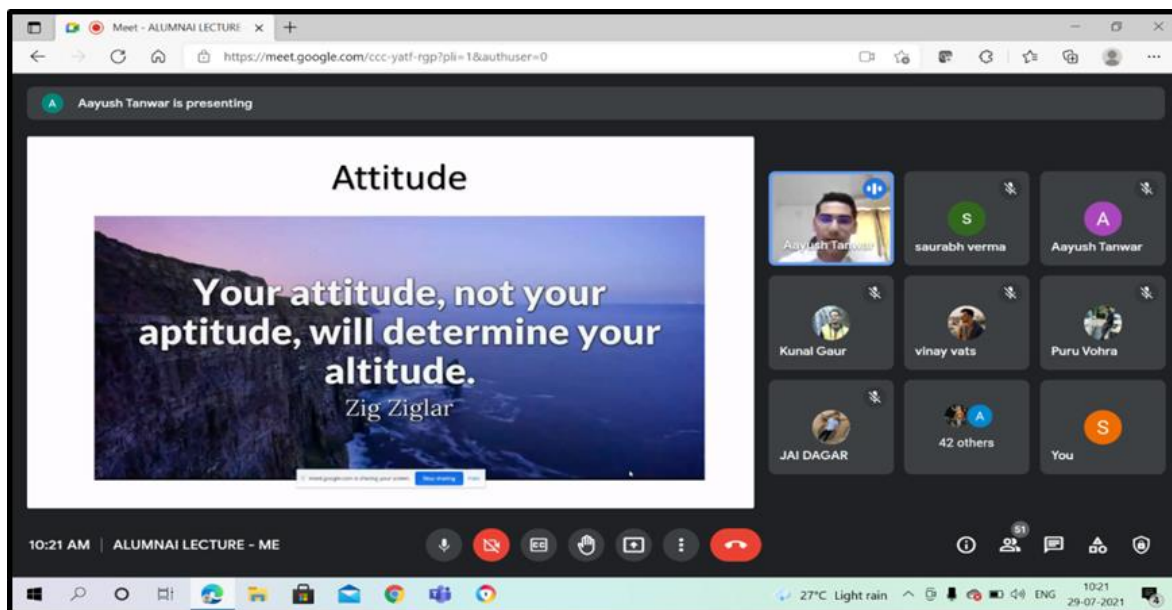
● The Department of Physics organized a Session on My Journey from Dept. of Physics, MRU, Faridabad to the University of IOWA, USA by **Ms. Himani Saraswat, Alumnus of M.Sc. Physics on 01-08-2021.** Ms. Himani will be joining University of Iowa, U.S. for pursuing Ph.D. in Physics. She started her talk by explaining the importance of different fields of research areas and her experience after joining M. Sc. Physics program. She further elaborated the path to pursue the Ph.D. from foreign universities through her presentation. She elaborated on the importance of various concerns to be followed bearing in mind the selection of research guide, field of research as per various countries, research interests, and target country and so on. She encouraged the students to focus on their goals and constantly work upon their field of interest. She stressed that to enhance their communicative skills and prepare for TOEFL along with experimental/software skills required publishing a good research article and simultaneously grooming themselves for relevant areas of their interest.
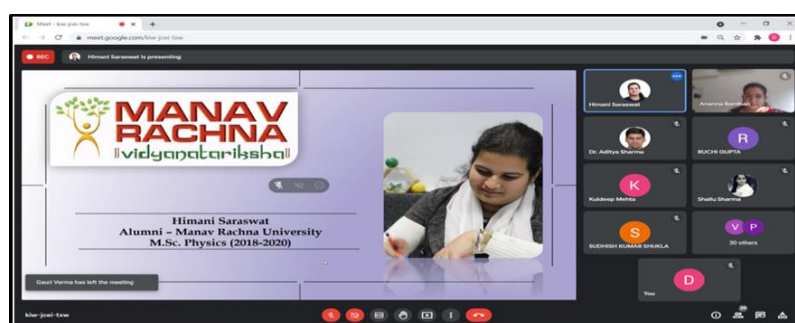
● Department of Physics organized a Session on Career Aspects in Designing and Research & Development by Mr. Himanshu Garg, Texas Tech University, USA Pursuing a Master's in Mechanical Engineering on 3rd August 2021.

Mr. Himanshu Garg was a splendid student not only academically but in extracurricular exercises as well. He has great experience in designing and has done two research papers in Scopus and presented them at the National conference. He has been bestowed with the 'Outstanding Achievers Award' in research and innovation by the Manav Rachna University in 2019. He has continued his designing   journey with the same pace into a much wider and more diverse platform known as Adroit Industries. He has done many projects and online certification during graduation.
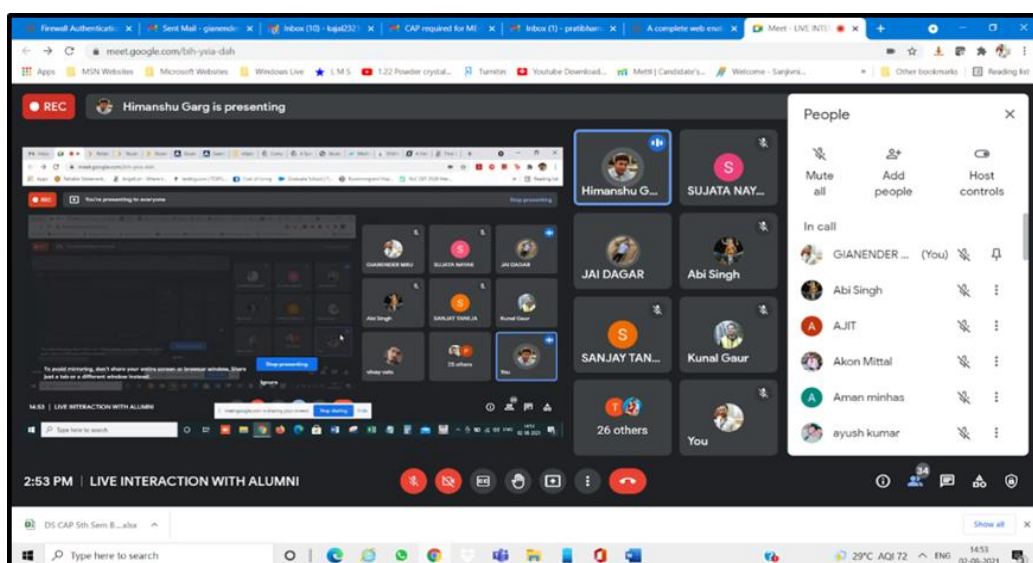
● Department of Chemistry, Manav Rachna University hosted an alumni lecture on 07th August 2021, Saturday. Ms. Sakshi Gupta, from the batch of M.Sc Chemistry 2017-2019, has received excellence in her academics by clearing CSIR-NET, consequently 3 times with AIR of <50. She is now going to join CSIR-Delhi Research lab for her Ph.D. In her talk, she emphasized on the importance and significance of providing Internships to Master students as a part of the curriculum. She also mentioned that these internships are really helpful to decide their interest, and also open the future opportunities in the corporate world, research labs etc. she was very overwhelmed with the research exposure given to her during her M.Sc. course in Manav Rachna University, she presented her research work in various conferences, learning to read, understand & write a publication, which ultimately helped her to reach at the point where she is now. She also guided the listeners to prepare for the CSIR-NET exam.

● Ms. Aditi Pratap, batch of M.Sc. Chem 2019-2021, is working as the Patent Research Analyst in Expert Lancing. In her talk, she praised the initiative from the CDC and placement department. She also highlighted the importance of giving opportunities to explore in the field of research, IPR cell and Patent, which actually helped her to attain the position in her current Job. The session was hosted by Dr. Jaya Tuteja, note of thanks was given by Dr. Arpit Sand, Associate Head and the session was ended with the remarks by Head of the Department Dr. S.K. Shukla. A total of 26 students and faculty members of the Chemistry department attended the session.
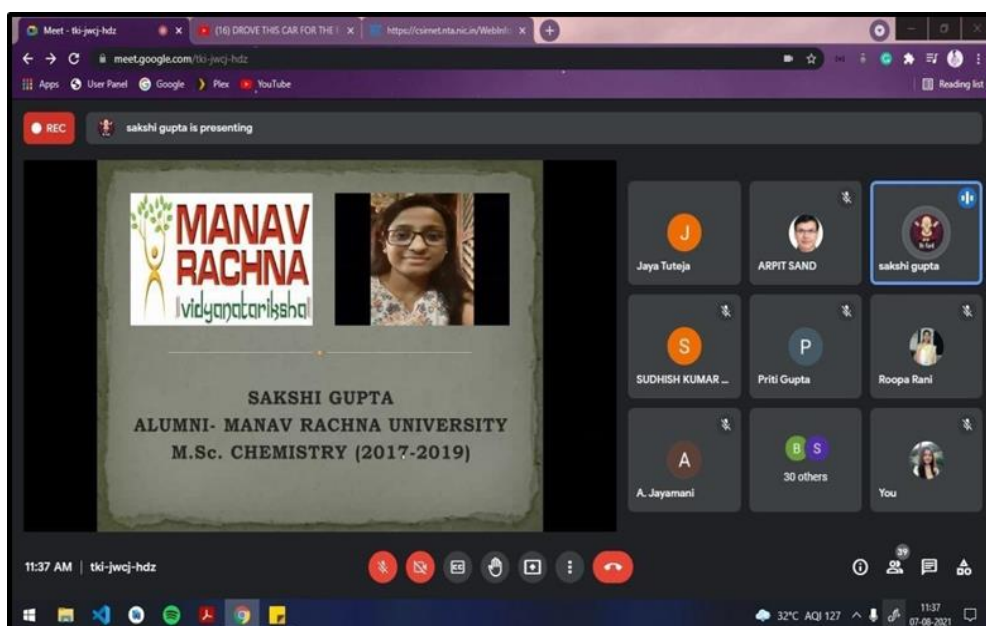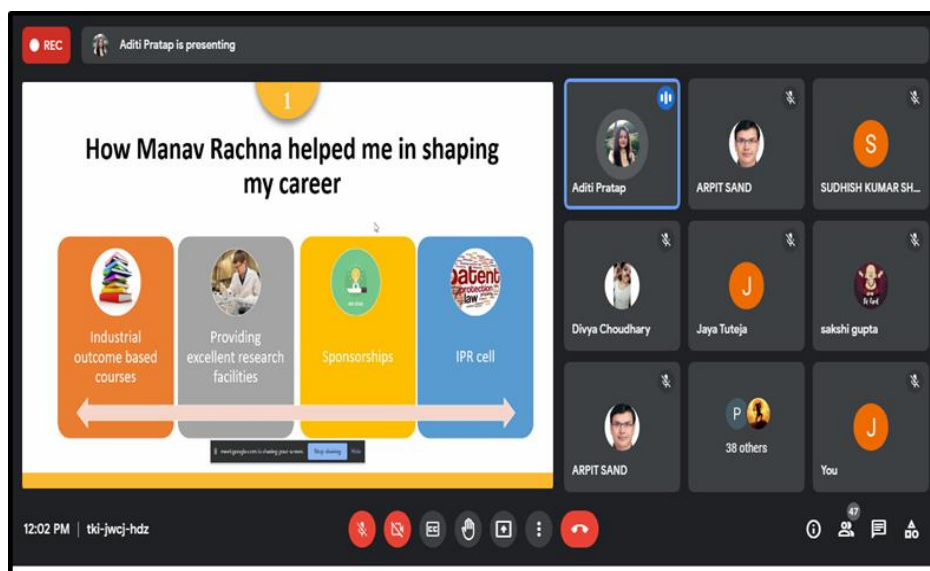
● Department of Mathematics organized an Alumni Session on Learning, Accomplishments and Future Endeavors on 11th August 2021 from 11:30 AM in Online Mode by Ms. Chhavi Balyan, Alumna B.Sc. (Hons.) Mathematics (2017-2020).

The session began with a brief introduction about the department by Dr. Advin Masih, Assistant Professor, Department of Mathematics, MRU. He highlighted the vision and mission of the department. He elaborated the thrust area of research of the department, teaching strategy of the department, its mantra "Learning by Doing" and program highlights viz CBCS, Futuristic Courses, Summer Training, different verticals at UG level etc. Dr. Masih also showcased the student's achievements of the department and invited the alumni for the talk.

Ms Baliyan started her talk by showing the presence and importance of higher education and its impact on personal and societal development. She also showed the importance of research work, programming, mathematical software's and scientific writing in the curriculum, which helped her a lot in getting admission in the Masters program. She elaborated thoroughly the steps involved in getting admission in MS abroad. She also shared information about certain scholarships offered by different universities for master programs. She strongly recommended students to read books so that they built concepts and applied these concepts to certain problems.
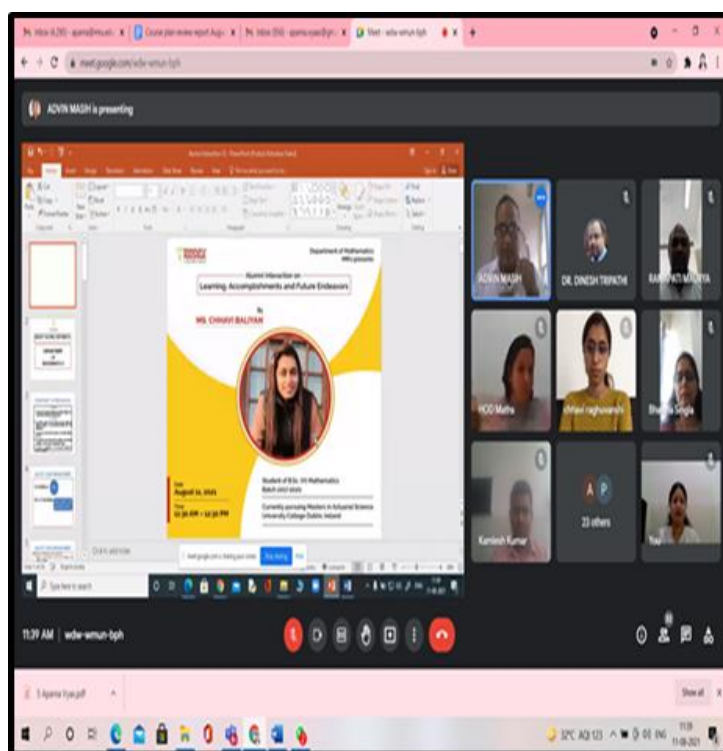
● To celebrate "National Science Day" on February 28, 2022, The Department of Mathematics, Manav Rachna University organized the session of Career Counseling by its alumni (M.Sc. Mathematics 2019-2021 batch), Ms. Ridhi Bhatnagar. She got placed with Nagarro Software Pvt. Ltd. through virtual campus placement in 2021 at a package of 3.5

LPA. The session was conducted in online mode on Microsoft Teams from 2 PM onwards. The session began with the welcoming of the speaker and audiences. A brief introduction about Ms Ridhi was given by a student of B.Sc. mathematics, Ms. Divija Sekhri. Ms Ridhi shared her experiences of the journey from Manav Rachna to Nagarro Software Pvt. Ltd. She shared how research guidance and encouragement for placements at the university lead her to achieve this position at Nagarro. She also shared that the guidance from her research mentors helped her to grow as a researcher and made her capable of presenting papers in various workshops and conferences during her master's tenure. Many questions were asked by the students which Ms Ridhi answered very skilfully. She motivated students to be self-managed and to manage time effectively so as to participate in extracurricular activities while keeping their grades on the higher side. She inspired students to stay focused on their goals and to never stop learning. Overall, the session was very informative and the students were very happy to listen to her.
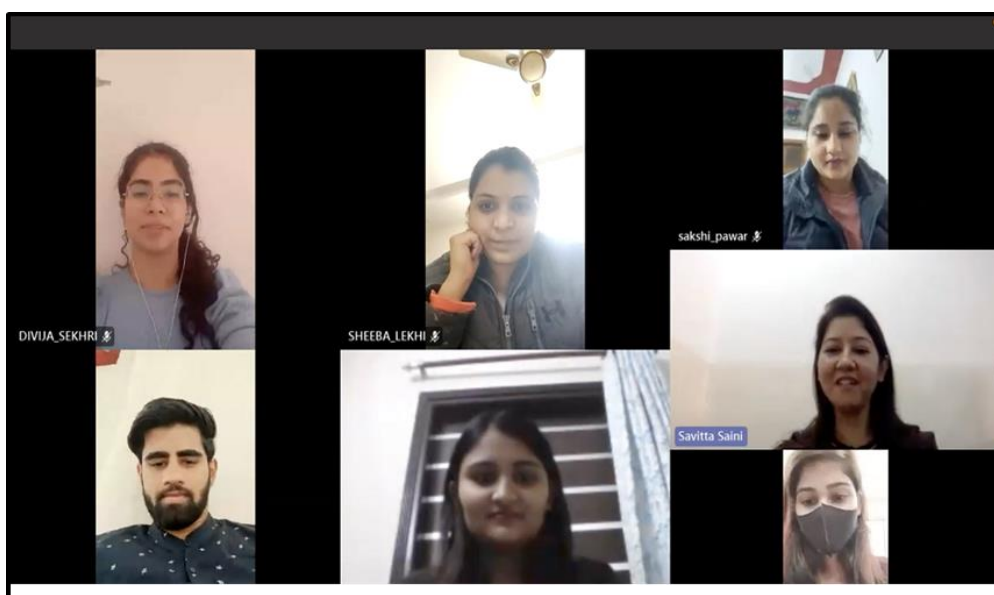
- The Department of Computer Science and Technology, Manav Rachna University welcomed "Mr. Bhavesh Chaudhary", alumnus B.Tech CSE 2012-16. He is currently working as Product Manager in Airbnb and has 7 years of rich work experience in Product Management and Customer Engagement. The seminar was conducted on May 6, 2022, 10 am - 11:30 am with B. Tech CSE 1st year students on the Topic - Journey from a College Student to a Project Manager. Dr Manpreet Kaur, HoD CST department presented sapling as a token of gratitude to our alumni. The talk covered his journey of hardships from being a college student to being at Airbnb as a Project manager. He shared his college time stories and how the networking has really helped him reach where he is today. He also

explained how networks can be built along with dos and don'ts of the same. He also emphasized on the benefits of alumni reference. He demonstrated the role of project manager with the students. It was really an interactive session as students participated with enthusiasm. The session ended well with a vote of thanks followed by a memento presentation as a token of appreciation to our Alumni for sparing his valuable time and experience with all.

- Alumni connect program on Guidance for Quality Education and Research in Indian and Foreign Universities on 23rd May 2022 was presented by **Ms. Surekha Chaudhary, an alumna of M.Sc. Physics (2018-2020). She is presently a Ph.D. scholar in Gwangju Institute of Science and Technology (GIST) South Korea.** This talk was organized by Dr. Aditya Sharma (Assistant Professor and R&D coordinator, Department of Physics), on Google Meet platform in online mode. The minutes of the meeting are as follows:

- A brief introduction about the alumni speaker was given by Dr. Aditya Sharma. Presenting alumnus, Ms. Surekha Chaudhary, started her talk by explaining the importance of different fields of research and her experience after joining M. Sc. Physics program in MRU. She further elaborated the path to pursue the Ph.D. from foreign universities through her presentation. She elaborated on the importance of various concerns to be followed bearing in mind the selection of research guide, field of research as per various countries, research interests, and target country and so on. She encouraged the students to focus on their goals and constantly work upon their field of interest. She stressed that to enhance their communicative skills and prepare for TOEFL along with experimental/software skills required publishing a good research article and simultaneously grooming themselves for relevant   areas of their interest. The students of 2nd , 4th and 6th semester (total: 18

students) of Physics department attended and enjoyed the session. Students asked different questions and showed interest in this demonstrative session. All faculties of the Applied Sciences attended this session, and the session was concluded with Vote of Thanks by Dr. D. K. Sharma, Head of Department, Department of Physics, MRU.
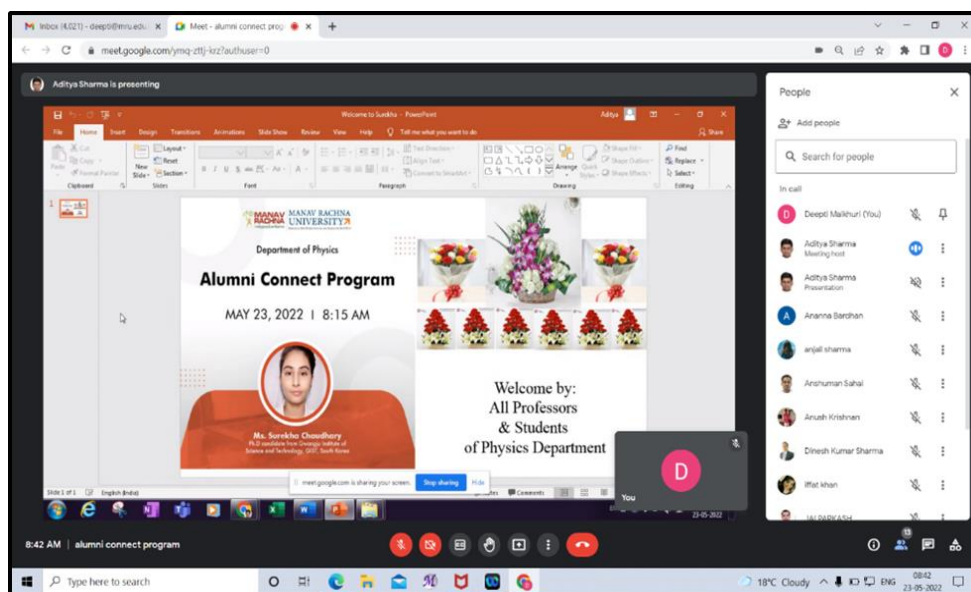
- Alumni connect program on Opportunities for Higher Studies in Physics on 21st June 2022 was presented by Mr. Rohit Rawat, an ex-student of B.Sc. Physics (2018-2021).

A brief introduction about the alumni speaker was given by Dr. Ananna Bardhan. Presenting alumnus, Mr. Rohit Rawat, started his talk by sharing his experience after joining B.Sc. Physics program in MRU. He discussed various career options and scope after pursuing B.Sc. Physics Program. He further elaborated about various competitive exams and the path to pursue the M.Sc. Physics from various prestigious universities through his presentation. He further elaborated the importance of Geosciences in our day-to-day activities, the process of capturing and processing the satellite images of geological structures and oil deposits. He also suggested the students update themselves with a little new software. He also explained the processing of satellite images through software like ARCgis, SAGA GIS. He also requested an addition of a course related to remote sensing for our students.

● The Department of Electronics and Communication Engineering organized an online Alumni session on "Experience of Industry Sector which is old with value equals to gold" delivered by our Alumni **Mr. Rohtansh Vashishth, ECE (2014-18 Batch).** Mr. Rohtansh is currently working as Software Engineer, Coperion Ideal Pvt Ltd, Noida and holds an experience of working on Automation related projects employing PLC and related hardware and software. He shared his journey with the students of how he progressed from college to choosing this field as his career. He also guided and motivated students regarding various career options available in the field of Electronics and Electrical being their counterparts. He also shared some pictures of the control panels the industries are working upon and what is expected from an ECE engineer in this was shared. The session was very motivating and students actively participated and interacted with him to clear all their fears and doubts.
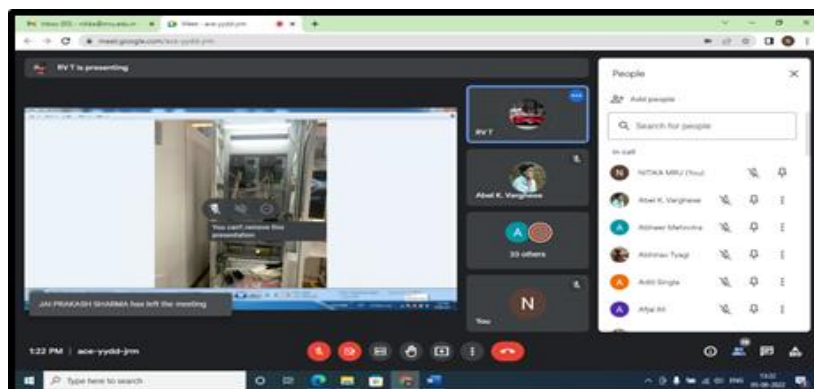
● Department of Mechanical Engineering, Manav Rachna University organized an Alumni Lecture on 17th September 2021 from 10:00 a.m. to 11.00 a.m. in online mode on MS-Team. Mr. Tushar started his talk by explaining the importance of different aspects of

Mechanical Engineering. Tushar Gupta, (Alumni 2019-MRU-First batch pass out), Mechanical Engineering pass out student, delivered a lecture on motivation dated on 17.09.21, who is presently working as a motivational speaker and life coach. Mr. Tushar Gupta shared his experiences of Krishna Maruti with the students and also explained different motivational factors in day-to-day life. He focused on different motivating aspects which include time management, patience and energy. He also advised the students to focus on their goals and constantly work upon to enhance their skills and in turn groom themselves for industry and areas of their interest.
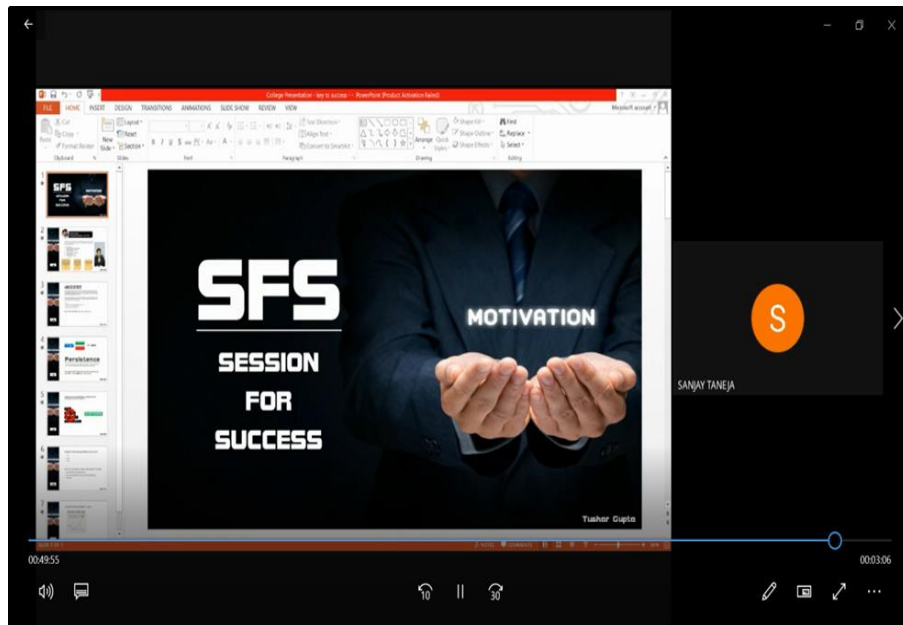
- Department of Computer Science and Technology, MRU had a jubilate experience of interacting with alumnus Ikshith Puri, (B.Tech CSE, 2004-08 Batch), Associate Director at UnitedHealth Group for a live interaction on "US Healthcare & PBM Analytics". Mr. Ikshith has 12 years of experience in Healthcare Analytics and is currently leading the team to provide end-to-end analytics solutions for Digital, Marketing Campaigns, and Customer Service verticals. Mr. Ikshith shared fascinating facts related to healthcare and medicines in the US & India. He framed & posed some questions to the students on the spot which made the session very interactive as well as spontaneous. The students were very keen on answering as he also awarded them with Amazon vouchers to keep students' spirits high. Faculty members were also a part of the interaction and were glad to welcome him back to the square. He explained about various software that they can learn in order to excel or open career options further.
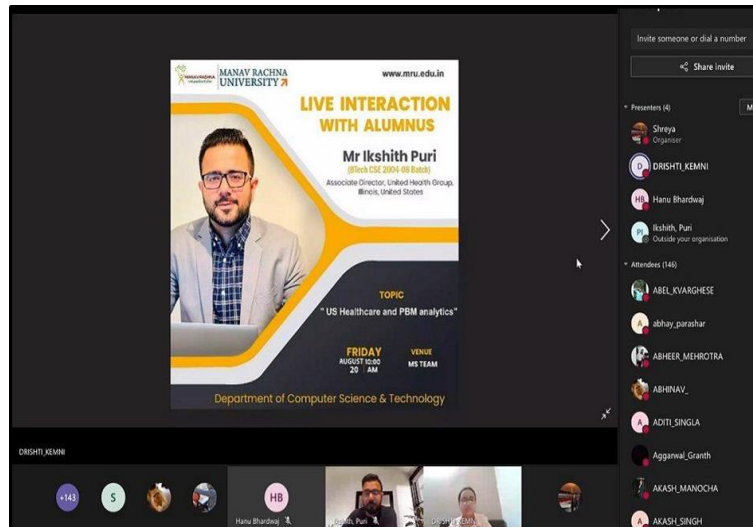
- Department of Mechanical Engineering, Manav Rachna University organized an Alumni Lecture on 02nd May, 2022 from 12:30 pm-01:30 pm in HF-10, Lecture Hall. Mr. Varun started off his presentation by giving an address to sustainable development using economic empowerment to address the United Nations Sustainable Development Goals. He spent some time telling how one can improve himself and utilize sustainable development and college resources such as Professional Competency Enhancement facilities for self-betterment. His main focus was on Environmental criteria, Social criteria and Governance. He also shared about Eliminate Poverty, Erase Hunger, Establish Good Health and Well-Being, Provide Quality Education, Enforce Gender Equality, Improve Clean Water and Sanitation, Grow Affordable and Clean Energy, Create Decent Work and Economic Growth, Increase Industry, Innovation, and Infrastructure, Reduce Inequality, Mobilize Sustainable Cities and Communities, Influence Responsible Consumption and Production, Organize Climate Action, Develop Life Below Water, Advance Life On Land, Guarantee Peace, Justice, and Strong Institutions and Build Partnerships for the Goals. He explained why certain industries would be still willing to hire mechanical engineers right after the crisis of the corona pandemic. He motivated students to improve themselves and dominate industry and research areas of their interest.

●   Manav Rachna University was delighted to invite Mr. Abhinav Gambhir for a IEEE awareness lecture for the students. Mr. Abhinav Gambhir, who is currently working with Hewlett Packard, USA was enthused to address the students and informed about the advantages and opportunities under IEEE. Students came to know how IEEE broadens the member's access to the industry and companies like HP, Microsoft, Google etc. He shared his journey about how IEEE played an imperative role in his career. Further to his lecture, he also met Dr. I. K. Kilam, Dean – DSW, where he shared his experience as a professional in a foreign country. He also narrated his student experience at Manav Rachna and was happy to learn about the developments at the Campus.
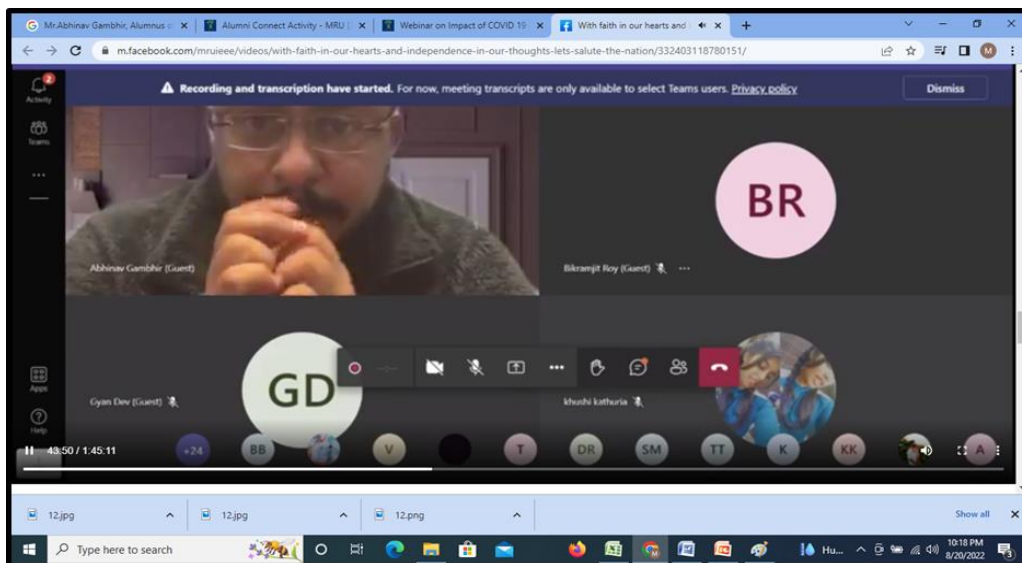
●   School of Education and Humanities of Manav Rachna University, Faridabad, Haryana organized an alumni lecture for its students on **March 3, 2022.**The interaction took place at 2:00 p.m. via Zoom platform. Ms. Manisha Arya, (BSc B.Ed.Batch 2017-21) was invited to interact with the students. She interacted with the students on **"Yoga and**

Meditation – A panacea for All the Problems Faced by the Learners". Ms. Manisha Arya after introducing Yoga and its eight limbs shared at length the positive effects of yoga on Body, Mind and soul. She emphasized that when yoga and meditation is followed religiously and makes one's way of life multiple aspects of the human body, mind and soul are improved.
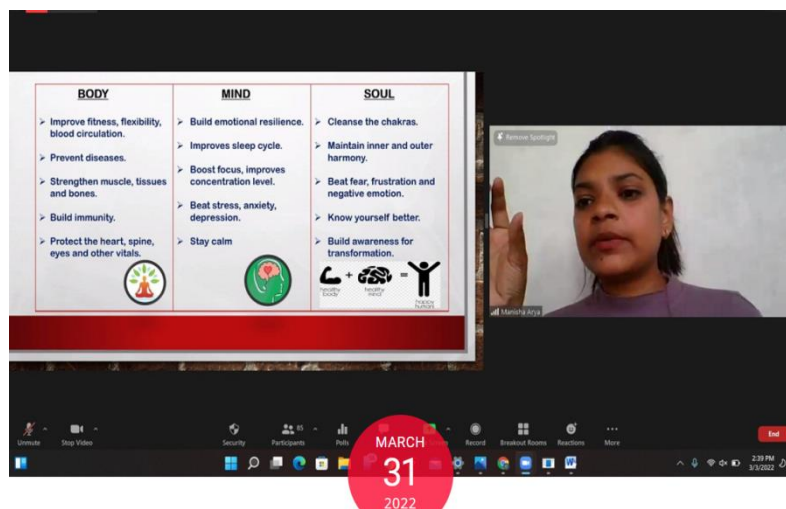
● Almashines Alumni Meet-19.02.2022: **Department of Chemistry, School of Applied Sciences, MRU** organized a **Virtual Alumni Meet on 19th Feb, Saturday 2022 .Around** 12 alumni and 20 students from the current batch took part in the event.

● Manav Rachna University organized an Alumni Meet "Reminiscence 2022" on April 2nd, 2022, in Mandala, G block Auditorium. The occasion drew around 300 Alumni from batches of 2008 to 2021. The event started with Registration followed by networking tea, wherein faculty members got a chance to welcome and interact with the alumni, some of them were visiting even after a decade. After registration, formal welcome started with the lighting of lamps by Senior Dignitaries and Alumni representatives. This was followed by blessings from our Hon'ble Vice Chancellor Prof. I.K. Bhat and Hon'ble Pro Vice-Chancellor Prof. D.S. Sengar. The alumni were apprised of the developments taking place in University over the last few years.The event continued with various cultural

performances which included foot-tapping Group Dances, memorable Band Performance, enthusiastic Skit Performance and also a mesmerizing Fashion Show by our current students. In between the various performances, some incredibly enjoyable games were also played with Alumni wherein they had a great time living their college days again. Alumni's delight was evident in their surprise performances, which included Dance, Singing, Fashion Walk performances, On the Spot games and exciting Lucky Draw Prizes. Towards the end, Dean Academics Prof. Sangeeta Banga gave the blessings and revived memories while interacting with the Alumni. A remarkable film of their college days was shown to Alumni to make them nostalgic and whisk them back to their favorite memories. Alumni also enjoyed getting themselves clicked with a themed photo booth "Trip to Nostalgia". The Alumni Meet ended with a DJ followed by networking lunch, wherein Alumni appreciated the efforts of University for organizing such an event and shared that they had a great enjoyable & memorable time.

CHAPTER: 7

SDGs AT MANAV RACHNA UNIVERSITY

This report provides a comprehensive overview of the initiatives and achievements made by Manav Rachna University (MRU) in promoting and achieving sustainable development goals (SDGs) during the previous academic year. MRU has actively pursued sustainable practices across various domains, including education, research, campus operations, community engagement, and student involvement. This report highlights the key initiatives undertaken and the outcomes achieved, demonstrating MRU's commitment to sustainability and its contribution to the SDGs.

Introduction:

Manav Rachna University recognizes the importance of sustainable development and has incorporated the SDGs into its strategic vision. By aligning its activities with the SDGs, MRU aims to create a sustainable campus, foster research for sustainable solutions, and instill a sense of responsibility among its students to become agents of change.

7.1 Key initiatives

7.1.1 Sustainable Campus Operations:

- MRU implemented various measures to reduce its ecological footprint, including energy-efficient lighting systems, solar power generation, waste segregation, and water conservation techniques.
- The university introduced a Green Procurement Policy, ensuring sustainable sourcing practices for goods and services.
- A comprehensive recycling program was initiated, promoting waste reduction and recycling practices throughout the campus.

7.1.2 Curriculum Integration and Research:

- MRU revised its academic curriculum to incorporate sustainability-related courses across various disciplines.
- The university facilitated interdisciplinary research projects addressing environmental, social, and economic sustainability challenges.

- Students and faculty members were encouraged to conduct research and publish papers on sustainable development topics.

7.1.3 Community Engagement:

- MRU actively engaged with the local community through awareness campaigns, workshops, and seminars on sustainable living practices.
- The university organized events, such as tree plantation drives and clean-up campaigns, to promote environmental stewardship.
- MRU collaborated with local NGOs and government bodies to support community development initiatives related to education, health, and environmental conservation.

7.1.4 Student Involvement and Empowerment

- MRU established student-led sustainability clubs to raise awareness and drive sustainable initiatives on campus.
- Students participated in sustainability-focused competitions, hackathons, and conferences, fostering innovation and creativity.
- The university provided internships and volunteering opportunities in sustainability-related organizations to enhance students' practical understanding.

7.1.5 Environmental Impact:

- Significant reduction in energy consumption through efficient lighting systems and solar power generation.
- Water conservation efforts resulted in a substantial decrease in water usage.
- Proper waste segregation and recycling practices led to a considerable reduction in landfill waste.
- Research and Publications
- Increased research output on sustainability topics, resulting in several research papers, publications, and patents.
- Interdisciplinary research projects addressed critical sustainability challenges, contributing to the body of knowledge in the field.

7.2 About Manav Rachna Centre for Peace and Sustainability (MRCPS)

MRCPS was established under the guiding principles of the visionary and legendary academician and nation-builder, Dr. O.P. Bhalla, who championed the cause of knowledge, values, and ethics to establish peace and sustainability.

It is a hub of academic endeavors, training, research, community awareness programs, and more, dedicated to all spheres of peace and sustainability. Established on October 2, 2019, MRCPS envisions promoting peace and supporting the development of India's peace operations through the power of youth. It is the epicenter of peace and sustainability activities, focusing on education, training, value inculcation, attitude formation, research, policy-making, collaboration, and networking.

MRCPS's Advisory Board comprises luminaries such as Padma Vibhushan Dr. Karan Singh as Chairman, former Chairman of UGC, former member NDMA, Chairman of Terre Policy Centre, UNEP, Founder of WISCOMP, Head of the Department of Psychology at Delhi University, Chairperson of Bharat Soka Gakkai (BSG), and Retired Officer in Chief-Indian Army, among others.

MRCPS's five verticals, namely PARASHAKTI (Women empowerment), PRAKARSH (Quality Education), SAHRITA (Environment conservation), SAMRIDDHA (Economic Development), and SADBHAV (Peace), focus on different six SDGs. The center has collaborated with UNESCO-MGIEP, IPRA, Heartfulness organization, among others. It encourages research projects under SDGs and introduced the Peace and Sustainability Student Club (MRPSC). MRPSC comprises Green Warriors striving for environment conservation, Peace Champions developing skills and attitude towards peace, and Gender Champions spreading awareness and putting efforts towards women's empowerment.

MRCPS has undertaken several projects, such as Project Pahal (Educating under privilege), ESDP (Awareness of SDGs), Wall of Peace, Kuch kahna hai (Eradicating child abuse), and ANG (Adopt, Nurture and Grow plants), among others, to promote peace and sustainability among youth. The university received the WCDM DRR Awards for the work carried out by the MRCPS during the COVID-19 pandemic for mitigating its impact, which was given by the Hon'ble Shri G Kishan Reddy, Union Minister of Tourism, Culture, and Development, Government of India. It has also received the 'Institutions of Happiness

'award for fostering happiness in the academic environment at the QS I-Gauge Academic Excellence Conclave held at the India Habitat Centre, New Delhi.

7.2.1 Collaborations

IPRA

MRCPS has collaborated with Institute of Peace Research and Action (IPRA) on 10th February 2020. IPRA is the organization that has been engaged in peace activities for the last five decades. It contributes in dissemination of knowledge in the area of peace, and has completed many successful projects and published books in the area of sensitizing society on Peace. They have conducted seminars and organized peace lecture series involving faculty and staff of reputed organizations. The collaboration of MRU and IPRA will be for collaborative research and developmental projects National/ International Conferences / Seminars jointly.

MGIEP

Manav Rachna University has partnered with UNESCO-MGIEP to offer the online course SEEK (Self directed Emotional Learning for Empathy and Kindness) which is developed by UNESCO-MGIEP in collaboration with Life University, USA. 1800 students of Manav Rachna University have enrolled for the course. The Course was offered to all students of Manav Rachna University and was completed successfully by a large chunk of students across various disciplines.

To understand the students' responses regarding the SEEK course, Assistant Director General, UNESCO Mr Nicholas Jeffreys was on an India visit. He along with Director UNESCO MGIEP, Prof Dr Anantha Duraiappah, SEEK Project Officer – Mr Abel Caine, (TBC) visited Manav Rachna Campus.

Heartfulness Organization

30 students with faculties became part of Youth summit at Hyderabad. Heartfulness in association with AICTE and UNESCO Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP) as its knowledge partner is bringing forth the International 'Rising with Kindness' Youth Summit at Kanha Shanti Vanam – Heartfulness Headquarters in the outskirts of Hyderabad between 12th-14thAugust 2022. Students also undertake meditation sessions in Manav Rachna campus. Faculty development

programmes were arranged for faculties to inculcate self management to gain leadership mastery.

SCCN

Manav Rachna University became a member of Smart Campus Cloud Network. Manav Rachna University participated and took a voluntary pledge to develop the roadmap towards making University carbon neutral on the fifth anniversary of the Paris Agreement on December 12 2020 in virtual event NOT Zero Net Zero organized by TERRE Policy Centre under Smart Campus Cloud Network. Committees including Manav Rachna faculty and Students are formed to implement towards the goal of making campus Carbon neutral.

7.2.2 Manav Rachna Peace and Sustainability Club

The University plays an important role as a convener and facilitator of support processes of SDGs to make an impact in our society.

Manav Rachna University introduces the Peace and Sustainability Club as Manav Rachna university has a strong faith in youth power and their conviction in making a better world.

Let's join hands to attain Sustainable Development Goals and to attain peace by becoming a part of Peace and Sustainability club

Peace and sustainability Club is a platform through which we can pick up social, economic and environmental issues. Together we can make small but impactful changes in our surroundings and to ourselves to make a difference and contribute to the better world.

Attitude of Peace cultivates a harmonious working culture that promotes excellence in Performance. Top Leaders display this quality and rise above others. India has an opportunity through our youth to engineer Peace and become world leader in this aspect. Let's take a first step towards making India proud.

Performance in bringing Social good is more conspicuously noticed than economic operational performance. Let's become sensitized global citizens to make Manav Rachna and India shine in the world.

International Placements can be achieved through demonstrating traits of "Engineering Peace" more than mere Operational Domain brilliance. Let's use this platform to make our career better.

Above all, an attitude of peace helps you lead "Powerful life" through your own conduct and lifestyle and making a difference to "Have Not" thereby ensuring Peace through sustainability.

Peace Champions, Green Warriors and Gender Champions

At Manav Rachna, we are making a thoughtful attempt to create a brigade of Peace champions, Gender champions and Green warriors who we believe, would be influential and leading citizens of Peaceful and Sustainable New India. This brigade will spread the message and connect to the society and they would also expand the network of other youth outside Manav Rachna.

Peace champions to be an instrument of peace

"If you want peace, be peace."

Youth power should be harnessed by indulging in art and culture related pursuits to develop a peaceful mind to be an instrument of Peace. We believe that youth should be at the Centre of Change and Innovations. Youth ought to be empowered and should be physically and mentally strong to make them key agents for nation's development & peace.

We at Manav Rachna, believe in youth power and we envision to make youth competent global professionals with values and integrity. This endeavor aims to prepare the youth of the nation to develop into leaders who will contribute in bringing progress to society through such actions and initiatives that promote Peace and Sustainability in the area of their chosen career. Peace is not confined to meditation or breathing techniques. People experience a calm mind through music, art, nature and even knitting, weaving many more. We would like youth to experience this by unraveling peace using these methods. The Peace Champions initiative aims to make youth, responsible citizens by engaging them in peace building activities. Eventually we look forward to its expansion to a larger body at inter university level.

We are also looking forward to synergizing activities of the organizations and institutions who are working for the cause of Peace.

We are very hopeful to achieve the goal of inculcating a right attitude in youth towards peace and sustainability through technology and curriculum put together.

Harnessing Youth raising army of Green warriors

Manav Rachna seeks to empower youth to be at the forefront of this mission of environmental protection. Army of Green warriors is being raised in Manav Rachna who would be spearheading this movement to spread the message of saving the environment and attaining carbon neutrality to the masses. In order to make our campus carbon neutral, green and to make students environmentally conscious citizens, we need to initiate the change from ourselves. Youth is the torch bearer to make changes in society. We, at Manav Rachna believe in youth power and wish to use it in our effort to make the mother earth greener and sustainable. We need to change the mode of interaction at all levels – home, university, workplace and so on. To increase the outreach for creating an environment that fosters environmental sustainability, Manav Rachna envisages engagement of youth as GREEN WARRIORS. This is also an attempt to divert youth in productive, creative problem solving to make them true leaders of future India. This endeavor aims to prepare the youth of the nation to develop into leaders who will contribute in bringing progress to society through such actions and initiatives that promote Sustainability in the area of their chosen career.

Upholding gender equality through Gender champions: Parashakti

Gender socialization of both boys and girls begins early and it is important to initiate change processes at a young age to shape attitudes and transform behaviors. Colleges play a major role in this regard, because students spend a large amount of time engaged with peers in such settings. Creating positive social norms in educational institutions that value girls and their rights is important to improve their well-being and achieve long-term and sustainable social change. India is home to around 232 million individuals aged 5-24 years, who account for 1 9.15% of the country's population. Engaging with these young boys and girls is crucial to help them critically assess notions of masculinity and question prevailing gender inequities. We need to tap into the goodness and sense of justice of these young boys and girls and give them tools for maintaining those gifts as they encounter people and experiences that are different from their own. We need to engage with them to challenge and shift gender norms that contribute to girls and women having less worth, opportunities and decision-making ability than boys and men. In order to promote gender equality, guaranteed by Article 15 of the Indian Constitution, we need to change the mode of interaction at all levels – home, school, workplace and so on. To

increase the outreach for creating an environment that fosters equal treatment, MRCPS envisages engagement of Gender Champions in university. It is a joint initiative of the Ministry of Women and Child Development and Ministry of Human Resource Development which is being implemented at Manav Rachna.

The activities organized by the Centre during 2021-22 are as follows:

- **Ecological Restoration Growing native plants of Aravali on 17th July,2021**

The event was organized to understand how the field of ecological restoration can begin to address the issue of environmental racism in online mode. Recognizing the increasing role of ecological restoration as a tool for addressing a wide variety of ecological and social challenges, Initial ideas that could be used to develop net gain metrics included (green is focused on ecological; blue combines ecological and human wellbeing; purple is focused on human wellbeing)

- Resource Person: MR. SOHAIL MANDAN, Head, CEC, BNHS

The message of Bhagvad Gita on 8th July,2021

The purpose of the event was to have a distinctive knowledge about Bhagvad Gita. The main objective was to celebrate the 25 glorious years of Manav Rachna .To make youth aware about the inner beauty of Bhagvad Gita. To create awareness about what Bhagvad Gita teaches you in every path of your life.

- **"Understanding and Achieving Sustainable Development Goals through Education" 13 August 2021, 10 AM-11:30 AM**

School of Law, Manav Rachna University in collaboration with the School of Education and Humanities conducted a seminar on "Understanding and Achieving Sustainable Development Goals Through Education" on 13th August 2021 at 10:00 am through Google Meet. The aim of this discussion was to create awareness and begin a discussion on gender inclusiveness in education and society, about the Sustainable Development Goals provided by the United Nations.

- **Webinar on Youth Empowerment For Peace And Sustainability,4th October 2021, Online Mode**

Manav Rachna Centre for Peace and Sustainability organized a webinar on "Youth Empowerment for Peace and Sustainability ''. The respected distinguished speaker was Dr. Markandey Rai (Executive chairman, IIEE National Chancellor, IAEWP Chancellor, The Global Open University Nagaland chancellor, IGTAMS University, INDIA Senior Advisor, UN-Habitat) and the chief Convener was Dr. I.K Bhat vice chancellor, MRU.

- **Masti ki Pathshala, 12th November, 2021**

To celebrate National Education Day, the birth anniversary of Maulana Abul Kalam Azad the 1st education minister of India after Independence. Also to celebrate Children's Day on 14th Nov which is celebrated every year across India to increase awareness of the rights, care & education of children.

- **RAJASTHAN VISIT (RAJASMAND), 26th November 2022**

On 26th of November 2022 are trip started from Delhi to Rajasmand organised by Manav Rachna University, under the guidance of Manav Rachna Centre for Peace and Sustainability where students were invited to attend the National youth peace conference at same we were engaged in many interesting activity including dance games and speeches who's main motive was to encourage the younger generation and to spread peace among them.

- **Visit to Heartfulness Campus,Kanha Shanti Vanam, Hyderabad, 14th August 2022**

The 3 day events and experience were wonderful for students to experience the inner peace and beauty of nature.It started with yoga followed by meditation. Further, interesting sessions were organised for all the delegates along with plantation drive. The main purpose was to develop kindness and experience positivity and peace.

- **Sustainable Development Education Program, 15th July 2022**

We have started a project called the **Sustainable Development Education Program** in which students of Education Department visited and taught students about 17 Sustainable Development Goals with the aim to create awareness in the society.

- **ANG CAMPAIGN** (Adopt Nurture and Grow)**, 22nd April 2022**

The Honourable Deputy Commissioner inaugurated the Adopt, Nurture and Grow campaign by planting saplings. Mr. Jitendra Yadav handed over saplings to the students. Students adopted the plants which they will be returning and these plants will be planted in the campus of the university on the 5th of June 2022, World Environment Day the idea was to implement the motive of campaign, that is, ADOPT, NURTURE and GROW.

- **Yoga Shoga, 23rd June 2022, International Day of Yoga**

There were exciting games and knowledge which were the essence of the whole event. There were three rounds- picture showing and guessing, nani ka nuska and kahoot quiz.

- **YOGAZING CARNIVAL 2.0 :SAATHI SANG YOG, Date : 29th June 2022**
Let's improve health with close ones

Yoga at home and yoga with a family theme focuses on informing people to stay motivated at home, communicate with each other and adopt a healthy lifestyle by practising yoga. The

event was submission-based. There were a good number of registrations as well as participation. The event was open to everyone and maximum participation was seen from school and university students. They participated along with their parents. Our guest of honour Miss Chetna Choudhary was sent all the entries of the participants and she chose 3 winners from the 25 registrations.

- **Pehel Project**

13th of April, 2022 marked the inception of "PEHEL" an "initiative" in the most literal sense, orchestrated principally by PRAKARSH, a vertical under MRCPS aimed towards the provision of quality education to a massive chunk of underprivileged kids. The event was aimed at the provision of quality education to a massive chunk of underprivileged kids.

7.2.3 Course on Essentials of Peace and Sustainability

Course offered as an elective subject to undergraduates of Manav Rachna

Manav Rachna Centre for Peace and Sustainability, at Manav Rachna University, has developed an insightful course entitled 'Essentials of Peace and Sustainability.' This course is made available to undergraduate students as an elective subject, with the primary objective of fostering greater awareness of the ambitious Sustainable Development Goals (SDG) agenda of 2030, its various components, and imparting the knowledge and skills required for peace-building.

The course draws upon experiential and project-based learning approaches, as well as collaborative and cooperative learning strategies, to provide learners with a comprehensive and immersive educational experience. As part of the course, students select a specific SDG and propose a solution based on their acquired knowledge in their respective domains, making the learning experience both practical and impactful.

To ensure the quality and rigor of the course content, it is developed by a team of experts in the field of Peace and Sustainability. The course is delivered in a blended mode, leveraging technology and traditional methods to provide students with the flexibility and convenience of learning in a manner that best suits their needs. The course has so far successfully been completed by 450 students, making it a valuable and sought-after addition to the academic offerings of the university.

Course offered by Fakir Mohan University

The course entitled "Essentials of Peace and Sustainability" is presently being offered to Fakir Mohan State University, Balasore, and Orissa. This course is offered in a blended mode of delivery, wherein the theoretical components are imparted through our esteemed university through virtual platform Canvas, while the practical aspects are being attended to by the Department of Education in a physical mode.

It is a six-month duration program, which commenced in March 2022 and culminated in August 2022, and is meticulously designed to provide a comprehensive understanding of the fundamental principles and concepts related to the critical areas of peace and sustainability.

Course offered by OE4BW

The course also has been made available as an Open Educational Resource (OER) for the benefit of undergraduate students. This laudable initiative is in alignment with the OER4BW (Open Educational for Better World) program, an illustrious initiative supported by the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

The carefully crafted course on "Essentials of Peace and Sustainability" is designed to equip young learners with a thorough and nuanced understanding of the crucial concepts and principles that underpin the fields of peace and sustainability. By leveraging the power of cutting-edge technology and innovative pedagogical approaches, the course material is delivered in an engaging and interactive manner that inspires learners to think critically and reflect deeply on the subject matter.

7.3 Awards

DRR Award

Manav Rachna University received WCDM DRR Awards for the work carried out by the Centre for Peace and Sustainability during COVID 19 pandemic for mitigating its impact. The award was given by the Hon'ble Shri G Kishan Reddy Union Minister of Tourism, Culture and Development of North Eastern Region, Government of India and received by Prof. I K Bhat Vice Chancellor of Manav Rachna University, at a function held in India International Centre (IIC) on 22nd June 2022.

The Centre for Peace and Sustainability during the tough times of pandemic developed several structured and practice oriented extra-curricular programmes for youth to inculcate

values and promote indulgence in art and culture related pursuits to develop a peaceful mind to face the disaster. Besides this the centre emphasised on developing life skills among students, creating awareness and training programmes for many SDGs including environmental consciousness, culture of peace and harmony, to be peace champions to support community during pandemic and post pandemic period. It helps to develop the attitude towards sustainability amongst students through interuniversity forums and competitions to create awareness among people in societies to avoid such and similar disasters. It is expected that the centre will keep serving the society and help in making the world a better place to live.

Happiness Index Award

Manav Rachna University has received the 'Institutions of Happiness' award for fostering happiness in the academic environment at the QS I-Gauge Academic Excellence Conclave held at the India Habitat Centre, New Delhi.

A total of 100 Institutions from Pan India participated in this survey and only 33 qualified for the criteria to receive the 'Institutions of Happiness' award. UK based QS, Quacquarelli Symonds' Indian subsidiary, QS I-GAUGE announced India's happiest educational institutions after a rigorous assessment exercise which began in December last year in association with industry body ASSOCHAM.

7.4 MRCPS Verticals

7.4.1 PRAKARSH

SDG-4 aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. It supports the reduction of disparities and inequities in education, both in terms of access and quality. It recognizes the need to provide quality education for all, and most especially vulnerable populations, including children belonging to the weaker sections of the society, children with special needs, and children belonging to indigenous and refugee clans. Being an SGD of critical importance due to its transformative effects on the other SDGs, sustainable development pivots on every child receiving a quality education. With a robust support mechanism, the children are offered the tools to develop to their full potential. Thus, they become prolific individuals prepared to give back to their communities and break the cycle of poverty. Education enables upward socioeconomic mobility. The vertical 'Prakarsh', has been envisaged on the lines of the fourth Sustainable Development Goal (SDG- 4) on Quality Education. It ensures a steady progression towards an inclusive-equitable society which provides free yet quality education to one and all, while promoting lifelong learning opportunities for everyone.

Objectives

The objectives identified under *Prakarsh* are:

- To promote a holistic vision of quality education.
- To promote university-community linkages for better student support.
- To facilitate the schools with socio-emotional and academic support services.
- To address the learning needs of the children coming from the margins.

7.4.2 PARASHAKTI

MRU perseveres in a continuous engagement with the local community women to promote female education and empowerment through awareness campaigns and community programs. The university reinforces promotion of its female staff in the organisation based on their merit and performance. This permits the university to warrant the implementation of strategies and plan of action guaranteeing gender parity and equity. The approach directs at improving the representation of women in the university's leadership positions along with senior academic roles. The university also provides 'Day-care' facilities in the campus to promote a conducive environment to work stress free for teachers and their children.

Objectives

The objectives identified under *Parashakti* are:

● To promote equal opportunity for women in the campus for their professional growth.

● To empower female staff and women from the local community.

● To create awareness regarding gender equality.

● To implement strategies against gender discrimination.

7.4.3 SAHRITA

The vertical Sahrita identifies with the SDG- 6 and 13 as it balances clean water and sanitization and climate action.

Objectives

The objectives identified in this vertical are:

• To make efforts towards making MR campus carbon neutral.

• To spread awareness about agenda 2030.

• To enable the departments to weave sustainability in the curricular and co-curricular activities.

• To promote environment-friendly initiatives in university.

7.4.4 SAMRUDDH

The vertical *Samruddh* is drawn on the lines of SDG-8 on Decent Work and Economic Growth. It aims to promote inclusive and sustainable economic growth, full and productive employment and decent work for our students. Where the goal aims to eliminate the worst

forms of child labour, Samruddh takes a step ahead to make the students competent and skill-oriented to suit the industry needs.

Objectives

The objectives under Samruddh are identified as:

● To inform students about the recent entrepreneurial trends based on industry needs.

● To address the university-industry gaps for better student employability.

● To empower students to explore alternate careers in ICT and e-learning.

● To partner with local organizations and institutions to promote viable employability options in the surrounding community.

7.4.5 SADBHAV

Sadbhav, derived from '*Sadbhavna*', literally refers to compassion, a feeling generated across humanity through empathy, good will and faith. With Manav Rachna Centre for Peace and Sustainability focussing on the sixteenth sustainable development goal (SDG-16), 'Peace, Justice and Strong Institutions', Manav Rachna University (MRU) aspires to deconstruct the binaries and disparities prevalent in the society through *Sadbhav.* The SDG 16- Peace, Justice & Strong Institutions mandates, 'To maintain regional and global stability'. It is an approach toward peaceful and inclusive societies for sustainable development which provides access to justice for all and recommends building effective, accountable and inclusive institutions that aim at a significant diminishing of violence and chaos on the planet we live in. With our baby steps yet sustained efforts, we have built a reliable platform to spread the message of *Sadbhav* entrenched in the heart and soul of MRU. Through initiatives like *Wall of Peace, Sanvad,* MRCPS has persistently made efforts to carry forth the legacy of *Shanti*, *Sadbhav* by reinforcing them already existing in our value systems

Objectives

Manav Rachna University contributes to the realization of SDG 16 to its fullest through '*Sadbhav*' through the following objectives:

● To provide education and training programs that focus on conflict resolution, human rights, and other topics related to peace and justice.

- To support research and innovation in areas related to peace, justice, and accountable institutions.
- To raise awareness on aspects related to peace, justice, and accountable institutions into the curriculum.
- To promote a culture of respect and inclusivity on campus, and taking steps to ensure that all members of the campus community feel safe and supported.

CHAPTER: 8

INTERNATIONAL RELATIONS

8.1 Office of International Affairs shall be responsible for undertaking the following activities:

- To disseminate information related to admission process among prospective foreign students.
- To engage in promotional activities and brand building campaigns abroad.
- Single point of contact for carrying out all collaborative activities with the foreign institutes.
- Acts as a liaison body between the foreign students and sponsoring agency.
- To coordinate all matters relating to welcoming and supporting foreign students.
- To address the grievance of foreign students and sponsoring agency.
- Single point contact for registration with FRRO/e-FRRO.
- To facilitate networking with fellow students.
- To extend all possible help to the foreign students to adapt to the new cultural environment and make their stay in India comfortable and enriching.

(https://manavrachna.edu.in/office-of-international-affairs/)

S. No.	Faculty	International Activities Coordinators
1	Chairperson	Dr. Meena Kapahi
2	Mathematics	Dr. Aparna Vyas
3	Physics	Dr. Sandeep Kumar
4	Chemistry	Dr. A. Jayamani
5	Computer Science and Technology	Dr. Alpana
6	Electronics & Communication Engineering	Dr. Yogita Khanna
7	Mechanical Engineering	Dr. Ajit

8	Education & Humanities	Dr. Pooja Parmar
9	Law	Ms. Chaitali Wadhwa
10	Management & Commerce	Dr. Vandana Zutshi Bhat

8.2 MOUs with Foreign Universities/ Institutes

S. No.	Institute	Country
1	Abdullah Gul University	Turkey
2	Antioquia School of Engineering (EIA), Columbia USA	USA
3	Association of International Accountants	UK
4	Autonomous University of Sinaloa	Mexico
5	Hasan Kalyoncu University	Turkey
6	Istanbul Commerce University	Turkey
7	Istanbul Kultur University	Turkey
8	Lahti University of Applied Sciences	Finland
9	Purdue University NorthWest	USA
10	University of Pitesti	Romania
11	College Sevigne	France
12	University College of Northern Denmark	Denmark
13	University of North America	North America
14	President University	Indonesia
15	Vinh University	Vietnam
16	University of Regina	Canada
17	T.C. Beykent University	Turkey

18	Syrian Private University	Syria
19	Asia University	Vietnam
20	Akamai University	USA
21	Al Mustaqbal University College	Iraq
22	Karabuk University	Turkey
23	The University of Nottingham	UK, China
24	Auburn University of Montgomery	USA
25	University of the West of England	UK
26	Universidade Lusofona	Portugal
27	Nottingham Trent University	UK
28	Polesskey State University	Pinsk, Belarus
29	Universitas Indonesia	Indonesia
30	The University of New Castle	Australia
31	Universidad Nacional Villa Maria	Argentina
32	Haaga Helia University of Applied Sciences	Finland
33	Laurea University of Applied Sciences	Finland
34	Metropolia University of Applied Sciences	Finland
35	Istanbul Gedik University	Turkey
36	University of North Texas	USA
37	Osh State University	Kyrgyztan
38	Korean Culture Centre	Korea
39	Illinois Institute of Technology	Chicago, USA
40	Norquest College	Canada
41	Universiti Teknologi Malaysia	Malaysia

42	Yuan Ze University	Taiwan
43	Our Lady of the Lake University	USA
44	Wentworth Institute of Higher Studies	Australia
45	Livingstone International University of Tourism Excellence and Business Management (LIUTEBM)	Lusaka, Zambia
46	Ureka Education Group	Oxford Science Park, Oxford, UK
47	The University of Winnipeg	Canada
48	Instituto Superior de Derecho Y Economía	Madrid, Spain

8.3 International Faculty Panel

Prof. Joonki Paik
Department of Image Science
Chung-Ang University
Seoul South Korea

Dr. Meenakshi Arora
Assistant Dean (International Student Pathways) Director,
Melbourne India Postgraduate Academy Associate Professor
(Department of Infra. Engg.)
The University of Melbourne, Australia

Prof. Maria Skopina

Department of Applied Mathematics and Control Processes

St. Petersburg State University, Russia

Prof. Luis Martinez

Department of Computer Science,

University of Jean, Spain

Prof. Valentina E. Balas,

Department of Automatics and Applied Software,

University of Arad, Romania

Professor Minna Hakkarainen,

Professor and Head, Division of Polymer Technology,

KTH Royal Institute of Technology,

SE-100 44 Stockholm, Sweden

Prof. Bungo Ochiai,

Department of Applied Chemistry,

Chemical Engineering, and Biochemical Engineering,

Graduate School of Science and Engineering,

Yamagata University, Yonezawa, Yamagata Japan

8.4 Webinar/ Workshop/ Lectures Organized

S.No.	School	Deptt	Title/Topic of the session	Name of Expert	Details of Resource person
1	School of Applied Sciences	Mathematics	Numerical Explosive Combustion Models: Multiplicity and Simulations	Professor Yufeng Xu	Central South University , China
2	School of Education and Humanities	SoEH	Expert talk on Smart wearable sensing devices for biomedical and environmental applications	Dr. Rupesh Mishra	Lead Research Scientist, Bindley Bioscience Centre, Purdue University, USA,
3	School of Education and Humanities	SoEH	Sound of Silence: Manav Rachna Meditates Transcendental Meditation	Prof. Scott Herriott	Provost of Maharishi University of Management, USA.
4	School of Law	Law	Session on How to secure LLM Admissions and Scholarships Abroad	Professor Monika Batra Kashyap, Professor Shireen Moti	Associate Director of the India Center for Law and Justice at Seattle University School of Law
5	School of Education and Humanities	SoEH	Webinar on Emotional Learning for Empathy and Kindness	Mr Shane O'Connor	Educator and Coordinator , Global Education Network.
6	School of Law	Law	"Mainstreaming Global Environmental Governance: Implications for legal education and practice".	Mr Nathan Cooper	Associate Professor at *Te Piringa - Faculty of Law*, University of Waikato, New Zealand.

CHAPTER: 9

INTERNAL QUALITY ASSURANCE CELL

Based on the guidelines of the National Assessment and Accreditation council, Manav Rachna University has constituted an Internal Quality Assurance Cell to take quality initiatives for improving the academic and administrative performance of the institution. Key objectives of IQAC include organization of activities relating to the enhancement of educational quality and development & application of quality parameters. IQAC cell is engaged in developing mechanisms for timely, efficient, and progressive performance of the various academic and administrative units of the university. Under the Cell periodic academic review of the various departments were organized, which supports taking specific quality improvement measures for further improvement. The Cell plays a key role in promoting a quality culture in the University. Faculty & Staff training, workshops and expert lectures are organized by the cell from time to time to train faculty and students for enhancing the quality of education and student support services.

In Academic Session 2019-20, following new practices were introduced addressing to quality improvement

Criterion wise departmental quality reviews as required by NAAC

- Quarterly AQAR quality check for departments
- Online teaching and assessment introduced during COVID 2020
- CAPs introduced for BT and CO attainment
- CO assessment introduced in examination system and course plans
- SWOT analysis.

9.1 FDP organized

Seminars/ Workshops organized under IQAC/Departments AY 2021-22				
S. No.	FDP Title	Facilitator / Speaker	Organization	Date/Duration
1	STC on Machine Learning Using Python through ICT	AICTE	CST, MRU	28-03-2022 to 01-04-2022
2	FDP on Robotics and Artificial Intelligence	AICTE Sponsored	ME, MRU	13-12-2021 to 17-12-2021

3	FDP on Transforming Higher Education for the New Globalized World: International Perspective	Geoffrey Clements,	MRU	27-06-2022 to 02-07-2022
4.	FDP on Objective to Outcome: Revisiting Practices	K. BHAT	MRU	07-06-2022 to 16-06-2022
5.	STTP on Machine Learning Using Python	XEBIA	CST, MRU	19-07-2021 to 23-07-2021
6	FDP on Nanoelectronics Device and Circuits Design	AICTE Recognised	ECE, MRU	22-08-2022 to 26-08-2022
7	FDP on Challenges and opportunities in VLSI Design	AICTE Recognised	ECE, MRU	25-07-2022 to 29-07-2022
8	FDP on VLSI Physical Design	AICTE Recognised	ECE, MRU	09-05-2022 to 13-05-2022
9	FDP on Leadership Mastery Through Self Management	Centre for Value Based Education Delhi Technological University, New DELHI In Association with Heartfulness Education Campus	CAL, MRU	27-12-2021 to 31-12-2021
10	STP on Bio Privileged and Sustainable Chemistry	Megha Mittal	Chemistry, MRU	17-01-2022 to 21-01-2022
11	FDP on Internet of Things and Sensors	Mr Arvind Dixit (Director & Chief Executive Officer, Advance Tech India Pvt Ltd-Chandigarh) Dr. Avinash Rai (Dept. of Electronics & Comm. Engineering RGPV, M.P.) Mr. K.K. Singh Yadav		26-07-2021 to 30-07-2021

		(Assistant Director Bharat Sanchar Nigam Limited (BSNL)) Prof S. Kaushik (Sri Ramakrishna Engineering College, Coimbatore.) Dr. Amit Mahesh Joshi (Dept. Of Electronics & Comm. Engineering, MNIT, Jaipur) Dr. K. Deepa (Dept. of Electronics and Comm., MRU) Dr. Seema Nayak (HOD-ECE IIMT) Dr. Amrita Rai (ECE Dept. from GL Bajaj Institute of Technology and Mgmt., Greater Noida)		
12	FDP on Wavelets and its Applications :Image Processing , Data Science and PDEs	Neeraj Kumar Shukla	Mathematics, MRU	06-12-2021-10-12-2021
13	FDP on Version Control & Automation by Xebia	Xebia	CST, MRU	19-07-2021 to 23-07-2021

9.1.1 School of Education and Humanities, Manav Rachna University in collaboration with Shiksha Sanskriti Uthan Nyas organized a **National FDP on "Vedic Mathematics: Possibilities and Opportunities" on May 2, 2022.** The FDP witnessed an enthusiastic participation by over 110 participants from 10+ States in the country. The workshop spanned over 8 days with 30 hours of hands-on sessions for the participants. The event was organized under the mentorship of Dr. Chhavi Kulshrestha – Associate Professor and Faculty Coordinator for the event and led by B.Ed second semester students Avishi Garg, Anuj, Himanshi Arora and Kamna Bagga.

9.1.2 The Department of Electronics and Communication Engineering Manav Rachna University, Faridabad organized 5-Day FDP On "Internet Of Things(IoT) And Sensors" from July 26, 2021- July 30, 2021. The keynote speakers were Mr. Arvind Dixit, Director & Chief Executive Officer at AdvanceTech India Pvt., Dr. Avinash Rai, Dept of ECE, Rajiv Gandhi Proudyogiki Vishwavidyalaya | State Technological University of Madhya Pradesh, Mr.K K Singh Yadav, Assistant Director Telecom(IT-Courses, Exam & TM-2) Advanced Level Telecom Training Center (ALTTC), Mr. S.KAUSHIK , Dept of Electronics and Instrumentation Engg, Sri Ramakrishna Engineering College-Coimbatore, Tamil Nadu, Dr. Amit Mahesh Joshi, Dept. of Electronics & Comm. Engineering,MNIT, Jaipur, Dr. Amrita Rai, Associate professor, Dept of ECE, GL Bajaj institute of technology and management , Greater Noida.
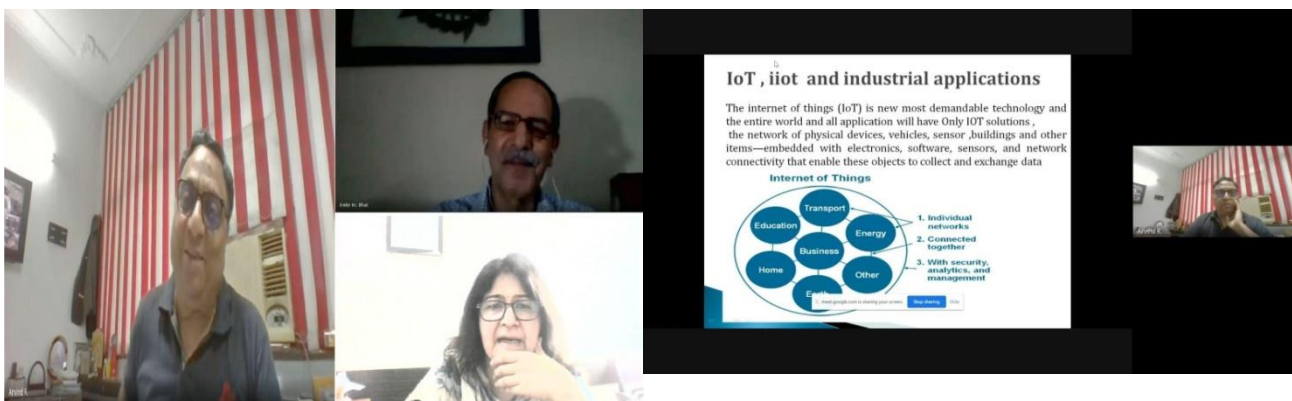
9.2 SWAYAM -NPTEL REPORT

NPTEL Report 2021-2022

Manav Rachna University SWAYAM-NPTEL Local Chapter got "Active Status" **(2nd Rank in Haryana) with 11 National Toppers, 6 Gold , 56 Silver, 110 Elite and 100**

successfully completed certificates (Total 262 certificates). The MOOCs enrollment and certification details are as under:

Total Enrollments	587
Total Exam registrations	261
Total number of students appeared for Credit Transfer	241
Faculty certified for NPTEL-FDP courses	2

The department-wise distribution of students appearing for credit transfer is shown below:

Dept.	CST	EDU	ECE	MATHS
Students for credit transfer	75	49	02	0

A large number of students and faculty members have achieved National Topper Positions, Elite-Gold, Elite, and successfully completed certificates. The certificate category details are as follows:

Certificate Category	No. of Students	No. of Faculty
National Topper	2	1
Elite	56	1
Elite+Gold	4	-
Elite+Silver	25	-
Successfully Completed	76	-
Total=	163	02

The Faculty and Students National Toppers Details Are Shown In Table 1 And Table 2

Sno	Name	Course Name	Department	Topper
1	Somi Patel	Enhancing Soft Skills and Personality	Education	Topper of 1% in this course
2	JOGINDER SINGH	Product Design and Development-Online	Mechanical	Topper of 1% in this course

The MOOCs enrollment and certification details are as under:

SEMESTER	2021-22
1. No of courses offered to students through SWAYAM	
2. No of students registered in SWAYAM courses	261
3. No of students appeared in examination for SWAYAM courses	236
4. No of students passed in SWAYAM courses	163
5. No of students benefited with SWAYAM credit transfer	124

The department-wise distribution of students appearing for credit transfer is shown below:

Semester	2021-22 Even Sem				
Department	CST	EDU	ECE	Maths	Total
1. No of Courses Offered to Students Through Swayam	52	3	05	01	61
2. No of Students Registered in Swayam Courses	105	54	05	08	172
3. No of Students Appeared in Examination for Swayam Courses	94	54	05	08	161
4. No of Students Passed in Swayam Courses	75	46	04	08	133
5. No of Students Benefited with Swayam Credit Transfer	75	46	02	08	131

9.3 VIRTUAL LABS

In continuation with the series of Virtual Labs Workshops, MRU organized another workshop on "Virtual Labs" in association with IIT Delhi on **21st April 2022**, for faculty members and students from respective disciplines (CSE, BSC, ECE and ME) by Virtual Labs team, IIT Delhi. The resource persons for this training program were Mr. Prateek Sharma, Mr. Shubham Dalal, and Mr. Chandan Kumar. Total 101 students and 14 faculty members attended the workshop. The objective of the workshop was to introduce practical skills and impart practical knowledge to students through virtual labs. The session commenced in the presence of Prof(Dr.) Shruti Vashist, Dean Engineering, Prof. (Dr.) Manpreet Kaur, Head, CST, Ms. Chandni Maggoo, Associate Head, CST, Ms. Hanu Bhardwaj, Associate Professor, Dr. Mamta Arora, Nodal Coordinator, Student Coordinators, Participants and faculty members. The training session started with the small introduction of Virtual labs followed by some experimental demonstration for each discipline including Chemistry, Physics, Electronics and Computer Science. The students were also explained how to create experiments on their own and upload it to virtual labs. Finally, the workshop training session concluded with the vote of thanks by Dr. Mamta Arora, Nodal Coordinator, MRU.

Semester wise Virtual Labs usage Report

(July 2021– Dec 2021)

Department	No. of students	No. of Virtual labs performed	No. of experiments	No. of students x No. of Virtual labs performed x No. of experiments
CSE	297	5	10	14850
Physics	28	5	8	1120
IIT workshop (students)	87	1	7	609
IIT workshop (Faculty)	7	1	7	49

(January 2022 – May 2022)

Department	No. of students	No. of Virtual labs performed	No. of experiments	No. of students x No. of Virtual labs performed x No. of experiments
CSE	243	6	10	14580
ECE				
Physics	30	4	6	720
IIT workshop (students)	96	4	8	3072
IIT workshop (Faculty)	13	4	8	416
Total usage				18788

9.4 IQAC Activities

In the Academic Session 2021-22, various initiatives were taken by IQAC for quality improvement. In this session IQAC focussed on criteria wise analysis and improvement as per NAAC specifications. Quarterly reviews of activities for each department were carried out. Half yearly review of supporting documents was conducted. At the end of the Academic session, each department prepared their individual AQAR reports. The schedule for the activities carried out is shared below:

S. No.	Activity Name	Outcome	Proposed Dates/Week	Resource Person (if applicable)
1	Webinar of Healthcare Technology	Awareness about Innovation in healthcare	31st July 2020	Mr. M.Malaiyappan, Pantech Solution
2	NAAC SSR reviews	Quality Improvement	August second week to September third week	IQAC and NAAC team

3	Course status reviews for online lab sessions	Teaching Learning and Evaluation	September last week	IQAC audit teams
4	Talk on multidisciplinary Innovation in Healthcare technology (orientation technology)	Awareness about Innovation in healthcare	30th September	M.Prateek Sikka
5	AQAR quarterly report July-Sept, 2020 compiled for Engineering disciplines	Quality Improvement	30th September	Dr.Charu Pathak
6	AQAR quarterly Audit analysis ECE	Quality Improvement	October last week	IQAC executing team
7	AQAR quarterly Audit analysis ME	Quality Improvement	November first week	IQAC executing team
8	AQAR quarterly audit analysis CSE	Quality Improvement	November second week	IQAC executing team
9	Course Status Review	Implementation of OBE	Sept 2020	Ms.Geeta Thakur, CAL Incharge
10	Introducing CAPs in course plan	Evaluation process	Sep-20	IQAC executing team
11	Introducing CO-PO attainment on ERP	Attainment analysis	Sep-20	IQAC executing team

12	AQAR analysis July- Sept	Overall quality improvement at departmental level	Oct 2020	IQAC executing team
13	MS office training	Teacher and staff quality improvement	Alternate Saturday, Dec 20-Jan 21 (3 sessions)	IQAC executing team
14	AQAR analysis Oct- Dec	Overall quality improvement at departmental level	Jan third week 2021	IQAC executing team
15	Academic audit	Quality Improvement	Feb, 2021	IQAC executing team
16	AQAR analysis Jan- April	Overall quality improvement at departmental level	May first week	IQAC executing team
17	Workshop on Reflective teaching	awareness about reflective teaching	May 2021	Dr.Kiran Gupta, Dr.Hardeo Thakur
18	Learn to story tell a research	Increasing h-index of Univ	June -2021 (4 sessions , one every week)	ies solutions
19	Yoga -Post Covid recover	human values	12,13,19,21 June, 2021	Ms.Manisha Arya
20	AQAR analysis May-June	Overall quality improvement at departmental level	July, 2021 second week	IQAC executing team

9.5 Internal Academic Audit

Through IQAC, the university conducts periodic reviews of the academic processes. An internal academic audit system has been developed pertaining to criteria defined by NAAC. The academic review includes the course planning review to assure a quality learning process. Internal academic reviews take into account all other aspects of the academic system like, evaluation, student support system, curriculum design, institutional values etc. A brief categorization and description is followed.

A). Course Plan review (IQAC)   --Once in a Semester
B). Internal Academic Review (IQAC)-   Twice a semester
C). Student feedback (Feedback Committee) --Twice in a Semester
D). Attendance review (Attendance review committee) –Thrice in a Semester

A. Course plan review is done once in a semester, before the beginning of classes by IQAC teams or by   departmental review committees. The course plans are reviewed. Course Plans include

1. Well defined course outcomes are defined clearly to address the program outcomes.
2. A well defined Course plan which includes mapping of Laboratory and Tutorial objectives to achieve the stated course outcomes and the relevant Bloom's Taxonomy level.
3. A well defined course assessment plan to achieve the stated course outcomes.
4. Teaching pedagogies like active learning, Collaborative learning, and problem based learning are incorporated in the mode of delivery.
5.   CO, PO articulation matrix.

B. The Internal Academic Review

The Internal Academic review is conducted by IQAC audit teams twice a semester. The process flow is as follows:

1. The departments are asked to submit quarterly reports of activities conducted as per academic quality assurance criteria listed by NAAC.
2. Quarterly AQAR activity reports are analyzed by IQAC and thus a feedback analysis is shared with respective departments.

3. Half year academic audit and annual academic audits are conducted for all the seven criteria where the departments are supposed to produce all the supporting documents.

4. The departments are asked to propose the action plans after every audit as per audit feedback.

5. Internal Academic review also involves review of course files. Randomly chosen subjects are reviewed for the detailed review of course files which includes course plan, tutorials, assignments, evaluation and analysis for weak and strong students, pedagogy and various other parameters.

C. The student course feedback system includes formative and summative feedback for each course being taught in that semester. This is conducted by the feedback committee. Thus, the feedback is taken twice in a semester.

1. The feedback format of each course ensures that the syllabus coverage, delivery of course material, planning for the course delivery, innovative teaching methodology etc are covered.

2. The formative feedback is taken from all the students for every course being taught, 3-4 weeks after the commencement of classes. This feedback is shared with the respective faculty members.

3. The summative feedback is taken from the students who meet minimum attendance criteria, towards the end of the semester. This feedback also assesses the course outcomes and achievements of course objectives.

4. Student satisfaction survey for generic facilities and curriculum is also conducted.

D. Attendance review of students is done by the attendance review committee thrice a semester.

1. The faculty members teaching individual courses are required to update the attendance everyday on ERP.

2. The strength of students present in each class is monitored on a daily basis.

3. The cumulative attendance of students is checked thrice a semester one week before the start of sessional exams (T1 & T2) and the final exam.

4. The students, who do not meet the minimum attendance criteria, are notified by sending the information telephonically to the parents.

CHAPTER: 10

MANAV RACHNA CREATING BUZZ….

Smriti Zubin Irani felicitates MRU and MRIIRS with 'Institution of Happiness' award at QS I-Gauge Academic Excellence Conclave

Union Minister for Women and Child Development, Smt. Smriti Zubin Irani presided over the event and awarded the certificates

Hirender Kr. Mandal
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NEW DELHI: Manav Rachna University and Manav Rachna International Institute of Research and Studies have received the 'Institutions of Happiness' award for fostering happiness in the academic environment at the QS I-Gauge Academic Excellence Conclave held at the India Habitat Centre, New Delhi. A total of 100 Institutions from Pan India participated in this survey and only 33 qualified for the criteria to receive the 'Institutions of Happiness' award. UK based QS, Quacquarelli Symonds' Indian subsidiary, QS I-GAUGE announced India's happiest educational institutions after a rigorous assessment exercise which began in December last year in association with industry body ASSOCHAM. Union Minister for Women and Child Development, Smt. Smriti Zubin Irani presided over the event and awarded the certificates.

Union Minister for Women and Child Development, Smriti Irani at the 'QS I-GAUGE' Academic Excellence Conclave, in New Delhi

Addressing the attendees, she said "it is important that educators gain insights into the level of happiness of the students, their well-being, quality of life, and engagement in sustainability and social change projects, which will enable institutions to advance further for better outcomes."

At the event, Manav Rachna University also received the certificate for QS I-Gauge overall Diamond rating which is bestowed upon an Institution after rigorous assessment in over 100 indicators spread across various categories ranging from teaching & learning, faculty quality, employability, social responsibility, and internationalization to research, entrepreneurship, innovation, sports, and arts & culture. MRU has been bestowed with QS I-Gauge Diamond rating for Teaching & Learning, Faculty Quality, Facilities and Social Responsibility;

AT THE EVENT, MANAV RACHNA UNIVERSITY ALSO RECEIVED THE CERTIFICATE FOR QS I-GAUGE OVERALL DIAMOND RATING WHICH IS BESTOWED UPON AN INSTITUTION AFTER RIGOROUS ASSESSMENT IN OVER 100 INDICATORS SPREAD ACROSS VARIOUS CATEGORIES RANGING FROM TEACHING & LEARNING, FACULTY QUALITY, EMPLOYABILITY, SOCIAL RESPONSIBILITY, AND INTERNATIONALIZATION TO RESEARCH, ENTREPRENEURSHIP, INNOVATION, SPORTS, AND ARTS & CULTURE

QS I-Gauge Platinum rating for Employability and Academic Development. Colonel Girish Kumar Sharma - Executive Director, International Affairs received the award on behalf of MRIIRS. MRIIRS is a QS - 5 Star rated Institution for Teaching, Employability, Academic Development, Facilities, Social Responsibility and Inclusiveness. Prof. (Dr.) I.K. Bhat - Vice Chancellor, MRU; Prof. (Dr.) Dharmendra S. Sengar - Pro-Vice Chancellor, MRU and Dr. Sangita Banga - Dean Academics, MRU were present to receive the award for MRU.

पद्म विभूषण डॉ. कर्ण सिंह ने एमआरसीपीएस की तीसर...

HindustanVision

Monday,23 May , 2022

Padma Vibhushan Dr. Karan Singh chaired the third Advisory Board Meeting of Manav Rachna Centre for Peace and Sustainability

FARIDABAD NEWS 23 MAY 2022 :

Jitender Yadav, DC Faridabad launches ANG Plantation Campaign on Earth Day 2022 at Manav Rachna University in the presence of Tree Man of India

Hirender Kumar
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DELHI-NCR : 'Invest in Our Planet' is the theme of Earth Day 2022 encouraging everyone to shift towards sustainable practices. Earth Day is a reminder to everyone that "the healthier our ecosystems are, the healthier the planet- and its people". With this vision in mind, ANG (Adopt, Nurture, Grow) Plantation Campaign has been launched at the Manav Rachna University, inaugurated by Sh. Jitender Yadav, IAS, Deputy Commissioner, Faridabad in the presence of Prof. (Dr.) I K Bhat, Vice Chancellor, Manav Rachna University (MRU). More than 500 'Green Warriors' of Manav Rachna Centre for Peace and Sustainability, MRU pledged to spread the awareness about this cam-

paign and take necessary measures to protect the environment. Sh. Jitender Yadav planted a sapling and expressed his desire to monitor the progress of the plant by personally visiting the campus at intervals. He said, "There is no Planet B and we need to take care of Mother Earth by planting saplings and taking care of them, besides protecting our trees". On this occasion, Mr. Deepak Gaur, Tree Man of India also visited the campus and

inspired the students to take up a mission and deliver their best to it. He shared how he developed the sense to dedicate his life to planting trees. Dr. I.K. Bhat shared, "As humans, we are majorly damaging Mother Earth and so it is our responsibility and accountability to take care of the environment for our own survival and for generations to come". To bring the dream of making Manav Rachna self-reliant and sustainable into reality, major initiatives

have been undertaken: Installation of Solar Photovoltaic Systems in the campus for generation of renewable energy; Commissioning Rain water harvesting systems at four locations in the University campus to collect rain water for storage in tanks and further use; Setting up Sewage Treatment Plant of capacity 200 KLD at the university campus for recycling of sewage water to be used for watering the plants in gardens and lawns of the campus and flushing the toilets in the campus. In the endeavor to 'Go Green', Manav Rachna seeks to empower the youth to be at the forefront of this mission. Army of Green warriors is being raised in Manav Rachna who would be spearheading this movement to spread the message of saving the environment and attaining carbon neutrality to the masses.

फरीदाबाद ◇ हरियाणा

जितेंद्र यादव, डीसी फरीदाबाद ने भारत के ट्री मैन की उपस्थिति में मानव रचना यूनिवर्सिटी में पृथ्वी दिवस 2022 पर एएनजी वृक्षारोपण अभियान शुरू किया

written by Mahesh Gotwal
April 23, 2022

फरीदाबाद, शनिवार, 23 अप्रैल, 2022: 'इन्वेस्ट इन आवर अर्थ' पृथ्वी दिवस 2022 का विषय है जो सभी को सस्टेनेबल प्रथाओं की ओर बढ़ने के लिए प्रोत्साहित करता है। पृथ्वी दिवस सभी के लिए एक अनुस्मारक है कि "हमारा इकोसिस्टम जितना स्वस्थ होगा, हमारा ग्रह और उसके लोग उतने ही स्वस्थ होंगे"।

इसी को ध्यान में रखते हुए मानव रचना यूनिवर्सिटी में एएनजी (अडॉप्ट, नर्चर, ग्रो) वृक्षारोपण अभियान शुरू किया गया है। जिसका उद्घाटन श्री

मानव रचना यूनिवर्सिटी को केंद्रीय मंत्री किशन रेड्डी ने डिजास्टर रिस्क रिडक्शन पुरस्कार से किया सम्मानित

फरीदाबाद, 23 जून (सूरजमल): मानव रचना यूनिवर्सिटी को कोविड 19 महामारी के दौरान सेंटर फॉर पीस एंड सस्टेनेबिलिटी एमआरयू द्वारा इसके प्रभाव को कम करने के लिए किए गए कार्यों के लिए वर्ल्ड कांग्रेस ऑन डिजास्टर मैनेजमेंट डिजास्टर रिस्क रिडक्शन पुरस्कार से सम्मानित किया गया है।

यह पुरस्कार किशन रेड्डी भारत के उत्तर पूर्वी क्षेत्र के केंद्रीय पर्यटन, संस्कृति और विकास मंत्री, भारत सरकार द्वारा प्रस्तुत किया गया था। प्रो. (डॉ.) आई.के. भट कुलपति, एमआरयू और प्रो. (डॉ.) डी.एस. सेंगर, प्रो वाइस चांसलर, एमआरयू ने इंडिया इंटरनेशनल सेंटर (आईआईसी) में आयोजित एक समारोह में यूनिवर्सिटी की ओर से पुरस्कार प्राप्त किया। मानव रचना सेंटर फॉर पीस एंड सस्टेनेबिलिटी अध्यक्ष पद विभूषण डॉ. कर्ण सिंह के कुशल मार्गदर्शन में समाज को प्रभावित करने वाली आपदाओं की रोकथाम और प्रबंधन के लिए प्रयास करके शांति और स्थिरता के पथ पर है। महामारी के कठिन समय

के दौरान सेंटर फॉर पीस एंड सस्टेनेबिलिटी ने युवाओं के लिए मूल्यों को विकसित करने और कला और संस्कृति से संबंधित गतिविधियों में भागीदारी को बढ़ावा देने के लिए कई संरचित और अभ्यास उन्मुख पाठ्येतर कार्यक्रम विकसित किए

ताकि आपदा का सामना करने के लिए एक शांतिपूर्ण दिमाग विकसित किया जा सके। इसके अलावा केंद्र, शांति और स्थिरता पर जोर देता है, छात्रों के बीच जीवन कौशल विकसित करता है, पर्यावरण जागरूकता, शांति और सद्भाव की संस्कृति

सहित कई एसडीजी के लिए जागरूकता और प्रशिक्षण कार्यक्रम प्रदान करता है ताकि महामारी और महामारी के बाद की अवधि के दौरान समुदाय का समर्थन किया जा सके। केंद्र ऐसी आपदाओं से बचने के लिए समाज में लोगों के बीच जागरूकता पैदा करने के लिए अंतर विश्वविद्यालय मंचों और प्रतियोगिताओं के माध्यम से छात्रों के बीच स्थिरता के प्रति दृष्टिकोण विकसित करने में मदद करता है।

इस दौरान योग और ध्यान प्रशिक्षण सत्र भी आयोजित किए गए। मानव रचना यूनिवर्सिटी ने विभिन्न विश्वविद्यालयों के स्नातकों के लिए शांति और स्थिरता पर एक पाठ्यक्रम भी डिजाइन और वितरित किया। सेंटर फॉर पीस एंड सस्टेनेबिलिटी, एमआरयू समाज की सेवा करने और हमारी युवा पीढ़ी को सामाजिक कल्याण सेवाओं का मूल्य सिखाने के लिए निरंतर प्रयास में है। समाज की बेहतरी की दिशा में प्रयासों के लिए मान्यता प्राप्त करना छात्रों और शिक्षकों को सही दिशा में काम करने के लिए प्रेरित करता है।

मानव रचना यूनिवर्सिटी को केंद्रीय मंत्री किशन रेड्डी डिजास्टर रिस्क रिडक्शन पुरस्कार से सम्मानित करते हुए।

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