



# **MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES**

(Deemed to be University)

## **Admission Brochure AY 2020-21**

### **Details of List of Programmes offered**

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**MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES**

(Deemed to be University under Section 3 of the UGC Act, 1956)

(NAAC Accredited 'A' Grade)

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[www.manavrachna.edu.in](http://www.manavrachna.edu.in)

# A UNIVERSE AWAITS YOU

ACADEMIC SESSION 2020-21



**MANAV RACHNA INTERNATIONAL  
INSTITUTE OF RESEARCH AND STUDIES**

'Deemed to be University' under Section 3 of the UGC Act, 1956  
NAAC ACCREDITED 'A' GRADE INSTITUTION

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# We are people who want to learn, discover, think, and do

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We push the limits of what can be achieved and develop ideas that can make a difference in the world.

For more than 23 years, our community has been more than a collection of bright minds, MRIIRS has attracted people with an ambitious spirit. We imagine what the future can be, and work together to realize it. This is our spirit. A bold, enduring spirit of initiative.

MRIIRS is a comprehensive, student-focused Institution, with students enrolled in a broad range of undergraduate and postgraduate programmes. We have strong student-faculty relationships, exceptional award-winning faculty and innovative staff. It creates a unifying atmosphere of excellence across all of our faculties to encourage lifelong learning, teaching, research and discovery.

Our goal is to move each individual forward as a well-rounded, lifelong learner and a good global citizen. To achieve this, emphasis is placed not just on academic achievement, but also on extracurricular involvement. Our vibrant student life provides something for everybody, from sports to concerts, and various international trips in between. Students are also involved in many different types of social activities, including community development, team building, and networking events.

MRIIRS has joined with a panel of globally renowned education and corporate institutions to provide exciting opportunities for intelligent and deserving students to progress and grow. The Institution offers a wide spectrum of education choices for learners to carve a niche in their respective fields, complemented by opportunities to hone their practical skills, through ultra-modern technology spread across its campus buildings, classrooms, laboratories and other facilities.

# VICE CHANCELLOR'S MESSAGE



The education at Manav Rachna International Institute of Research & Studies (MRIIRS) aspires to not only bestow knowledge and skills, but also a positive attitudinal change.

नास्ति विद्या समं चक्षु नास्ति सत्य समं तपः ।  
नास्ति राग समं दुखं नास्ति त्याग समं सुखं ॥

“There is no vision as powerful as the vision of knowledge; there is no penance as the oath of truth, there is no pain as that caused by desire; there is no act that gives more happiness than sacrifice”. MRIIRS strives to carve young minds with a bright vision of the future motivated by Integrity, Perseverance and Passion. This ensures that they are mentally wired to make a difference in their work place. Making every Manav Rachna student pragmatic and a good human being is at the helm of the objective that we as an educational institution strive to achieve. We firmly believe that each student shouldn't be a mere success story but become an incomparable example of achieving self actualization and being a front runner in all the realms of life.

The Yoga Sutra of Patanjali says, “When you are inspired by some great purpose, some extraordinary projects, all your thoughts break their bounds. Your mind transcends limitations, your consciousness expands in every direction, and you find yourself in a new, great and wonderful world”. Our biggest competitive edge as a country is our Human Resource. 71% or

742 million Indians are below the age of 35 years. This is a great opportunity for all of us as the responsible citizens of India and not just for the government. So, let us “Think in India, “Make in India” and “Make for the World.” At Manav Rachna Educational Institutions, we are working on this mission as the business environment demands a new cadre of professionals with a global outlook, yet with a deep rooted value system springing from our vast cultural heritage and glorious past.

The programme structure, teaching methodology and an inimitable industry interaction with focus on attitude, behavioral skills and global orientation have been the key features of our educational philosophy. Continuous learning is not a choice in today's business environment but a necessity. MRIIRS is committed to update and revise the course curriculum in sync with the dynamic needs of the business world, thereby abridging the gap between the “desired” and the “produced”.

MRIIRS endeavors to create human capital for the industry that is not only suitable for today or tomorrow, but also for times to come. Come and be part of legacy where students are taught that nothing is unattainable to the one who has courage and who works hard!

Prof. (Dr.) Sanjay Srivastava  
Vice-Chancellor, (MRIIRS)

# VISION MISSION

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## VISION

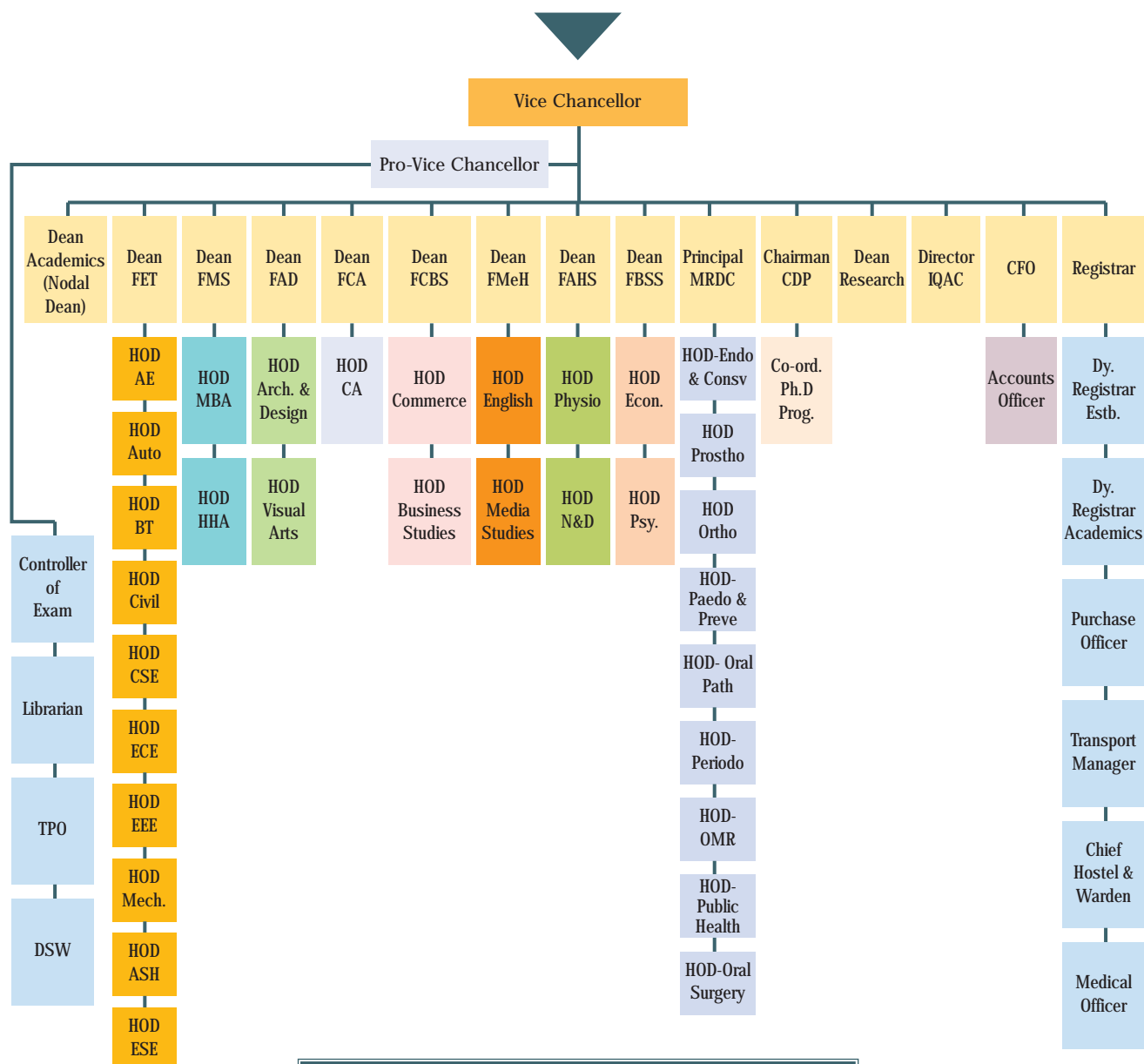
MRIIRS is dedicated and committed to train and equip its students with the latest knowledge and skills in the chosen fields in the backdrop of Indian ethos and values to enable them to face any global challenge with a view to transforming them into insightful, honourable and responsible citizens of this great country; and imbibe a work culture of theoretical and applied research leading to creation and dissemination of knowledge.

## MISSION

To provide an environment in which teachers love to facilitate and students love to learn, consisting of infrastructure facilities at par with the best institutions in India and abroad with the aim:

- To inculcate skills and impart knowledge to the ignited minds in the fields of science & technology and soft skills including leadership, team-building and communication.
- To create human beings with golden heart, who work and dedicate themselves for the advancement of humanity.
- To undertake research and development activities in collaboration with the world of work leading to creation of new knowledge in the fields of science, commerce, humanities, engineering & technology, management, health sciences & therapies, sports, multi-media, applied & performing arts.

# ORGANISATION CHART MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES



| IN SUPPORT  |  |
|---|--|
| Marketing & Branding  |  |
| Admissions Facilitation Centre                                |  |
| Manav Rachna Research Innovation and Incubation Centre (MRIC) |  |
| Manav Rachna Academic Staff College (MRASC)                   |  |
| Corporate Relationship & Career Management Cell (CRCMC)       |  |
| IT/ERP  |  |

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|--|
| FET: Faculty of Engg. & Technology           |
| FMS: Faculty of Management Studies           |
| FCA: Faculty of Computer Applications        |
| FCBS: Faculty of Commerce & Business Studies |
| FMeH: Faculty of Media Studies & Humanities  |
| FAD: Faculty of Architecture & Design        |
| FAHS: Faculty of Allied Health Sciences      |
| FBSS: Faculty of Behavioral and Sciences     |

|  |
|--|
| MRDC: Manav Rachna Dental College            |
| FDS: Faculty of Dental Sciences              |
| AE: Aeronautical Engineering                 |
| Auto: Automobile Engineering                 |
| BT: Biotechnology                            |
| CSE: Computer Science & Engineering          |
| ASH: Applied Sciences & Humanities           |
| ECE: Electronics & Communication Engineering |

|   |
|---|
| EEE: Electrical and Electronics Engineering |
| ESE: Earth Science & Environment            |
| Mech.: Mechanical Engineering               |
| HHA: Hospitality & Hotel Administration     |
| CA: Computer Applications                   |
| Physio: Physiotherapy                       |
| N&D: Nutrition & Dietetics                  |
| Econ: Economics                             |
| Psy: Psychology                             |
| Prostho: Prosthodontics                     |

|  |
|--|
| Endo & Conserv: Endodontics and Conservative         |
| Periodo: Periodontics                                |
| Ortho: Orthodontics                                  |
| Paedo & Preve: Paedodontics and Preventive Dentistry |
| Oral Path: Oral Pathology                            |
| CDP: Council of Doctoral Programme                   |
| CFO: Chief Finance Officer                           |
| HOD: Head of Department                              |
| TPO: Training & Placement Officer                    |

## KEY FUNCTIONARIES

| Name & Qualification  | Designation   | Special Interests  | Previous Employment  |
|---|---|--|--|
|  Dr. Sanjay Shrivastav<br>Ph.D (University of Delhi)   | Vice-Chancellor   | Cross Cultural Management, Psychometric Profiling, Leadership, Change Management & Qualitative Research  | Dean Examination & Faculty of Management Studies, Amity University   |
|  Padmashri Prof. Dr. Pritam Singh  | Chairman-Strategic Mentoring Board  | Strategic Management   | Ex-Director, MDI Gurgaon & IIM Lucknow, Ex-DG IMI  |
|  Dr. M. K. Soni,<br>B.Sc. Engg, M.Sc. Engg, Ph.D   | Pro Vice-Chancellor   | Research & Development, Consultancy, Educational Administration, Teaching  | Director, CRSCE, Murthal, Professor, HoD and Dean- NIT, Kurukshetra  |
|  Mr. R. K Arora,<br>BA LLB, M.Phil (Political Science)   | Registrar   | Administration   | Registrar-Deenbandhu Chhotu Ram University of Science & Technology, Murthal, :Controller of Examinations, Guru Jambheshwar University of Science & Technology, Hisar |
|  Dr. Naresh Grover<br>B.Sc. Engg, (Hons) M.Tech, Ph.D   | Professor & Dean Academics  | Research, Academic Planning and Coordination, Educational Administration, Teaching   | Department of Technical Education, Haryana   |
|  Dr. Chavi Sharma,<br>MA (Psychology), Ph.D, CJMC  | Executive Director & Dean FBSS & FMeH Secretary - Dr. O.P Bhalla Foundation | Research and Extension in Management Education with specialization in Human Psychology and Org. Behaviour  | Professor, Amity University and Associate Fellow, CSDS   |
|  Prof (Dr.) Harish C. Rai.<br>Ph.D (IIT Delhi), M.Sc (Control Engg from Delhi College of Engineering, Delhi) | Professor & Dean Faculty of Engineering and Technology                      | Electrical Machines, Control Engineering, Power Electronics, and Power Systems, etc.   | Pro-Vice-Chancellor in Galgotias University  |
|  Dr. Nand Lal Dhameja<br>Ph.D (IIM - Ahmedabad)  | Dean Faculty of Management Studies  | Infrastructure Development, Finance and Accounting, Public Budgeting and Financial Management, Public Sector Restructuring and Public Enterprise Management. | MDI - Gurgaon<br>IIPA - New Delhi<br>ICAI - New Delhi<br>NPC - New Delhi<br>Delhi University - New Delhi   |
|  Dr. S.S. Tyagi,<br>B.Tech, M.S., Ph.D   | Professor & Dean- Faculty of Computer Application                           | Cloud Computing, Wireless security, Mobile Adhoc Networks, Computer Networks Security  | Assistant Professor in LIMAT, Faridabad  |
|  Dr. Aparna Prashant Goel<br>M.Sc, PG.D.M., D.I.S.M, Ph.D  | Professor & Dean - Faculty of Commerce & Business Studies                   | Writing, Research, Training, Green Marketing, CSR  | Amity University   |
|  Prof (COL) Sanjeev Gupta<br>B Arch Panjab University, M Arch IIT Roorkee, Business Management IIM Lucknow   | Professor and Director Faculty of Architecture and Design                   | Design and Planning & Research   | Principal, MIT School of Architecture, Pune, Dean Academics, Chitkara University, Director Architect, Indian Army  |



## KEY FUNCTIONARIES

| Name & Qualification  | Designation   | Special Interests   | Previous Employment  |
|---|---|---|--|
|  <p>Dr. G.L. Khanna<br/>B.Sc (Hons.), M.Sc,<br/>Ph.D</p>   | Director - Faculty of Allied Health Sciences                    | Research & Consultancy in High Performance Sports, Nutrition & Physiology, Educational Administration             | Former Head Faculty of Sports Sciences Sports Authority Of India, University of Science Malaysia technical Expert member (Sports Sciences) Commonwealth Games Govt. of India   |
|  <p>Dr. Arundeeep Singh,<br/>MDS</p>   | Principal-MRDC  | Microendodontics & Aesthetic Dentistry  | Maulana Azad Institute of Dental Sciences, New Delhi.  |
|  <p>Dr. Ashim Aggarwal,<br/>BDS, FDSRCS (London)</p>   | Vice-Principal, Professor & HOD Dept of Oral Surgery            | Maxillofacial Trauma, dental implants and management of Temporomandibular joint disorders                         | Harsarn Dass Dental College, Ghaziabad   |
|  <p>Dr. Dax Abraham<br/>MDS</p>  | Professor & HOD- Dept of Endodontics and Conservative Dentistry | Microendodontics & Retreatment in Endodontics   | IDST, Modinagar  |
|  <p>(Prof.) Dr. N.K. Chadha<br/>Ph.D (Delhi University)<br/>Post Doctorate (University of Virginia, USA)</p> | Chairperson Doctoral Programs                                   | Research, Psychometric Testing, Career Counseling, Positive Psychology, Human Resource Management and Gerontology | Head, Department of Psychology, Head and Director, Department of Adult, Continuing Education and Extension), Chairman, Board of Research Studies in Humanities and Social Sciences, University of Delhi, Panel of Judges, PM's Trophy, Government of India |
|  <p>Dr. Sarita Sachdeva<br/>M.Sc, M.Phil, Ph.D</p>   | Professor & Dean Research                                       | Bioremediation, Biofuels and Environmental Biotechnology Teaching, Research with Social Outreach                  | Researcher, MDU Rohtak   |
|  <p>Dr. R.K. Malhotra,<br/>Ph.D (IIT Delhi)</p>  | Adjunct Professor   | R & D, Renewable Energy   | Former Chairman & Full-time Director at Indian Oil Corporation, R&D Centre   |
|  <p>Dr. Dipali Bansal,<br/>B.Tech, M.Tech, Ph.D</p>  | Professor & Director-IQAC,                                      | Digital Signal Processing, Bio signal Acquisition & Automated Analysis  | Grapco Industries Ltd., Shriram Bearings Ltd, Apeejay College of Engineering   |
|  <p>Dr. Geeta Nijhawan,<br/>Ph.D, M.Tech, B.Tech</p>   | Professor, ECE & Associate Dean-FET                             | Signal Processing, Wireless Communication and Free space optical communication                                    | Career Institute of Technology & Management (CITM), Faridabad  |
|  <p>Dr. Umesh Dutta<br/>B.Tech, M.Tech, Ph.D</p>   | Director-MRIIC  | VLSI & Embedded System Product Designing and Innovation   | Manav Rachna International University Deputy Director-MRIIRC   |
|  <p>Mr. N.K. Sharma<br/>MA (Economics),<br/>L.L.B., MBA (HR &amp; Mktg), Ph.D. (Pursing)</p>                 | Controller of Examination                                       | Administration, Academics & Legal. Signal Processing, Wireless Communication and Free space optical communication | Rural Development & Education as Dy. Registrar, Registrar & Dy. COE  |

## KEY FUNCTIONARIES

| Name & Qualification  | Designation   | Special Interests   | Previous Employment   |
|---|---|---|---|
|  <p>Prof. S. K Saluja<br/>BHM (IHM Pusa),<br/>B.Com (Hons.),<br/>Advance Kitchen<br/>Program, Oberoi<br/>School of Hotel<br/>Management</p>      | Prof and Director-<br>Hospitality and<br>Hotel<br>Administration              | Hospitality Educator, Hotel<br>Administration, Research and<br>development, Kitchen Operations,<br>Food Quality.  | Dean at G.D. Goenka, Amity, Galgotias,<br>Executive Officer (Studies) NCHMCT,<br>Principal/ Secretary- CIHM, General<br>Manager- Hotel Chandigarh Beckons and<br>Mid- day- meal Coordinator- Chandigarh<br>Administration (GOI) |
|  <p>Air Commodore<br/>Devender Sharma<br/>(Retd) B.E (Mech) Hons.,<br/>M.E.- Aero (IISc<br/>Bangalore), MBA-HRM,<br/>M.Sc (Defence Studies).</p> | Professor & HoD,<br>Aeronautical Engg.  | Flight Testing & Evaluation,<br>Aerodynamics, Aircraft Design,<br>Propulsion Engg.                                | 36 Years in Indian Air Force, DPSU (HAL) &<br>DRDO. Qualified Flight Test Engineer with<br>Flight testing Experience on 12 different types<br>of fighters, transport Aircraft & Helicopters.                                    |
|  <p>Dr. Devendra Vashisht,<br/>B.Tech, M.Tech,<br/>Ph.D, MBA</p>   | Professor & HoD,<br>Automobile Engg.  | Internal Combustion Engines,<br>Alternative fuels   | YMCA Institute of Engineering Faridabad   |
|  <p>Dr. Abhilasha Shourie<br/>M.Sc, Ph.D</p>  | Professor & HoD of<br>Biotechnology   | Phytochemistry  | Lecturer, Saraswati College, Palwal   |
|  <p>Dr. Sadiqa Abbas<br/>B.Tech., M.Tech., Ph.D-<br/>Jamia Millia, Delhi.</p>  | Professor & HoD,<br>Civil Engineering.  | Environmental Engineering.,<br>Solid Waste Management,<br>Ground Water  | Sr. Environmental Engineer-Tetra Tech India<br>Ltd., Research Scientist-Deptt of Civil Engg.<br>Jamia Milia Islamia, Asstt Professor Galgotias<br>University  |
|  <p>Dr. Suresh Kumar<br/>BE, M. Tech., Ph.D</p>  | Professor and HoD,<br>Computer Science<br>& Engg.                             | Data Mining, Mobile Ad hoc<br>Networks.   | Engineer CMC Ltd, New Delhi   |
|  <p>Prof. (Dr.) Brijesh<br/>Kumar<br/>Ph.D. (CSE), M.Tech.<br/>CSE, M.Tech. Applied<br/>Geophysics</p>   | Professor and<br>HOD-Computer<br>Science & Engg.<br>IBM programs at<br>MRIIRS | Free and Open Source Software,<br>Web Technologies, Computer<br>Networks and Simulations                          | Prof. & Dean, School of Engineering &<br>Technology at Ansal University, Gurgaon  |
|  <p>Dr. Anita Khosla,<br/>B.Tech, M.Tech, Ph.D</p>   | Professor<br>& HoD, Electrical<br>& Electronics Engg.                         | Control System, Power<br>Electronics<br>Production Engineering  | Fr. Angel Institute, New Delhi.   |
|  <p>Dr. Arunangshu<br/>Mukherjee<br/>M.Sc. PhD (Geology)</p>   | Professor & HoD,<br>Earth Sciences and<br>Environment                         | Hydrogeology and Geology  | Served Central Ground Water Board, Ministry<br>of Water Resources, GOI as Scientist for<br>about 25 years from 1993 to 2017   |
|  <p>Dr. Manu Srivastava<br/>Ph.D, Master of<br/>Technology, Bachelor<br/>of Engg.</p>  | Professor & HoD,<br>Mechanical Engg.  | Robotics, Additive Manufacturing,<br>Advanced Manufacturing, Hybrid<br>Manufacturing & Optimization<br>Techniques | SGT University, Gurgaon, IMS Engineering<br>College, Ghaziabad, NSIT, New Delhi<br>Ideal Institute of Technology, Ghaziabad<br>BSA College of Engineering, Mathura<br>Babu Banarsi Das Institute of Technology,<br>Ghaziabad    |

## KEY FUNCTIONARIES

| Name & Qualification   | Designation  | Special Interests  | Previous Employment  |
|--|--|--|--|
|  <p>Dr. Abhiruchi Passi<br/>Ph.D M.Tech (ECE),<br/>MDBA (Marketing), B.E</p>  | Associate Professor & HOD-Electronics & Communication Engg.    | Areas of interest are RF Solution, Microstrip Filters, Wireless and Data Communication and Internet of Things.           | Career Institute of Technology & Management(CITM), Faridabad   |
|  <p>Dr. Jyoti Chawla<br/>Ph.D (Chemistry)</p>   | Professor & HoD Applied Sciences & Humanities                  | Water Purification, Risk Assessment of Nanomaterials, Surface Chemistry  | Lecturer in D.A.V College, Batala and Guru Nanak Dev University, Amritsar, Research Fellow in Bhabha Atomic Research Centre, Mumbai in a collaborative project (IUC-DAE) with Guru Nanak Dev University, Amritsar. |
|  <p>Dr. Pooja Anand,<br/>MSPT, MIAP</p>   | Associate Professor & HoD-Physiotherapy                        | Exercise physiology & Sports Rehabilitation.   | Amity Physiotherapy College, Guru Nanak Dev University, Amritsar.  |
|  <p>Dr. Divya Sanghi<br/>M.Sc. Ph.D</p>  | Associate Professor & HoD, Nutrition & Dietetics               | Clinical Nutrition, Nutrigenomics,   | Worked as JRF SRF and Young scientist at King George Medical University, Lucknow   |
|  <p>Dr. Shaveta Bhatia<br/>MCA, Ph.D</p>  | Associate Professor & HoD- Computer Applications               | Mobile Computing, Web Application Development, Database Management System, Computer System Architecture                  | Lecturer, S.A Jain (PG) College, Ambala City   |
|  <p>Dr. Jayender Verma,<br/>M.Com, Ph.D<br/>(Finance)</p>   | Associate Professor & HoD-Commerce                             | Accounts & Economics   | Faridabad Institute of Technology, Faridabad.  |
|  <p>Sh. Sushil Kumar<br/>Pasricha<br/>BE (Mech.Engg.), MBA</p>  | Associate Professor & HoD- Business Studies                    | Strategic Management & Marketing   | Associate Professor-School of Management, Associate Professor-JRE Group of Institutions, Greater Noida   |
|  <p>Dr. Deepti Dabas<br/>Hazarika<br/>Ph. D. (Management),<br/>M. Phil. (Management),<br/>MBA, BA (Hons.)<br/>Economics, B. Ed.</p> | Associate Professor & HOD- Management Studies                  | Service operations management, Service design, Technical and creative writing, Marketing Communications, Tourism studies | Tiger Systems India Pvt. Ltd. (New Delhi), Gulf Alliance Centre for E-learning (Muscat, Sultanate of Oman), ICFAI Academy (Faridabad)  |
|  <p>Ms. Ritika,<br/>PG Diploma in PR &amp;<br/>Marketing, B.Ed</p>  | Assistant Professor & HoD-Hospitality and Hotel Administration | Public Relations   | Hotel Industry   |
|  <p>Dr. K M Tripathi<br/>Ph.D (Organizational<br/>Behavior)</p>   | Assoc. Professor & HoD Psychology                              | Organizational Behavior, Research Methodology, Counseling, Social Psychology   | TCS & Entrepreneurship Development Institute of India, Ahmadabad.  |

## KEY FUNCTIONARIES

| Name & Qualification   | Designation   | Special Interests   | Previous Employment  |
|--|---|---|--|
|  <p>Dr. Nimai Das BSc (Economics Honours), MA (Econometrics &amp; Statistics), PhD (Environment &amp; Natural Resource Economics)</p> | Assoc. Professor & HoD- Economics                         | Research in Public Economics and Applied Econometrics including quantitative modelling of environment, climate change, natural resources, public health, state finance, etc | Institute of Economic Growth (Delhi University Enclave), Centre for Studies in Social Sciences Calcutta (ICSSR-ERC), Presidency College (Kolkata) and Public Health Foundation of India (PHFI Delhi) |
|  <p>Dr. Shivani Vashist Ph.D (I.I.T Roorkee), M.A. (Gold Medalist), M.Ed, PGDCA</p>   | Professor & HoD-English                                   | Indian Writings in English, Diaspora studies, Women's Writing   | Shri Mata Vaishno Devi University Katra (J&K)  |
|  <p>Mr. Manoj Raut MA, PG Diploma in Mass Communication, PG Diploma in Journalism</p>   | Associate Professor & HoD-Journalism & Mass Communication | Film making, Broadcast Journalism, Media Research & Training  | NDTV   |
|  <p>Sanjay K Surya B.Arch &amp; M.Arch</p>   | Professor & HOD Architecture and Design                   | Landscape Architecture, Urban Design, Research Work, Smart cities expert  | Vaastu Kala Academy  |
|  <p>Mr. Vishal Prabhakar B.A (Delhi University)</p>   | Head Visual Arts  | Visuals Arts, Visual Effects, Animation & Broadcast Design  | Autodesk, Sony Entertainment Television & Zee Television   |
|  <p>Prof. (Dr.) Pankaj Dhawan, MDS</p>  | Professor & HOD Dept of Prosthodontics                    | Implants & Aesthetic Dentistry  | AIIMS, New Delhi   |
|  <p>Dr. Sridhar Kannan, MDS</p>   | Professor & HOD Dept of Orthodontics                      | Self Ligating Systems, Aligners, Mini Implants  | Professor, Sudha Rustagi Dental College, Faridabad   |
|  <p>Dr. Shveta Sood, BDS &amp; MDS- Pedodontics</p>   | Professor & HOD   | Caries Prevention Agents, Dental Care for Special Children.   | I.T.S Centre For Dental Studies & Research, Ghaziabad (2001-2005). Krishna Dental College (2005-2010). MRDC, Faridabad (2010 till date).   |
|  <p>Dr. Shivani Aggarwal, MDS</p>   | Professor & HOD Dept of Oral Pathology                    | Diagnostic Histopathology and Early Diagnosis of Oral Cancer  | Harsarn Dass Dental College, Ghaziabad   |
|  <p>Dr. Pooja Palwankar, MDS, PGDHHM</p>  | Professor and HOD, Dept. of Periodontology                | Surgical Periodontics   | Pad. Dr D.Y. Patil dental college & hospital, Navi Mumbai M.M College of Dental Sciences & Research Mullana, Ambala. Shree Bankey Bihari dental college and research centre, Ghaziabad.              |

## KEY FUNCTIONARIES

| Name & Qualification   | Designation   | Special Interests  | Previous Employment  |
|--|---|--|--|
|  Dr. Sumit Bhateja<br>MDS   | Reader,<br>Department of<br>OMR, Incharge of<br>Research                              | Research & publications in Oral precancerous lesions & conditions, Diagnostic Radiology, Forensic odontology, Alternative Medicine | ITS Dental College, Gr. Noida  |
|  Dr. Meena Jain,<br>MDS   | Reader, Dept of<br>Public Health<br>Dentistry   | Research in Health risk behaviors, Innovation, Entrepreneurship, Institutional social responsibility                               | Manav Rachna Dental College  |
|  Dr. Supriya P. Panda,<br>M.Sc. (Maths), M.S.,<br>Ph.D                                  | Professor-<br>Department of<br>Computer Science<br>Engineering                        | Soft Computing, Software<br>Engineering, Algorithms  | Associate Professor-NCU(Formerly ITMU Gurgaon)   |
|  Dr. Anil Sarin,<br>M.Com, PGDM,<br>Ph.D, D.Litt  | Professor,<br>Management<br>Studies   | Marketing, Management and<br>Entrepreneurship  | Hamdard University, Jamia Milia Islamia,<br>Pondicherry University, NIAM-Jaipur  |
|  Dr. Surbhi Kapur,<br>PG (English), Ph.D<br>(English)                                 | Professor<br>Management<br>Studies  | Business Communication & Cross<br>Culture Communication  | KIIT School of Management (KSOM),<br>Bhubaneswar   |
|  Dr. Rashmi Agrawal,<br>M.Tech, MBA, M.Phil   | Professor Faculty of<br>Computer<br>Application                                       | Data Mining, Artificial<br>Intelligence  | Faridabad Institute of Technology, Faridabad   |
|  Mr. Dinesh Bhardwaj<br>B.Arch-SPA, Delhi;<br>Diploma in Urban<br>Planning            | Professor, Design<br>Chair-Architecture   | Architecture Design & Vaastu<br>Consultant   | D.B Alliance, Principal Architect  |
|  Dr. Moattar Raza Rizvi,<br>Ph.D in Medical<br>Physiology<br>(2009, Delhi University) | Professor (Medical<br>Physiology) -<br>Department of<br>Physiotherapy, FAS,<br>MRIIRS | Conventional and Un-conventional<br>Machining, Cutting Tools   | Manager (Prod and Vendor Development),<br>GP International Ltd., Faridabad,  |
|  Dr. Manoj Nayak<br>B.E (Mech.), M.Tech,<br>Ph.D (NIT)                                | Professor & HoD,<br>Department of<br>Mechanical Engg.                                 | Vascular Biology, Diabetes, Stroke,<br>Cancer  | Department of Nursing, College of Applied<br>Medical Sciences, Majmaah University,<br>Majmaah, Riyadh, KSA 11952<br>(Dec 2009 to Aug 2019) |
|  Dr. Pratibha Singh,<br>M.Sc, Ph.D, NET   | Professor & HoD,<br>Department<br>of Nutrition &<br>Dietetics                         | Research and Innovation in the field<br>of Clinical Nutrition, Public Health<br>Nutrition  | Dr B.R. Ambedkar University, Agra, Faridabad<br>Institute of Technology, Faridabad.  |
|  Dr. Vijay Kumar<br>M.Sc (Maths), Ph.D<br>(Applied Mathematics)                       | Professor & HoD,<br>Department of<br>Mathematics                                      | Fuzzy Information theory & decision<br>making  | Delhi College of Technology & Management,<br>Palwal and JRE College of Engineering,<br>Greater Noida.                                      |



## KEY FUNCTIONARIES

| Name & Qualification  | Designation  | Special Interests   | Previous Employment   |
|---|--|---|---|
|  <p>Dr. Devi Singh<br/>M.Sc (Delhi University),<br/>Ph.D (Delhi University)</p>                        | Professor & HoD,<br>Department of<br>Physics                             | Material Science, Polymer Fibers  | Central Road Research Institute (CSIR), Senior Secondary Education Sector and Lingayas University   |
|  <p>Dr. Joseph Alexanand<br/>Davis Ph.D, M.Sc.</p>   | Professor<br>Department of<br>Biotechnology                              | Research and Development of drugs against Diabetes, Cancer and Anti-infective. Development of diagnostic kits, addressing environmental issues and Industrial Biotechnology | Post doctrol fellow in Burnham Institute and UCSD (USA), Assistant Director in Daiichi Sankyo Pharma Company (Japan), Senior Group Leader in Ranbaxy Laboratories   |
|  <p>Dr. Meenakshi Moza<br/>Ph.D, M.Tech &amp; B.Tech</p>   | Professor<br>Department of<br>Computer Science<br>& Engineering          | Computer Network, Network Security and Network simulation   | Avery India Ltd. Faridabad  |
|  <p>Dr. Indu Kashyap<br/>Ph.D, M.Tech</p>   | Professor<br>Department of<br>Computer Science<br>& Engineering          | Analytical and pedagogical applications of Text Mining, Machine Learning, Evolving Intelligent Systems and Computational Intelligence                                       | <ul style="list-style-type: none"> <li>Industrial Experience of 1 Year in Brickred Technologies, Noida,</li> <li>12 Years of Teaching experience in CITM and MRIIRS</li> </ul>  |
|  <p>Dr. Charu Virmani<br/>Ph.D, M.Tech &amp; B.Tech</p>  | Professor<br>Department of<br>Computer Science<br>& Engineering          | Complex networked systems, Human Computer Interaction, Usable Security  | B.S.A. Institute of Technology and Management, Faridabad  |
|  <p>Dr. Leena G<br/>Ph.D, M.Tech &amp; B.Tech</p>  | Professor<br>Department of<br>Electrical &<br>Electronics<br>Engineering | Intelligent Control, Nonlinear System, Sliding mode control, Solid waste management, Renewable energy   | Previously worked as Lecturer in Vellore Engineering College (present Vellore Institute of Technology), Govt. College of Engineering, Thiruvananthapuram, Kerala, and Assistant Engineer (Research and Planning) in Kerala State Electricity Board      |
|  <p>Dr. Basant Kumar<br/>Bhuyan<br/>Ph.D, M.Tech &amp; B.Tech</p>                                    | Professor<br>Department of<br>Mechanical<br>Engineering                  | Advanced Manufacturing Processes, Advanced Engineering Materials, Finite Element Method (FEM)   | Babu Banarsi Das Institute of Technology, Ghaziabad, U.P Career Institute of Technology & Management, Faridabad, Worked as a Senior Research Fellow (SRF) in Motilal Nehru National Institute of Technology (MNNIT) Allahabad, U.P.                     |
|  <p>Dr. Anupama Rajput<br/>Ph.D (Chemistry),<br/>M.Sc. (Applied<br/>Chemistry)</p>                   | Professor<br>Department of<br>Chemistry                                  | Synthetic organic chemistry, Environmental chemistry, water analysis  | Worked as lecturer in Govt. Engg college Jabalpur (M.P)   |
|  <p>Dr. Deepak Kumar<br/>Ph.D (Mathematics)<br/>M.Sc (Mathematics<br/>with Computer<br/>Science)</p> | Professor<br>Department of<br>Mathematics                                | Mathematical Modeling, Data Analysis and Nature inspired algorithms.  | Worked as lecturer Lingaya's Institute of Management & Technology (LIMAT), Faridabad and CET, IILM Academy of Higher Learning, Greater Noida.   |
|  <p>Dr. Rakesh Kumar<br/>Arya<br/>Ph.D</p>   | Professor<br>Department of<br>Business Studies                           | International Economics, Foreign Exchange Management, Development Economics, International Trade and Foreign Investment, Financial Management                               | Worked in Economic and Marketing Research with British Govt. Project, Worked with Planning Commission, Worked with Sectoral Development & Social Projects & Financing all in senior capacities, worked as Professor in MRIIRS for the last three years. |

## KEY FUNCTIONARIES

| Name & Qualification   | Designation   | Special Interests   | Previous Employment  |
|--|---|---|--|
|  Dr. Rajat Gera<br>B.Tech, PGDRM-<br>Institute of Rural<br>Management,<br>Ph.D (GGSU) | Professor, Faculty<br>of Management<br>Studies  | Product and Brand Management,<br>e-marketing, social entrepreneurship                           | IMT Ghaziabad, Fore School of<br>Management, New Delhi, BIMTECH,   |
|  Dr. Nandini Srivastava<br>Ph.D   | Professor, Faculty<br>of Management<br>Studies  | Research -HR and OB   | Program Director-New Delhi Institute of<br>Management, IP University   |
|  Dr. Vikram Kr. Sharma<br>Ph.D, M.Lib. & Info.<br>Science, UGC-NET                    | Head, Central<br>Library  | Research & Reference  | The American Library, New Delhi, Union<br>Ministry of Home Affairs   |
|  Dr. Gurjeet Chawla,<br>M.Sc., MBA, Ph.D   | Associate Dean<br>Student Welfare &<br>Associate<br>Professor- Nutrition<br>& Dietetics | Nutrition & Health Promotion<br>Community, Resource Management                                  | Faridabad Institute of Technology, Faridabad   |
|  Dr. Shobha Srivastava<br>M.Sc., MBA, PhD in<br>Microbiology                        | Deputy Registrar-<br>Faculty of Engg. &<br>Technology                                   | Education & General Management,<br>Holistic Wellness & Life Skills &<br>Industrial Microbiology | Dean Administration & Corporate Affairs,<br>Shivalik College of Engineering, Dehradun  |
|  Mr. Deepak Sharma<br>B.Com. D.PEd.,<br>M.PEd.                                      | Deputy Registrar-<br>Registration &<br>Scholarships/<br>Academics                       | Administrative and Academic matters<br>of the University  | Assistant Registrar - Career Institute of<br>Technology and Management (CITM),<br>Faridabad from September, 2000 to May,<br>2006. 17 years of rich administrative<br>experience in educational institutions. |
|  Mr. Ishwar Singh<br>Sharma<br>MA   | Dy. Registrar<br>(Administration)   | Administrative matters  | OSD - DCRUST, MURTHAL and Former<br>Administrative Officer - Govt. of Haryana  |

## ESSENTIAL FUNCTIONARIES: MREI

| Name & Qualification  | Designation     | Special Interests                         | Previous Employment   |
|---|-----------------|---|---|
|  Dr. N.C. Wadhwa,<br>IAS (Retd.),<br>M.A. (Public<br>Administration), Ph.D | DG-MREI         | Educational Planning &<br>Administration. | Labour Commissioner cum Special Secretary<br>to Government of Haryana, Dean/ Director<br>Pt. B.D. Sharma, PGIMS, Rohtak, Vice<br>Chancellor, MDU Rohtak. Vice Chancellor,<br>MRIIRS |
|  Mr. Sarkar Talwar,<br>Graduation in Sports,<br>Level 4 Coach              | Director-Sports | Sports Management                         | Haryana Govt., Chief Coach of the Indian<br>Jr. Cricket Team (1995-2003)  |

## ESSENTIAL FUNCTIONARIES: MREI

|   |  |  |   |  |
|---|--|--|---|--|
|    | Col. Girish Kumar Sharma,<br>B.A., M. Sc. (Defense Studies), Business Administration MDI   | Director-Planning & Coordination                                   | Business Development  | Formerly at Indian Army, United Nations, Health Care, Education & Global Alliances   |
|    | Dr. Amit Seth,<br>Ph.D. (Aligarh Muslim University)  | Director Admissions-MREI, Professor, Faculty of Management Studies | Strategic Management, Entrepreneurship and Turnaround Management, Conducting MDPs, Exploring Industry Linkages.   | Vice President (Marketing Operations) Metro Tyres Limited, J.K. Tyres, Uptron India Ltd, Ralson India Ltd, Siya Ram Poddar Group, Delhi Business School, New Delhi |
|    | Mr. Sudhir Verma,<br>MBA (Marketing)   | Director Marketing & Branding                                      | Marketing & Strategy  | Formerly at Hindustan Times, Spice jet Ltd.  |
|    | Mr. Atul Kalra,<br>PG in Advt. & PR  | Director-Administration  | Administration, Operations, Branding, Events.   | Director Operations - Techplast India Pvt. Ltd.  |
|   | Dr. B.S. Gill<br>B.Sc. (Engg), Ph.D  | Advisor MRIC   | Heat Transfer, Pinch Technology/ Process Integration, Combustio, Fired Heaters, Fluidized Bed boilers, Advanced Controls, Computational Fluid Dynamics and Project Management | Formerly at Central Mechanical Engineering Research Institute, Durgapur, Bharat Heavy Electrical Ltd., Engineers India Ltd., New Delhi                             |
|  | Mr. Gautam Srivastava<br>Physics (Hons), MBA, Doctoral Scholar (Amity Business School)   | Head-CDC   | Interest Area-Self Leadership Strategies, Valued Based Selling, Sales Performance   | Modi Xerox, Times of India, Diligent Media Corporation, HT Media   |
|  | Dr. Monika Goel,<br>B.A, M.Com (E.A.F.M), NET, Ph.D  | Consultant - MRIC  | Business Taxation, Corporate Finance, Business Law & Financial Markets  | Asst. Professor, Lal Bahadur Shastri Institute of Management, New Delhi  |
|  | Ms. Rakhi Arora Pruthi<br>MBA (HR)   | General Manager (Corporate Relations)                              | Interest - Placement  | Profile Advertising  |
|  | Ms. Kanupriya Shekhar,<br>BBA, PGDBM (Human Relations & Industrial Relations), Business English Certificate (Cambridge University) | Dy. Director-Admissions  | Human Resources, Organization Behavior, Cross Cultural Communication  | Job Acumen   |
|  | Mr. Ujjwal Vishal<br>Post Graduate Diploma in Advertising and Communication  | Dy. Director - RMR & Head Media Centre                             | Directing Documentaries, Creative Content, Writing Travelogues  | Nine Pillars Media Pvt. Ltd.   |
|  | Ms. Pooja Gahrotra<br>PG in Marketing Communications & Management  | General Manager (Media and PR)                                     | Interest - Public Relations, Content Development, Branding and Marketing  | NASSCOM Foundation, Amity, Apeejay Sty Group, Feedback Infra Pvt. Ltd.   |





# FACULTY OF ENGINEERING & TECHNOLOGY (FET)

MRIIRS has its origins in Career Institute of Technology and Management (CITM), an esteemed educational entity, which originated in 1997. CITM was accredited by the NBA twice, first in the year 2004 for three B.Tech Programmes and next in 2007 for four B.Tech Programmes. In July 2008, Govt. Of Haryana granted Autonomous Status to the Institute. Subsequently, in October 2008 Ministry of HRD, Govt. of India conferred "Deemed to be University" status on the Institute and was then named as Manav Rachna International Institute of Research and Studies (MRIIRS). The programmes namely B.Tech-Computer Science and Engineering, Electronics & Communication Engineering, Mechanical Engineering and Biotechnology were again accredited by National Board of Accreditation (NBA under Tier I category) in 2018.

MRIIRS is accredited with "A" Grade by NAAC (An autonomous institution of the UGC). It enjoys unparalleled reputation among all stakeholders i.e. its students and their parents, employers and the community at large. The Faculty has a strong track record of on-campus

placements with national and international companies. It has excellent infrastructure. Its labs and workshops are equipped with state-of-the-art machinery and latest computing facilities. At U.G level, apart from the normal B.Tech Programmes, FET offers B.Tech with certain specializations in association with leading industry names. The faculty also offers admissions to B.Tech Lateral Programmes. At P.G level, the Faculty offers M.Tech Programmes in different departments. It also offers Ph.D Programmes. Presently more than 144 research scholars are pursuing Ph.D programme in different departments of FET. Eligibility conditions, No.of seats, Fees payable, Criteria for merit list and other details of all the above programmes are given from Page No. 81 onwards in this brochure. Student Exchange Programmes/ internships are also available to our engineering students. All the departments under FET have well qualified faculty involved in both teaching and research. Up to date laboratory facilities are available for both teaching (UG & PG) and research.

The computer student ratio in computer labs is 1:1. There are also specialized laboratory facilities for Cloud Computing, SAP technology etc.

A number of programmes are offered in collaboration with industry: B.Tech Computer Engg.- in association with IBM in the following specializations: (a) Cloud Computing (b) Business Analytics and Optimization (c) Cyber Security and Forensics (d) Graphics & Gaming Technology), B.Tech-Electronics and Communication Engineering with specialization in IOT and Artificial Intelligence in association with INTEL, B.Tech-Mechanical Engineering (Industry Integrated in association with JBM) with specified focused areas of Computer Aided design, Robotics, Automation, Digital Manufacturing, Industry 4.0 etc and M.Tech in Automation and Robotics in association with Mitsubishi. The Faculty regularly conducts in depth study on technology trend and brainstorming sessions with industry and their knowledge partners with a view to ensure that the students are kept abreast with the latest developments in

Technology. Choice Based Credit System (CBCS) with a basket of good number of Elective Courses including Discipline Electives, Generic Electives, Open Electives and Industrial Training have been embedded in the curricula for all the programmes. The course work is supplemented by industrial visits, educational tours and invited lectures from eminent persons from academics and experts from industries. Soft skills training is provided to make our students recruitment ready for job opportunities in IT industries and other enterprises. The students/faculty members jointly organize seminars/conferences under the aegis of student chapters of various professional bodies like Institution of Engineers (IEI), IETE, ISTE, IEEE, CSI, SAE, ASHRAE, and QCFL. It is a matter of great pride for FET to have Mitsubishi Factory Automation Lab sponsored by Mitsubishi Electric India (MEI) at campus. The objective of the Advanced Automation (Factory Automation) lab is to train the students and faculty on Automation and to encourage engineering students to take up this multidisciplinary field as a choice of their career & have hands on experience with latest automation technologies as per industry requirement. The lab has world class infrastructure with latest Robot, iQR set up which includes Q series Programmable logic Controller (PLC), servo, variable frequency drive (VFD), Graphical operational terminal (GOT)2000 and X-Y Plotter. A wide range of applications from transport of mechanical parts to assembly of electrical parts can be performed by the robot. "Infineon Centre of Excellence" has also been set up at the campus wherein the company- Infineon Technologies will offer internship programs to the students, technical support for carrying out Industrial projects to expand their professional understanding, improve their analytical & problem solving skills. Workshops will be organized on regular basis to familiarize students with Infineon's

power management & multimarket products. FET has collaborations with Honda Motorcycle and Scooter India Private Limited (HMSI). HMSI will provide technology support to MRIIRS for setting up training and research infrastructure for MRIIRS students. This will provide a platform to students of Mechanical / Automobile / Electronics & Electrical branches to take up research projects in emerging areas in association with FET has also organized various International and National Conferences/ Seminars/ Workshops in collaboration and support of Govt. Funded Organizations and Foreign Universities. The students of FET have been participating every year in number of competitions with excellent result.

Some notable achievements are:

- MREI team bagged second prize in Finals held in USA and won the Asia Finals of Microsoft Imagine Cup, 2019
- MREI Team bagged Infosys Aarohan 2019 Silver Award.
- 2 Students from MRIIRS were selected for Reality Virtually Hackathon which was held in January, 2019 at MIT, Cambridge, USA and bagged the Best Project Award winning a cash prize of 2500 USD for best use of AR in Industry.
- MREI team bagged the second position in 'Productathon', an event conducted by IIT Roorkee in Uttarakhand in February 2019.
- Team of MRIIRS got top position in the recently conducted robotics championship event at IIT Guwahati (Techniche- Annual Techno Management Festival of IIT Guwahati). Students were awarded with Gold medals, trophies and a cheque of Rs.30, 000/- for winning this event.
- 6 teams were selected from MRIIRS (maximum from any university in the country) for the national finals and two have made it to top 8 teams in Microsoft Imagine Cup 2018.

- Year on year, students of Manav Rachna have been sweeping away the top honours at some of the most prestigious innovation challenges. Following league, our students have bagged the "Jury Choice Award" of the Accenture Innovation Challenge 2018 held at Bengaluru on 1st August, 2018.
- Three projects have been shortlisted for AICTE CHHATRA VISHWAKARMA AWARDS 2018.
  - NANOWRAPPS (Natro Plast Startup)
  - TITCHY
  - SWASTIK
- Team "Tech Kins" bagged 1st position in the MAKEATHON Event organized by "India Electronics & Semiconductor Association (IESA)" during 27th-28th Feb 2018 in Bengaluru. Students were awarded with USD1000 credits from AMAZON AND Digital Ocean.
- Project LOTO from MRIIRS has made it to top 100 projects selected from the country in Renesas GR LYCHEE Design Contest 2018.
- In IESA Make-a-thon 2018, Start-up "Greenity" won the golden ticket to Grand Finale of IESA Makeathon for their smart chair.
- In AICTE-Canada India Acceleration Programme (CIAPE) for Women Entrepreneur 2018, Start-up "Nature's Drop" ranked among the top 60 women led startups In India during AICTE-CIAP 2018 at AICTE, New Delhi.
- Tackyon Motorsports Private Limited- a startup won the special award from China for showcasing their customized electric utility vehicle at International Exhibition for Young Innovators 2018.
- Naturo Plast- a startup won the special award from Taiwan for showcasing their innovative Nano-packaging wrap for food at International Exhibition for Young Innovators 2018.





- 4 projects were selected in Living Talent Master Piece 2018 event which was held in Dubai during 15th-16th Dec, 2017. Project "Sound Fidelity" has made it to top 3 in this event.
- In Imagine Cup 2017, a Project "SWASTIKA" an NGO connecting web platform was selected for National Finals of Microsoft Imagine Cup 2017.
- Albatros, a startup company was selected to 22nd edition of the "World Electronics Forum" 2017, France.
- The project "LOTO" bagged 2nd position in the prestigious Intel Higher Education Challenge 2017 was awarded with a cash prize of Rs.50, 000/-.
- MRIIRS Team got 2nd prize in IIT Guwahati Techniche 2017 Escalade Robotics Competition.

FET has a very good track record of placement of students. A large number of students have been successfully placed in reputed organizations such as TCS, Infosys, L&T Infotech, HCL Technologies, Maruti Suzuki, Huawei Technologies, NIIT Technology, Microsoft, I-Flex, Dell, Oracle, Nokia Siemens, Ericsson, Cease Fire, Escorts, Sandvik Coromant, Wipro, JBM, Hewitt Technology, Capital IQ, Data64, Life Cell International etc and have earned salary packages as high as Rs. 8 lac per annum. A good number of pass out students from FET are pursuing post graduate courses in India and abroad.

## DEPARTMENT OF AERONAUTICAL ENGINEERING

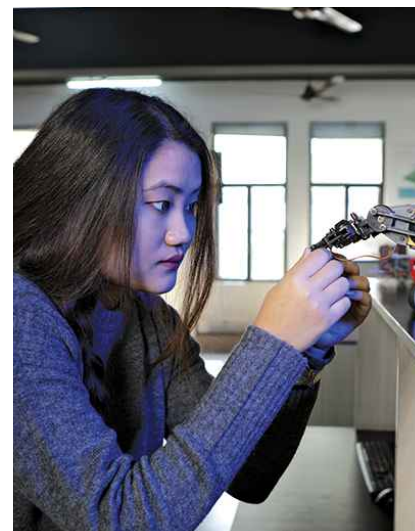
The Aeronautical Engineering department was established in 2008 and has, thereafter, acquired resources consistently in order to build up a good academic environment. The Lab facilities include a subsonic, open circuit wind tunnel along with its measurement accessories, a 3-component Balance, a water-table, a hot-wire anemometry system, a 32-channel electronic pressure scanner, propeller test set up, flame propagation apparatus, experimental set up for measuring shear centre, torsion and bending stresses, and diffused light Polaroscope for stress analysis. The department also has aircraft assemblies, components, and aircraft instruments of a frontline fighter aircraft, and models of various aircraft and jet-engine. The students assemble exotic configurations of aero-models and fly them so as to study the effect of aerodynamic features and structural integrity of such aircraft configurations. The computational facility in the department has specialized software like ANSYS and lab courses are also conducted on the use of modeling/simulation software's like, GAMBIT/FLUENT, MATLAB, CATIA, and CREO.

The faculty members in Aeronautical Engineering are well qualified, holding Ph.D. and M.Tech. Qualifications in Aerospace Engineering from premier institutions of India. They have rich experience in aircraft maintenance, aircraft design, rocket systems and design of UAV gathered from their previous tenures in

IAF and academic institutions. Such a practical experience is of great advantage to students to get first-hand information on modern technologies/practices followed in the aerospace industry.

The co-curricular activities include educational visits to Air Force bases, industry and academic institutions like IIT Delhi, Kanpur etc. The department conducts aero-modeling workshops & organizes guest lectures by experts from industry/academic institutions and other professional bodies.

Aeronautical students have been placed in DRDO labs, like ADE, Bangalore; in organizations like Mechartes and Zeus Numerix which is engaged in application and development of Computational Fluid Dynamics; and in private companies like





TCS and VizExperts Pvt Ltd., engaged in design, simulation and maintenance of aircraft. Our students have also performed exceptionally well in the private airlines like Jet Airways, Emirates and Indigo. Some of the students have gone for higher studies (M.Tech, MBA and Ph.D.) in premier institutions in India, USA, Germany, and Australia.

**Thrust Areas:** Experimental aerodynamics, CFD and UAV.

#### PROGRAMME OFFERED

- B.Tech in Aeronautical Engg (4 year/ 3 year with Lateral Entry)
- Ph.D

The students enrolled for B.Tech- Aeronautical Engg. also have option for specialization in Aerospace or Aircraft Maintenance.

The detailed semester-wise course structure along with study scheme for the programme is available on MRIIRS website.

#### PLACEMENT OPPORTUNITIES

Aeronautical Engineering is both challenging and rewarding. India's successful launch of 'Chandrayaan 2', 'Mars Orbiter Mission', 'GSLV Mk-III', and recent launches of 28 customer Satellites by Indian's PSLV -C45 besides successful induction of indigenously designed and manufactured Tejas fighter aircraft are examples of challenging careers and placement opportunities growing exponentially in the Indian market. The emerging joint ventures between aerospace giants like Boeing and Dassault Systems with Indian companies have opened further avenues of placement for aerospace students. The aeronautical careers exist in Hindustan Aeronautics Ltd. (HAL), Indian Space Research Organization (ISRO), Defence Research Development Organization (DRDO), Defence forces such as Indian Air Force, Indian Navy, Indian Army and Airlines in the Govt. and private sector as well as in the aircraft manufacturing companies in the private sector.

#### DEPARTMENT OF AUTOMOBILE ENGINEERING

The Indian Auto Industry is one of the largest in the world with an annual production of 30.91 million vehicles in FY 2018-19, following a growth of 6.26 per cent over the last year. The automobile industry accounts for 7.1 per cent of the country's Gross Domestic Product (GDP). India is also a prominent auto exporter and has strong export growth expectations for the near future, around 31 per cent of small cars sold globally are manufactured in India. Several initiatives by the Government of India and the major automobile players in the Indian market are expected to make India a leader in the Two Wheeler and Four Wheeler market in the world by 2020. The Government of India aims to make automobiles manufacturing the main driver of 'Make in India' initiative, as it expects passenger vehicle market to triple to 9.4 million units by 2026, as highlighted in the Auto Mission Plan (AMP) 2016-26.



Today Government policies are providing a major thrust to electric vehicles for less dependence on conventional fuels, BS VI vehicles for cleaner environment and in foreseeable future autonomous vehicles. These needs will create a demand for automobile engineers, experts and researchers which the department of Automobile Engineering aims to fulfill.

The Department of Automobile Engineering was established in 2009. It was created to provide specialized knowledge and skills to students for their contribution to the Automobile sector. This objective is fulfilled by the highly qualified and experienced faculty having M.Tech / Ph.D degrees. The

Faculty members of the Department have been actively involved in Research and Development activities in the field of alternative fuels, heat transfer, new engine development, vibration analysis in vehicles, electric and hybrid vehicle technologies etc. They had published their work in renowned National and International Journals, conferences and also filed patents in their areas of research.

The department has well developed up to date laboratory facilities. The students are exposed to various relevant topics like design of automobile components (both manual and computer aided), types of fuels used in automobiles with their property analysis, different types of energy losses in the vehicle, latest technology and standards used in engine design and manufacturing, air conditioning in the automobiles, dynamics of motor vehicles, vibration analysis, Electric and hybrid vehicle technology, autonomous vehicles, vehicle maintenance. Softwares such as ProE, MATLAB and ANSYS are being taught on workstations for design and development of vehicles.



## INDUSTRY-ACADEMIA INTERFACE

The department has linkages with industry and scientific research organizations the details are as under:

**Honda Motorcycle and Scooter India Private Limited (HMSI).**

Manav Rachna International Institute of Research and Studies (MRIIRS) in association with Honda Motorcycle and Scooter India Private Limited (HMSI) has established Automotive Training & Research Centre at University campus for imparting high end skills required in Auto Sector for its students. In this association HMSI will provide technical support on frequently changing technological advancement in two wheeler industry. Research areas will be focused on improving efficiency of engines, alternative sources of energy with improved design features of vehicle and its components. The centre of excellence will not only enhance employability prospects of the students but will also impart skills for self-employment. In this direction the centre has jointly organized DST Sponsored Technology Based Entrepreneurship Development Program (TEDP) in Two Wheeler Service Technology from 11.02.2019 to 30.03.2019.

**Indian Oil Corporation Limited (IOCL) R & D Centre Faridabad.**

The Department in association with IOCL helps in providing training in the new emerging area related to fuel development and emission control. In this association joint research projects are also taken up based on clean fuels & pollution reduction.

**Automotive Skill Development Council (ASDC)**

The Department in association with ASDC helps in imparting skill based training where in employability / self employment prospects increases. Automobile Engineering



Department runs SAE (Society of Automobile Engineers) Collegiate Club for its students interested in showcasing their practical knowledge at national and international level. Students of the department have participated in International events i.e Shell Eco Marathon, SAE BAJA FSG Germany and in national events SAE BAJA, SAE Supra, SAE Efficycle, SAE Go Kart Championship, Grid-Tech & Auto-Tech Review competitions and shown their capabilities / knowledge acquired through the programme.

A team of students had participated at Grid Tech 2015 held at Pragati Maidan and won the third prize among 40 shortlisted teams from all over India. Another team was 1st Runner-up in Student Innovator of the Year award category at the Indian Automotive Technology and Innovation Awards (IATIA) for the year 2016. The team was awarded with prizes worth of 450 Euros. Dr Devendra Vashist as a faculty professor of the department was conferred SAE GURU Award 2015-16. He is a member of Engineering Education Board of SAE India and in panel of judges for student's competitions.

Students are given regular exposure and awareness about manufacturing processes through industrial visits.

## PROGRAMMES OFFERED

- B.Tech - Automobile Engineering (4 year/ 3 year with Lateral Entry)
- Ph.D

## PLACEMENT OPPORTUNITIES

Automobile engineers are highly in demand nowadays because of the high proliferation of automobiles in everyday life all over the world. Maruti Suzuki, Toyota, Volkswagen, New Holland, Tata Motors, Hyundai, Mahindra & Mahindra, Ashok Leyland, Hindustan Motors etc. are some of the leading automobile manufacturers in the country who are showing an interest in our students. The automobile manufacturing industry is supplemented by OEMs, such as Krishna Maruti, Sharda Motors, Ginnie solution, Institute of Road Traffic Education, HKS Auto, TCS, Square Yards, Harrison Associates, Blue Sapphire, Newgen Software technologies, Honeywell, A one Commercial, Eternity Industries Pvt Ltd. etc who frequently visit the campus for placement. Of course, other fields are also open to these engineers where they can find suitable jobs. Some of these areas are defence forces, space programme, atomic energy, power plants, railways, research laboratories, software development, information technology etc. Some students, with meritorious academic records and matching skills, have opted for higher studies in both National & International Universities.

## DEPARTMENT OF BIOTECHNOLOGY

Biotechnology is growing at a fast pace in India and is rapidly gaining significance and opportunities throughout the world. India is one of the leading markets for Biotechnology industries and there is a huge focus of Indian government on Research & Development in Biotechnology. The biotechnology sector of India is highly innovative and is on a strong growth trajectory. Robust growth in Biotech industry has attracted the significant amount of attention of global companies over the past two decades. Biotechnology has shown a very promising future in India and has emerged as most sought after discipline for turning the country into a global manufacturing hub.

This discipline is the most diversified of all the natural sciences, exhibiting a bewildering array of sub disciplines. The complex multifaceted nature of biotechnology is the result of its amalgamation with other scientific disciplines such as physics, chemistry, mathematics, electronics, mechanics, information technology and programming. This has made possible the description of life processes at the cellular and molecular level and has largely enabled scientists to predict and engineer these processes. Biotechnology can today be considered as a series of enabling technologies involving the practical applications of organisms or their cellular components to manufacturing, service industries and environmental management. Biotechnology is developing at a phenomenal pace and will increasingly be seen as part of the advancement of modern life. Biotechnology is also one of the most realized fields for "Make in India" campaign and it has been identified by the Government amongst the 25 sectors that will be covered under the Make in India plan to strengthen the Indian economy. Huge funds are being mobilized

in different areas of biotechnology such as biopharma, agri-biotechnology, diagnostics, horticulture, food science and more through several schemes and initiatives by Department of Biotechnology (DBT), Department of Science & Technology (DST) along with other government funding agencies.

The Department of Biotechnology was set up in the year 2002 at MRIIRS. The Department has very highly qualified teaching faculty with Doctoral and M.Tech qualifications in different areas of Biotechnology. The Department has a wide range of laboratories namely Cell Biology Lab, Microbiology Lab, Fermentation Technology Lab, Molecular Biology Lab, Environment Biotechnology Lab, Bioinformatics Lab, equipped with world class instrument facilities like HPLC, Atomic Absorption Spectrophotometer, IR Spectrophotometer, Fermenter, Gel Documentation System, PCR etc. A state-of art research level laboratory has been recently established as 'Molecular Biosciences Research Lab', which is fully equipped with animal cell culture facility and houses major instruments like CO<sub>2</sub> incubator, fluorescence microscope, deep freezer, fume hood etc. This laboratory is meant for advanced research in molecular biology, animal biotechnology, enzyme technology and other allied areas. The undergraduate programme B.Tech Biotechnology offered by Department of Biotechnology has been accredited by NBA in 2018 under Tier I Category. The academic performance of students has always averaged between 80-85% in different Programmes offered by department.

The students not only excel in academics, they are also facilitated for their 360 degree development. Exposure and awareness of manufacturing units where bio processes are well established towards product delivery, needs to be introduced to students. To meet this aim, industrial visits are regularly conducted to renowned industries like Mother Dairy, Vita Milk Plant, Yakult

Probiotics, etc for an understanding of bioprocesses and manufacturing of bio-products. Students undergo industrial training in their final year at industries like Cipla, SRL, Ranbaxy, Mother Dairy, Pepsico, Dabur etc. and research organizations of national repute like Institute of Nuclear Medicine & Allied Sciences (INMAS)- DRDO, Defence Institute of Physiology & Allied Sciences (DIPAS)- DRDO, Indian Agricultural Research Institute (IARI), CSIR-Institute of Genomics & Integrative Biology (IGIB), International Centre for Genetic Engineering and Biotechnology (ICGEB), Centre for Cellular & Molecular Biology (CCMB) Hyderabad and many more. Department of Biotechnology has MoUs with industry and premium research organizations of India viz- Indial Oil company Ltd, Translational Health Science and Technology Institute (THSTI), ICAR-National Bureau of Plant Genetic Resources (NBPGR), National Institute of Immunology (NII) and Indian Institute of Petroleum (IIP) Dehradun, to facilitate students and faculty in collaborative R&D, joint projects, trainings etc.

Research & Innovative projects are the backbone of any progressing department. A rich Faculty resource, each holding Doctoral Degree with diverse skill sets, are engaged in intensive research with research scholars and students of both PG and UG Programmes. Faculty members are also guiding Research scholars for PhD Programme. Their dedicated efforts have resulted in more than 250 publications in National and International journals of high repute and proceedings of seminars/conferences. To ensure quality student product, workshops/ seminars/ conferences are organized regularly to disseminate developments in the discipline of Biotechnology. Students are encouraged to pursue research projects in the domain of their interest, present their work in seminars/ conferences and/or publish their work in scientific journals. This inculcates scientific temperament in students and fosters critical thinking.





One of the biggest achievements of the Department of Biotechnology is the Startup Company-“TRICHO AGRONICA Pvt. Ltd. The Department of Biotechnology has developed a bioformulation ‘Biolexir’ which is a remedy for Bull’s eye pathogen specifically in tomato crop at low cost. Tomato (*Lycopersicon esculentum* Mill) “Super food” is adversely affected by Early blight caused by *Alternaria solani*. To carry the projects forward a Startup company to this effect with nomenclature as “TRICHO AGRONICA Pvt. Ltd” has been setup under Indian oil start up scheme (IOSUS), a “Start-up India” initiative announced by Prime Minister Shri Narendra Modi and funding of Rs.1.72 Crores has been provided.

#### PROGRAMMES OFFERED

- B.Tech - Biotechnology (4 year / 3 year with Lateral Entry)
- M.Tech - Biotechnology (2 year)
- M.Sc. - Biotechnology (2 year)
- Ph.D

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website

#### PLACEMENT OPPORTUNITIES

There is immense potential in Biotechnology for placement and it is a complete myth that the market has no jobs for Biotech graduates. The main players in market are of course Pharmaceutical companies which offer majority of jobs, other sectors are Biomedical devices, Diagnostics, Fermentation, Dairy, Chemical Industry, Food industry, Agrochemicals and fertilizers, Clinical research particularly Molecular

Diagnostics and many more. The pass out students of Biotech have bagged excellent placements in leading companies, viz, Agilent Technology, Covedien, Imperial Life Sciences, LifeCell International, Totipotent RX, Sagacious Research, CHC Health Care, e4e Health Group, Link Biotech, Ozone Biotech, CPM, Panacea Biotech, Medox Diagnostics, TCS (Biotech Division), Infosys (Biotech Division), IDS, I & T Infotech, IFBI and HCL, SCOTT EDIL & Kelly Services India Pvt. Ltd, Boston Scientific, etc.

Also there are immense opportunities for entrepreneurship and students can start their own ventures. Large amount of funds are being provided through various schemes by GoI such as BIRAC, where innovative ideas are acknowledged by the investors and seed money is granted to the budding entrepreneurs.

Many pass outs have opted for higher studies in both national and International universities after qualifying in competitive exams. National institutes include IIT- Delhi, IIT- Kharagpur, IIT- Kanpur, IIT- Guwahati, NIT- Surthkal, NIT- Kurukshetra, BITS-Pilani, BHU- Banaras and Anna University, Chennai etc. International institutions where the alumni of Biotech have pursued their higher education are University of Minnesota, USA, University of Buffalo, USA, University of Pennsylvania, USA, John Hopkins, USA, Nottingham Trent, UK, Sydney University, Australia, Arizona State Univ, USA, Baltimore Univ, USA, Florida Inst Of Tech, USA, Worcester Polytech, USA, Imperial College - London, Monash Univ. Australia, University of Kuopio, Finland etc.

#### DEPARTMENT OF CIVIL ENGINEERING

Civil Engineering is considered to be the most versatile branch among all the engineering branches in the country. Being the oldest Engineering branch in the academic institutions in the world, it has a lot of diversity right from Geotechnical Engineering to Structural Engineering, Environmental to Hydraulics, Transportation to Hydrology, Planning to Construction, etc. A Civil Engineer plays a vital role in national development works like roads, bridges, tunnels, buildings, airports, railways, docks and harbor, dams, water works, water supply and sewage systems, etc. which are essential for the rapid growth of any country.

Civil Engineering Department was established in the year 2009. It has built an excellent reputation not only in academics but also placement. The department has a blend of highly qualified and experienced faculty members having M.Tech/Ph.D. degree from IIT, NIT, DTU, JMI and other Institutes of National repute. The Department offers B.Tech-Civil Engg, M.Tech-Civil Engg (with specialization in Structural Engineering/ Construction Management & Transportation Engineering) full time and part time and Ph.D Programme in Civil Engineering.



The Department has fully equipped Labs with state-of-the-art equipment including Applied Mechanics Lab, Structures Lab, Strength of Materials Lab, Soil Mechanics Lab, Environmental Engineering Lab, Concrete Lab, Transportation Engineering Lab, Hydraulics Lab, Fluid Machinery Lab, Surveying Lab, Engineering Geology Lab, Computational Lab, Advanced Structural Engineering Lab, Construction Yard, and Models & Material Museum. In order to keep the students abreast with the technological advances, continuous interaction with reputed companies is being organized at frequent intervals in the form of special technical lecture/ workshop/ site visit or exchange of technical knowledge etc. The Department also encourages its students to engage in extra-curricular and co-curricular activities, essential for overall development, nurturing of team spirit and honing organizational skills to keep themselves abreast with current developments in the area of Civil Engineering.

Faculty members of Civil Engineering Department have 100+ papers published in various national & international journals of repute.

#### PROGRAMMES OFFERED

- B.Tech- Civil Engineering (4 year/ 3 year with Lateral Entry)
- M.Tech-Civil Engineering (2 year)

#### • Ph D

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website.

#### PLACEMENT OPPORTUNITIES

India is going through an intense phase of rapid infrastructure development. This throws up possibilities of absorption of Civil Engineers in a big way. Presently, huge demand and supply gap exists for Civil Engineers in the market. A good number of students have been placed in reputed companies such as Ashoka Buildcon, Rothenberger, PNB Housing Finance, Earth Infrastructure Pvt Ltd, GR Infra Projects Ltd, KMC Construction, PNC Infratech Ltd, Sushee Infra Pvt Ltd, TCS, Theme Engineering, Unihorn, Vishwa Infrastructure, SGS-Technomech, Top Surveying, Prathishta Group, Cinda Engineering, Supertech etc. Besides, the department looks forward for tying up with other companies for opening up other window of opportunities for recruitment of students. Some of the students have also opted for higher studies in both National and International Universities of repute.

Geology, integrated earth system science, provides understanding of solid earth, concerning a more sustainable exploration of Earth resources and rising of awareness of geo-hazards. It provides wisdom about the raw materials needed for economic development of a nation and helps to generate a sense of reverence for Earth. Geological information can play a vital role in addressing challenges of sustainable development such as land degradation and groundwater protection, earth resources and contribute to improved decision-making processes.

The National Capital Region is having repository of rocks and minerals and evidence Proterozoic to Recent age geological phenomenon which provides a location benefit for study and understanding process closely to built a professional who can take up geological challenges and solve them amicably. With this background, the Department of Earth Sciences and Environment has been launched with its first programme in Applied Geology.

#### PROGRAMMES OFFERED

- BSc. (Hons) Geology
- MSc. in Applied Geology



## KEY HIGHLIGHTS and STREAMS OFFERED

The Department is committed to produce future geologists and geo-scientists having academic excellence. The curriculum includes contents which will enable to not only equip with latest know how but will also support to clear various competitive examinations, so as to enter into satisfying career. It will also include recent developments and practices adopted country wide by the industry, in the fields of geology, petroleum exploration, geo-technical, energy and mineral exploration. The curriculum of B.Sc- M.Sc. Geology Programme includes extensive field work, geological mapping, visits etc and it is designed in such a way that it is easier for the students to adapt in the role of professional.

The department has well equipped laboratories with several instruments like petrographic and paleontological microscopes along with samples and thin sections of all major rock types, ores, minerals and fossils and their polished sections.

## PLACEMENT OPPORTUNITIES

Geology is an important branch of applied science which contributes to the nation GDP substantially. The applied aspect of geology ranges widely from ecology to food and water security of the nation.

The economy of our nation depends significantly on the availability of mineral resources and its status of exploitation. The job opportunities for geologists are increasing day by day. After getting the degree one can work both in domestic as well as international arena.

The Union Public Service Commission (UPSC) conducts National Geoscientist Examination for Central Government Agencies - Geological Survey of India and Central Ground Water Board.

Other Central & State Government agencies which hire geologists are

- ONGC
- Coal India
- National Mineral Development Corporation (NMDC)
- Mineral Exploration Corporation limited (MECL)
- Atomic Mineral Division (AMD)
- Steel Authority of India Limited (SAIL)
- Hindustan Zinc Ltd
- Minerals and Metals Trading Corporation (MMTC)
- Indian Bureau of Mines (IBM)
- Indian Space Research Organization (ISRO)
- Bharat Petroleum Corporation Limited (BPCL)
- Universities, Colleges & CSIR Labs
- State Government Departments

Other agencies those hire geologists are

- Cement Industry o Mining Industry o IT Companies- as domain experts o MNCs engaged in consultancy job and projects

- Consultancy Agencies

## TOP RECRUITERS

- Government Companies in Exploration and Production of Coal / Lignite

- Government Companies in Exploration of Metals

- National Aluminum Company Ltd. NALCO

- Mineral Exploration Corporation Ltd:

- Bharat Gold Mines Ltd

- Oil and Natural Gas Corporation Limited ONGC

- Hindustan Zinc Ltd

- Hindustan Copper Ltd

- Sikkim Mining Corporation Government Companies in Iron Ore Sector

- National Mineral Development Corporation

- Kudremukh Iron Ore company

- Steel Authority of India Ltd

- Orissa Mining

- National Aluminium Company Ltd

- Government Companies in Copper and Rock Mining



## DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

The Department of Computer Science & Engineering (CSE) was established in 1997, initially offering Bachelor of Technology in Computer Science & Engineering (B.Tech, CSE). The department focuses on mastering the fundamental concepts both theoretically and practically. The department is providing motivation for learning, intellectual efficacy and self-reliance, which provide the best foundation for continuing professional achievements. The B.Tech (CSE) programme offered by the Department had been accredited Thrice by the National Board of Accreditation (NBA) in 2004, 2007 and 2018 under Tier I Category.

Keeping in view the growth in industry and increasing demand of computer professionals, the Department has started a postgraduate programme to offer Master of Technology (M.Tech) in Computer Engineering and Networking. The programme provides intensive training to the students at an advanced level, enabling them to take up Research and Development (R&D) activities. The course curriculum has been specially tailored to fulfill the growing global outlook and focuses on upcoming technologies in the field of Computer Science and Engineering, to cater to the needs of the industry and R&D organizations. One should choose Computer Science and Engineering (CSE) as there are plenty of opportunities in this area, the platforms are incredibly diverse, and the jobs guarantee high remuneration with excellent job satisfaction. In addition, the skills learnt with the logic and problem solving abilities paves a sound trajectory for the rest of professional life.

The Faculty members of the Department are actively involved in research and development activities and are continuously participating and contributing in National

and International Conferences & Seminars. The faculty members of the Department are well published, experienced, conferred with M.Tech/Ph.D degree.

The Department has up to date laboratory facilities for both under graduate (UG) and postgraduate (PG) programmes. The Department has specialized labs for IBM programmes. The laboratories are equipped with state of the art computing facilities.

The department is having several student chapters of the professional bodies like IEEE, CSI, ACM & ISTE. Students are participating in various activities regularly to enhance their technical and interpersonal skills, under the banner of these professional societies. The department also interacts regularly with Information Technology organizations like TCS, IBM, Sun Micro Systems, L&T, Infosys, HCL, Tech Mahindra, Dell-EMC, R Systems etc. for providing latest technology updates to the students.

THE DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (CSE) WAS ESTABLISHED IN 1997, INITIALLY OFFERING BACHELOR OF ENGINEERING IN COMPUTER SCIENCE & ENGINEERING (B.TECH, CSE). THE DEPARTMENT FOCUSES ON MASTERING THE FUNDAMENTAL CONCEPTS BOTH THEORETICALLY AND PRACTICALLY.

Manav Rachna International Institute of Research and Studies (MRIIRS) has collaborated with IBM to jointly offer B.Tech Computer Engg. (Industry Integrated) in association with IBM in various specializations viz., Cloud Computing, Business Analytics & Optimization, Cyber Security & Forensics and Graphics & Gaming Technology. The subject matter experts from IBM teach the faculty members on cutting edge technologies through Train the Teacher Programme. IBM provides Learning Management System, Industry Projects for students, Expert Lectures, Industry connectivity for students & teachers to enable them to experience the live IT Environment.

This partnership helps students to acquire domain skills in the advanced areas of IT and preferential placements by IT companies. Students enrolled in these programmes have access to an online Eco-system Platform namely Innovation Center for Open Standards enabling them to access course material, discussion forums, student projects, industry mentors and news-clips.

Students enrolled in these programmes undertake live projects developed by IBM/ other IT majors under the mentorship of industry experts and go for industry visits in software development and testing centers. They also attend one week Industry Interaction programme at Bangalore in IBM facilities at their own cost, where students are exposed to industry environment by senior industry experts. During this interaction students participate in panel discussions, group activities and visit The Data centre of different industries. IBM issues certificates for various modules after successful completion in addition to the MRIIRS B.Tech (CSE) Degree. The Programmes in association with IBM lead a big increase in job opportunities and industry readiness for the students.

Approximately 25% of the credits relate to the specific specialization in a particular programme and replace certain courses covered under normal B.Tech (CSE) Programme.

The Department has also collaborated with other leading industries such as Dell-EMC, Infosys and R Systems International in order to give exposure to the students. These collaborations help the students to work on the technologies which are currently being used in industry.





#### PROGRAMMES OFFERED

- B.Tech: Computer Science and Engineering (4 Year / 3 Year with Lateral)
- B.Tech Computer Science and Engg. In association with IBM in following specializations (4 Years / 3 Years with Lateral Entry)
  - Digital Forensics & Cyber Security
  - Gaming Technology

B.Tech.-Computer Science & Engineering In association with IBM with specializations in Digital Forensics & Cyber Security, Gaming Technology IBM, which is a well known multi-national conglomerate having a turnover of more than US\$ 100 billion and worldwide business in computer hardware/software, IT services and consulting shall deliver specialized modules in the above mentioned and other domain areas in consultation with IT industry to enhance employable skills of Engineering/Management Graduates, which consist of Learning Management System, Student Project, Expert lectures from Corporates, visits to software development and testing centers. FET students enrolled in these programmes shall be extensively exposed to professional environment and industrial experience under the mentorship of academic and IT Industry experts. Those students who excel in the specified domain skills shall definitely be preferred by the reputed IT employers through campus drive. IBM shall also issue certificates for various modules after their successful completion in addition to MRIIRS degree.

- M.Tech: Computer Engineering & Networking (2 year)
- Ph.D

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website.

#### PLACEMENT OPPORTUNITIES

Excellent placements with over 90% of its eligible/ willing students placed in companies namely Microsoft, Infosys, TCS, Cognizant, Wipro, L&T Infotech, HCL, IBM, Hewitt, Tata Telecom, NIIT, Dell, Capital IQ, Vodafone, Airtel, Idea etc. With the introduction of specializations in B.Tech (CSE) Programme, placement opportunities for the students pass-out from the specialized programme will get further enhanced in a big way. In addition, placement opportunities are also available in the organizations such as DRDO, ISRO, ONGC, NIC, BSNL, Armed Forces, IES, Civil Services, Banking, Health Sector, etc.

The introduction of specializations in M.Tech (CE) Programmes such as Computer Networking (CN) aims at exposing students to the current edge of research.

Many students opt for higher studies/ research in India/Abroad. The programmes running in the Department also prepare the students to choose a career in research and development, which provide an excellent foundation for Ph.D study.

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Electronics and Communication Engineering has long played a critical role in supporting innovations that improve the quality of life, support economic growth, and address societal problems. The essential technologies that connect society: mobile phones, laptops, wireless communications, electronic displays, “smart” power grids, smart cities, smart buildings and rapidly evolving systems for monetary transactions are all evidence of the impact of innovation in this field of engineering.

The Department was set up in 1997 and its B.Tech-ECE programme was accredited by NBA in 2004, 2007 and 2018. The research interests of the faculty members of the department encompass the wide area of applied and fundamental aspects of Electronics and Communication Engineering including but not limited to Communication Systems, Microelectronics & VLSI, IOT, Digital Signal Processing, Wireless and Mobile communication, Antenna Design and RF & Microwave Engineering. Twenty Ph.D scholars are currently engaged in cutting edge research in the Department and nine have been awarded Ph.D degree. Faculty members and students are actively involved in research and have published their work in journals of National/International repute.

Faculty members in the department have filed patents in the following fields:

- Energy harvesting fractal antenna
- Self-tracking shopping system for supermarkets
- A mobile home based biogas digester

The Department has state-of-the-art, well equipped laboratories with adequate

facilities catering to the requirements of undergraduates, postgraduates and research scholars particularly in the area of High End Electronic Design, Microcontrollers, Microprocessors, Embedded System Design, VLSI Design, Antenna Design, Microwave, Advanced Communication Systems, Simulation and Digital Signal Processing. In addition to the well-equipped curriculum related laboratories, the Department has strong association with the Research Clusters and various Centers of Excellence in the University.

The Department strives to impart latest knowledge and skills so as to kindle innovation & creativity among students, to establish a culture of research while promoting values, ethics and professionalism, leading to a progressive career in industry & academia globally.

The Department has state of the art educational aids, visual laboratories and competent faculty ensuring effective teaching learning process to meet the ever growing and changing industrial and business environment. The whole learning process is designed in a way so as to continuously challenge the young minds with ideas, to carry out innovative research through interaction with the research organizations & industry and to provide them avenues for recognition by participation in challenging platforms.

The Department continuously upgrades the curriculum and teaching inputs taking cognizance of its prime stake holders viz. research organizations, industry, peer community, alumni, parents and students. To give greater emphasis on education methodology, guest lectures, seminars, workshops, personality development programs, educational tours, industrial visits and quizzes are organized. The department has linkages with industry, leading academic institutes and scientific research organizations like the DST, MoSPI, DRDO, IIT, ISI, SAP, RIL etc. The department has offered consultancy to various industries. The student chapter of Institution of Engineers India (IEI) and ISTE is fully functional in the department.



The Department also encourages the students to take up Entrepreneurship with the support of Government agencies which leads to formation of Organizations offering services and solutions.

The students of the Department have participated in various National and International Level Competitions and have bagged top position in Intel Higher Education Challenge, Accenture Innovation Challenge, Microsoft Imagine Cup and techfest's of IIT's.

The Department has the following Knowledge Partners:

- Intel
- Texas Instruments (TI)
- Microchip
- Cogenda

Intel IOT Centre is a centre for higher education program for enhancing skills in IOT Domain using INTEL platforms.

Microchip has sponsored labs wherein 8 bit microcontrollers to ARM based microcontrollers from Microchip are being used for developing projects.

Texas Instruments (TI) India University Program (Edgate Technologies) has collaborated with the department wherein different lab facilities have been created within the department for enhancing the hands on skills of the students in the Domain of Embedded Systems, Analog Electronics, Power Systems, IOT & Sensor Technologies. Cogenda for collaborative projects in VLSI domain

These knowledge partners provide students the opportunities to do research on the latest cutting edge technologies and acts as an interface for skilling them as per requirements of the Industry.

#### PROGRAMMES OFFERED

- B.Tech Electronics & Communication Engg (4 Years / 3 Years with Lateral Entry)

This programme provides an opportunity to the students to learn the insights to the most important technologies driving the modern world namely Artificial Intelligence and Internet of Things.



Students will be given 360 degree exposure to various INTEL Hardware and Software platforms that are used in Industry for AI and IoT development. Curriculum designing in consultation with INTEL Experts will provide an opportunity to the students to acquire the latest skills in these cutting edge technologies using Intel Intelligent Systems Lab through INTEL experts. Students will get an opportunity to work on INTEL Xeon Processors, INTEL Parallel Studio Software, Intel System Studio Software, INTEL AI development Tools, INTEL AI Software Libraries, INTEL Frame Work Optimization, Movidius Neural Compute Stick and INTEL FPGA Boards. In the IoT Space, the students will get to learn about INTEL Galileo, INTEL Edison Boards along with other popular boards like Raspberry Pi and Arduino for designing IoT Systems. Students will get certified on successful completion of the course which caters to the need of Industry 4.0, theory and lab Courses related to Artificial Intelligence, Machine Learning, Internet of Things and detailed coverage of Electronics hardware that is driving these technologies.

This programme opens up Job opportunities for the Students in various Electronics and IT Industry and various sectors like Health Care, Core Electronics, driverless cars and various other areas where AI and IoT are playing an important role

- M.Tech Electronics and Communication Engineering (with specialization in Communication Systems/VLSI Design & Embedded Systems) (2 year)
- Ph.D

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website.

Strong Alumni Network is available in the Department with Alumni serving in Corporates like Microsoft, Infosys, Mentor Graphics, Cadence, ST Microelectronics, TCS, Microchip and other reputed Technology Leaders. Various reputed Alumni are also serving in Government Organizations and Defense Services.

#### PLACEMENT OPPORTUNITIES

Placement opportunities are available in Public sector companies like BEL, BSNL, BHEL, NHPC, NTPC, DRDO, DMRC, C-Dot, HAL, Airport Authority, BARC, ISRO, DoS, DST, NPL, Armed Forces and Core companies like Mentor Graphics, Cadence, Microchip, ST Microelectronics etc. Large MNCs and IT companies namely Infosys, TCS, Wipro, L&T Infotech, HCL, Hewlett, Satyam, Tata Telecom, NIIT, Siemens, Huawei, Ericsson, Ceasefire, Capital IQ etc. are the major recruiters. Students also opt for higher studies. New organizations handling IPR and Patenting also offer job opportunities to our students.

## DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

Electrical & Electronics Engineering is one of the fastest growing fields that involves study and application of electricity and electronics. It is a fascinating field, and one which could make your time challenging and providing enriching & rewarding experience. With challenges and with the rapid expansion of the technology sector over the last few decades, the demand for those who can create, understand and alter electrical control systems has raised accordingly. In the past few years, India has made impressive progress in the area of Renewable Energy. The Govt. has also initiated several programmes and schemes to promote the renewable energy sector as it has plenty of opportunities, both for employment and business. It augurs a bright future for Electrical engineers.

The Department commenced its activities in 2007. EEE department has adopted a teaching programme to develop in each student the mastery of fundamentals, motivation for learning, intellectual efficacy and self-reliance which provide the best foundation for continuing professional achievement. This shall prepare the students to deal constructively with issues and problems anticipated in the coming decades relevant to the technological development of our country in general and power/ energy sectors in particular.

The department has highly qualified and experienced faculty drawn from both industry and academia. The department has up to date laboratory facilities. The major laboratories are: Electrical Machines, The department has entered into the collaboration with Mitsubishi Electric India (MEI) since 2013, a global leader in Electric equipments. Under this collaboration Factory Automation Lab has been set up by Mitsubishi in the department equipped with latest automation products like i-QR training set up, SCADA software and Robotics set up. Regular trainings, FDP's, workshops and webinars are conducted for students/faculty by MEI trainers at the campus as well as at the MEI training centre in Gurugram. Mitsubishi is also providing Internship to selected students for the period of two years which includes training on live projects as well. It offers ample employability opportunities for students & consequently better careers. Moreover, Mitsubishi is also assisting students for placements.

The department has MoU with Infineon Technologies (originated from the Siemens semiconductor division). Under this MoU "Infineon Centre of Excellence" has been set up in the department which is the first centre of Infineon in India launched by Infineon's Power Management & Multimarket (PMM) division. Infineon will provide Internship, expert talk and workshops to students and also opportunity to work on live Industrial projects in collaboration with them.

The department has also entered into a MoU with Orient Electric Ltd, Faridabad to carry out consultancy projects. Expert faculty members of the department are currently working on projects of Orient Electric Ltd.

The infrastructure and lab facilities in the department are upgraded from time to time to provide adequate opportunities for the students and researchers to learn and innovate. Major softwares available for Research/ B. Tech. and M. Tech. Projects include Lab View, Matlab, Simulink and Digsilent for Load flow Studies and Power System Simulation. Necessary equipments are available for measurement, characterization and synthesis of Electrical, Electronics and Instrumentation Systems.

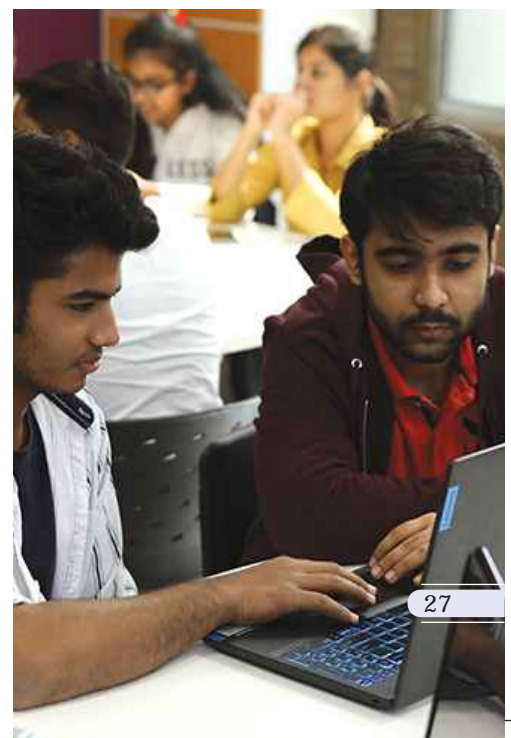
Academic growth of faculty is encouraged through their participation in various short term courses, National/ International conferences and seminars and higher studies. All the faculty members engage themselves in research activities and the department has 85 publications in National and International journals of repute and proceedings of seminars/ conferences over the years. 13 Research scholars are enrolled for PhD Programme in the department & 9 have already been awarded Ph.D

There is a student chapter in association with Institute of Engineers (India) in the department. Various events like technical quiz, seminars, paper presentation etc. are organized under its umbrella.

### PROGRAMMES OFFERED

- B.Tech. in Electrical & Electronics Engg (4 Years/ 3 Years Lateral Entry)
- M.Tech - Automation & Robotics in association with Mitsubishi Electric India (2 Years)
- Ph.D

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website





## PLACEMENT OPPORTUNITIES

Electrical Engineers are much in demand in India, and have numerous opportunities. Electrical engineers can work in atomic power plants, hydel or thermal power plants, railways, civil aviation, electricity board and utility companies, electrical design and consultancy firms and all types of manufacturing industries. The candidates can also find job opportunities in Production plants,

Design industries, Petroleum industry, Natural gas plants etc. in the private sector as well. Companies like ABB, Bajaj International Private Ltd, Crompton Greaves Limited, Siemens Ltd, Reliance Power Ltd, Oil and Natural Gas Corporation (ONGC), Bharat Heavy Electricals Limited (BHEL), Steel Authority of India Limited (SAIL), Coal India Limited (CIL), Power Grid Corporation of India Limited (PGCIL), Centre for Electronics Design and Technology and Wipro Lighting are the biggest employers hiring Electrical Engineers.

Apart from this, students also go for higher education and entrepreneurship. Over the last few years, most of our students have been placed in public and private sector corporations.

M.Tech in Automation & Robotics in association with Mitsubishi Electric India

About the course : The increased demand of current industry for efficiency and safety has led to a greater need for professionals with an added expertise in the field of "Robotics & Automation". Robotics & Automation combines design, construction, operation and application of robots coupled with computer based computer systems, sensory feedback and information processing. The design of a robotic system puts together principles of Electric & Electronics Engineering, Mechanical Engineering and Computer Engineering.

M.Tech in Automation & Robotics Engineering involves design, development and up-gradation in terms of automating products, systems and processes in every walk of human life. It includes :

- Hand-on Experience of Robotics and Automation by Theory & Practice.
- Well equipped labs which help in development of analytical skills, modeling and simulation skills to identify and analyse problems, propose and execute solutions.
- Training on latest lab equipments Programmable Logic Controllers & SCADA, Simple Motion Control, Variable Frequency Drives, Robotics and Graphic Operation Terminal.

M.Tech Automation & Robotics Engineering will enable students to serve the Industry requirement for implementation of new and smart technologies covering methods of synthesis, analysis and optimization of newer robots and mechanisms. Immediate & long term employment opportunities exist in the fields like Industrial Automation, Manufacturing, Agriculture, Mining, Aerospace, Healthcare and Defense. Also this field finds applications in the regular streams like Mechanical systems/design engineering, Electronics systems engineering and Control systems engineering.

Some major Recruiters are:

- Honda Trading Corporation India Pvt. Ltd.
- Daikin Air conditioning India Pvt. Ltd.
- Mitsubishi Electric India Ltd.
- Panasonic Industrial Asia Pvt. Ltd.
- Sharp Business Systems. (India) Ltd.
- Sony India Pvt. Ltd.
- Toshiba India Pvt. Ltd.
- Toyota Motor Corporation
- Asahi India Glass Ltd.
- Hero Honda Motors Ltd.
- Hitachi Metglas (India) Pvt. Ltd.
- MarutiUdyog Ltd.
- Denso India Ltd.

Note: Mitsubishi Electric India has set-up an Advanced Factory Automation Lab and its Centre of Excellence. The center has world class infrastructure with latest iQR set up including: Q series Programmable logic Controller (PLC), Servo, Variable Frequency Drive (VFD), Graphical Operational Terminal (GOT) 2000 X-Y Plotter, FX Kits, Robot Simulator setup with six axis joint & 240 degree in either direction which is the First Robotics Lab set up by MEI in the north India and SCADA Software for monitoring and analysis. Regular training programmes/courses are conducted in this Factory Automation Lab and Centre of Excellence.

## DEPARTMENT OF MECHANICAL ENGINEERING

Professional opportunities are vast in number for a mechanical engineer in the present generation of IR.4.0, Robotics, Additive Manufacturing, distribution of energy, material processing, industrial automation & control of manufacturing systems, design & development of mechanisms & machines etc. Ever since its inception in 1997, Department of Mechanical Engineering has grown in stature over the years considering its performance and achievements. The B.Tech-Mechanical Engineering program offered by the department





has been accredited by NBA in 2004, 2007 and 2018. Mechanical Engineering being very versatile branch remains the most preferred programme for admission seekers. The department is privileged to be a centre of highly qualified faculty members who are actively involved in research and innovation. A large number of publications in the form of books, research articles in journals of repute, patents and projects are undertaken by faculty members of the department. The department has various labs on Thermal Engineering, Fluid Mechanics, Fluid Machines and Turbo Machinery, Applied Mechanics, Strength of Material, Metrology etc. It is one of the only education centre which has all 8 working shops in the Central Workshop facility. Mechanical Engineering Department is a continuously evolving department and is truly progressive in nature. A fully equipped design centre with all basic as well as advanced software including AutoCAD, CATIA, CREO, ALTAIR, MATLAB, etc. is available in the department. Also, the labs are regularly upgraded with the addition of major equipment like fatigue test rig, torsion test rig, HMT precision lathe, cylindrical grinding machine, tool maker's microscope, gear roller tester (Parkinson's type), auto collimeter, Coriolis component equipment, epicyclic gear train, balancing of reciprocating masses.

Mechanical Engineering Department from Manav Rachna International Institute of Research and Studies is responsible for organizing many events in Collaboration with IET (India) (Institution of Engineers),

Indian Society for Technical Education (ISTE), Quality Circle Forum of India (QCFI), Quality Council of India (QCI), Indian Institute of Foundry (IIF), Indian Society of Heating, Refrigeration & Air conditioning Engineers (ISHRAE). A lot of events like such as job junction, expert lectures, technical quiz, conclaves etc. We are also in the process of making MOU between MRIIRS & various professional bodies of repute apart from many currently existing ones. Also, development of centers of excellence by the department in collaboration with these bodies at MRIIRS Campus is already in progress.

MoUs have also been signed with various industries and government agencies to carry out consultancy projects. The department offers following programs at graduate, post graduate and doctoral level apart from PhD degree.

#### PROGRAM OFFERED

- B.Tech in Mechanical Engineering (4 Year/3 Year with Lateral Entry)
- M.Tech. Mechanical Engineering (2 Year)
- Ph.D

The detailed semester-wise course structures along with study schemes for the programs are available on MRIIRS website

B.Tech in Mechanical Engineering (with specialization in Mechatronics) (4 Year) Mechatronics is a multi-disciplinary study dealing with the integration of mechanical devices, actuators, sensors, electronics, intelligent controllers and computers. Many new generations of consumer or commercial products can be classified as mechatronic products as they involve mechanical as well as electronic components. The need for mechatronic education has grown due to the increase in the number and importance of such systems and devices. The program is designed to provide in-depth knowledge in the fundamentals, design, analysis and operation of mechatronic systems.

\*B.Tech Mechanical Engineering (Industry Integrated in association with JBM) is offered jointly with JBM Group of Industries in which academic delivery shall also be made by Industry Experts in 3rd and 4th year in specified focused areas of Computer Aided design, Robotics, Automation, Digital Manufacturing, Industry 4.0 etc. Program includes 6 months structured industrial training and the key features of this program are (i) Industry engagements from first year onwards (ii) Pedagogy aligned with the industry environment (iii) Industry integrated projects (iv) Assured placement with letter of intent being offered at the time of admission with fulfillment of certain academic and training criterion.



#### JBM GROUP

JBM Group, a \$2.2bn global Indian conglomerate, has over 3 decades of excellence in driving product innovation & value across automotive, buses & electric vehicles, EV charging infrastructure, renewable energy, engineering & design services and railways sectors. With modest beginnings in the early 80s, JBM has leapfrogged multi-fold with an infrastructure of 60 manufacturing plants, 4 engineering & design centers in over 10 countries globally today with workforce of more than 30,000 employees.

The automotive business of the Group caters to a variety of key auto systems, safety critical assemblies & tools serving marquee OEMs such as Ashok Leyland, Bajaj, Daimler, Fiat Chrysler, Ford, Honda, Hero, JCB, Jeep, Mahindra, Maruti Suzuki, Renault, Nissan, TATA, Toyota, TVS, Volvo Eicher, Volkswagen and many more. JBM has carved a niche across various product categories by virtue of its alliances with over 15 globally renowned organizations like Arcelor Mittal, Cornaglia, Dassault Systems, JFE Steel, Ogihara, Linde-Wiemann, Solaris Bus & Coach S.A., Sumitomo, etc.

Consistent innovation, constant learning and benchmarking best technology in all its endeavours has been the cornerstone for JBM's sustained and consistent growth over the decades. JBM believes in acting as a one-stop shop encapsulating end to end solutions to attain and sustain customer delight. The Group's state of the art

in-house R&D Centre has been recognized by the Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India.

#### PLACEMENT OPPORTUNITIES

It is the primary focus of the Department of Mechanical Engineering to ensure that 100 percent placement target is achieved every year. A number of endeavors are successfully undertaken in this direction. Our students have been selected by industry giants like Tata Steel, Krishna Maruti, JBM, Indigo, TCS, JARO, Think and Learn, Stryker and a number of other industries of repute during various placement drives at campus. The highest package offered was around 12 lpa during last year.

The department also organizes Job Junction of North India Zone at the MRIIRS campus every year where students of all the colleges/ universities of Northern India having ISHRAE membership are invited for appearing in selection for different companies. Many students were selected by different companies like Blue star, Voltas, Daikin, Hi-Tech, Caryaire, Resistoflex, Sterling and Wilson, Kirloskar, Ruskin Titus etc. The salary package varied between 3 lacs to 6 lacs per annum depending on the company. Apart from this, the professional tie-ups with various prestigious Engineering bodies also benefit the departmental students in securing high end job opportunities.

#### DEPARTMENT OF APPLIED SCIENCES

The Department of Applied Sciences has three constituent units i.e. Physics, Chemistry & Mathematics and Ph.D program in different areas of Physics, Chemistry and Mathematics. Other than this, School also functions as an academic facilitation unit within the campus in which various courses of Physics, Management, Mathematics, Chemistry, Holistic Wellness & Life Skills, Professional Communication and Environmental studies are offered to the students enrolled in various programs. The aim of School of applied sciences is to provide sound knowledge base to the students of various disciplines. School is a house of well equipped Physics and Chemistry laboratories with modern facilities. Students are trained to explore, to innovate, to analyze and to acquaint themselves with the applications of basic sciences in engineering and technological areas. Workshops, competitions and conferences are the part of regular activity of all departments to motivate and sensitize the students for research. From the first year itself, we try to infuse self confidence in the students and offer unconditional support to them. We help them further to develop the skills and demeanor of lifelong learning so that they become academically competent and capable of facing the future with resilience and optimism.

All the departments have highly qualified, experienced and dedicated faculty which helps in creating an exciting academic and research oriented environment.



## PROGRAM OFFERED

### PHYSICS

The Physics unit of department of Applied Sciences offers an opportunity to the students to understand the fundamentals of basic physics that underlies most developments in engineering. Emphasis is given on hands-on experience of modern experiments of in Physics and an excellent preparation of students for a broad range of careers. The Department has a fully equipped Physics Laboratory with major facilities. Department also provides a stage to the students where they can showcase their innovative ideas by converting them into workable models. Many students have made models and won prizes in state and national level inter university competitions. The department has experienced and research oriented faculty members who are involved in research activities and have contributed many research publications in various indexed Journals/conferences of both national and international repute.

## PROGRAM OFFERED

- Ph.D. Program with specialization in Material Science, Plasma Physics, Nanotechnology, Polymer Fibres and Noise Pollution.

## MATHEMATICS

Mathematics is a foundation course to provide mathematical background to the students so that they are able to understand the charm of digits and equations required for various domain subjects. The department has experienced and research oriented faculty members who are involved in research activities in different fields of applied and pure mathematics. Faculty members have contributed many research publications in referred National, International Journals and conferences.

## PROGRAMMES OFFERED

- Ph.D Program with specialization in Bio-mathematics, Fluid dynamics, Fuzzy Theory, Decision Sciences, Fixed Point Theory and Numerical Analysis.



## CHEMISTRY

The Chemistry unit of Applied Sciences is dedicated to excellence in teaching and research. We prepare students for meeting technological challenges faced in ever changing world. The department has experienced and highly qualified faculty members. Faculty members are enthusiastically engaged in cutting-edge research in emerging areas. Faculty members have contributed many publications in reputed national/international journals/ conferences. Two AICTE sponsored research projects worth Rs. 14 Lakhs on “Bio-diesel Purification” and “Development of Composite Polymer Electrolyte films” have been successfully completed by the department. Departmental laboratory is well equipped with modern equipments.

Every year, the department organizes conferences, expert talks, workshops and competitions on varied topics of academic relevance.

## PROGRAM OFFERED

- Ph.D. program with specialization in composite polymer electrolytes, synthetic organic chemistry, colloidal chemistry, corrosion studies and water purification.



# FACULTY OF COMPUTER APPLICATIONS (FCA)

Faculty of Computer Applications is one of the earliest entities of the university provides industry ready and research oriented computer education and applications through different programmes. Currently it offers MCA, M.Sc.-IT, BCA, B.Sc. IT with various specializations like Internet technology and Software Development in association with Auckland Institute of studies (AIS), New Zealand and Ph.D Programmes with latest industry-ready curriculum which is kept regularly updated in the light of latest developments in the IT industry. The curricula for all the programmes being offered at FCA have been designed as per UGC Choice Based Credit System (CBCS) with a basket of reasonably good number of Elective Courses including Discipline Elective, Generic Elective and Open Electives. Some of the recent courses include Android Application Development, Cloud Computing, Optimization Techniques, Digital Image Processing, Compiler Design Software Project Management and Search Engine Optimization.

We at FCA provide a highly interactive learning environment so that the students get full fledged knowledge of Information Technology and its related work culture. Being into Information Technology sector we also make sure that our students should understand the need and utilization of service industry.

Students are encouraged in innovative and critical thinking in various computer languages and platforms. They are exposed to live industry projects to enable them to gain insights into the working of the industry.

One of our key areas of strength is highly qualified, experienced, committed and professionally oriented faculty. Faculty serves as a mentor to the students throughout their stay during the programme. Post-graduate students are also guided for research in addition to their curricula. A separate entity has also been committed for the research

activity for the post graduate students. Students of UG and PG are also encouraged to write research papers in good journals and present them in International & National Conferences.

The Faculty of Computer Applications has modern classrooms with quality audio-visual equipment and computer labs with latest software and equipment. The entire MRIIRS campus is Wi-Fi enabled with good connectivity. The students have access to world-class library stocked with a large number of books, professional journals and other academic resources.

We at FCA provide a highly interactive learning environment so that students get full-fledged knowledge of latest trends in the information technology and its related work culture. The faculty members and students are kept abreast of the latest trends in the field of information technology through regular Conferences, Workshops and Seminars at National/International level. Faculty members are actively involved in the areas of research like Data Analytics, Network Security and Cloud Computing, Machine Learning, Big Data, Software Defined Networking, Internet of Things, Robotics, Cryptography, Data Mining and Human Computer Interaction.

We provide great thrust on practical applications. Students are exposed to live industry projects to enable them to gain insights into the working of the industry. Along with the technical education, we also invest in the sharpening of what are labelled as soft skills. These abilities which are linked to personality traits will help the students to transform into outstanding corporate resources. For this purpose we have various clubs in the department where variety of activities are planned and executed by students under the guidance of our experienced faculty members.





Research plays a significant role in the process of conceptual thinking, learning and innovation. Research and Innovation Clusters provide technology and innovation support whereas Incubation helps the students to develop practical business models as startups or spin offs to become student entrepreneurs for working towards the policy “Make in India” by the Government of India. Department is having state of the art laboratories and highly qualified & research oriented faculty members.

Apart from rigorous classroom teaching, the students are given online practical assignments from time to time. There are regular mentoring sessions for each student in which academic and non-academic problems of students are individually discussed & resolved. Students and faculty members at Computer applications department are associated with professional societies like IEEE, ACM and CSI to enhance their professional skills.

As you embark upon your University career, we welcome you to join this exciting world of Computer Science in all its facets.

Major Recruiters for our students are: AON Hewitt, CMC, DELL, HCL Technologies, L & T Infotech, Motherson Sumi, NIIT, SAMSUNG, WIPRO, ACCENTURE, SONY ERICSSON, GENPACT, Zen Focus, 3 Pillars Global, Tech Mahindra, Aricent Technologies, TCS, ICS Solutions, SunLife, etc.

#### PROGRAMMES OFFERED

- Bachelor of Computer Applications (3 Year) (BCA) is an undergraduate degree course in computer applications. BCA provides learning thorough analytical skills, including analysis involved in computer systems and technology. Students are given knowledge on topics like Programming languages (C, C++, Java, Python, SQL, R etc.), hardware and software, computer networks, World Wide Web, Database Management, Multimedia, Artificial Intelligence, Machine Learning, Cloud Computing, Cyber Security etc.

- B.Sc. - Information Technology (3 Year) B.Sc- Information Technology is being offered in collaboration with Auckland Institute of Studies (AIS), Auckland, New Zealand, a unique tertiary institution providing NZQA Accredited UG and PG level programmes. AIS has partnered with MRIIRS to provide curriculum and accreditation support for B.Sc (IT). The students admitted in B.Sc- Information Technology programme shall undergo 4-week study abroad programme/ internship at AIS Auckland, New Zealand as a part of their programme.

- MCA - (3 Year) Master of Computer Applications (MCA) is a three-year (six semesters) professional Master's Degree in computer applications. The course is designed to meet the growing demand for qualified professionals in the field of Information Technology. It is a postgraduate course that can be taken up after obtaining a Bachelor's Degree. The MCA programme is inclined more towards Application Development and thus has

more emphasis on latest programming language and tools to develop better and faster applications. The course curriculum is a blend of Computer Science, Management and Mathematics and covers various aspects of Computational theory, programming, algorithm design and optimization, network and database management, mobile application developments, mathematics, Principles of Management, machine learning, Internet of things, cyber security etc.

- MCA - Lateral Entry (2 Year)

Master of Computer Applications (MCA - Lateral Entry ) - Students who are undergraduate with BCA or B.Sc. (IT) or B.Sc. (Computers) can take admission directly into second year of MCA programme.

- Master of Science - Information Technology (2 Year)-, a two year programme will offer an intensive and high end exposure of areas related to Computer Science by focusing on the advanced modules related to various specializations including data science, Web Application Development, Networking and others. It provides an opportunity to undergraduate students of any stream to explore his career in Information Technology. The projects and dissertation in M.Sc-IT can be directed towards software industry relevant projects as well as research based contributory projects which in turn will promote the inclination of students towards research.

- Ph.D.

The detailed semester-wise course structures along with study schemes for the programmes are available on MRIIRS website.

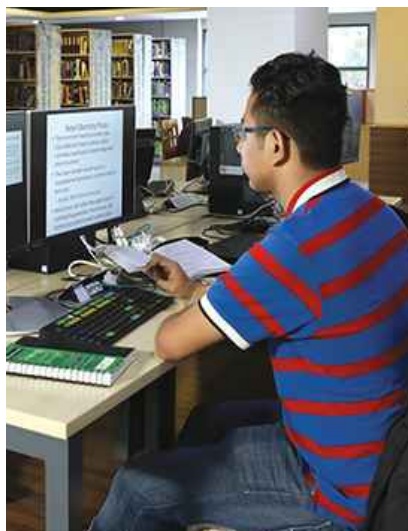
# FACULTY OF ARCHITECTURE & DESIGN (FAD)

## PROGRAMMES OFFERED

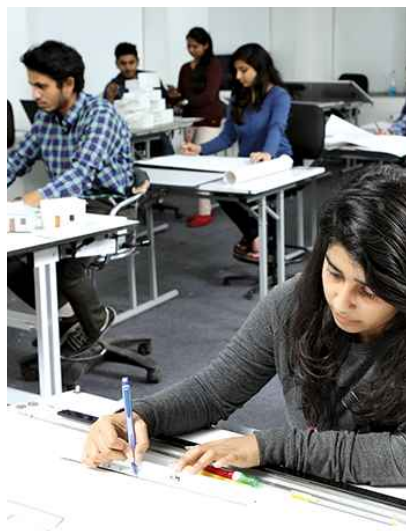
- B. Arch - Bachelor of Architecture (5 Year)
- B.Sc. - Interior Design (3 Year)
- \*B. Design (4 year) Specialization in
  - a) Product Design
  - b) Animation and Visual Effects (VFX)
  - c) Communication Design
- M.Sc. - Interior Design (2 Year)

## ABOUT B.ARCH.

Architecture, as an Art and Science of built environment has been in practice right from the inception of mankind. Considering its holistic nature, role and importance in serving interests of the society, community, client, preserving ecology and environment, preserving, addressing social issues and expanding aesthetic frontiers, Architecture has emerged as the most pivotal profession in the context of ever creating state of art manmade environment. The emerging needs of time, complexity of technological advances, emerging new areas of expertise, exponentially shrinking global environmental and natural resources has altered the entire context of Architectural Education calling for highest order of professional competence, knowledge and experience.



With the greater recognition of the ever increasing role and importance of the profession in creating sustainable, safe, qualitative and cost-effective functional built environment, improving quality of life and making life more productive and livable, Architectural practice requires greater skills based on higher order of knowledge, intelligence and practice. Recognizing this trend, Manav Rachna International Institute of Research & Studies (Deemed to be University) has undertaken the task of improving the standard of Architectural Education. With its commitment to encourage the state of art and science of planning and buildings, the appropriate standard of architectural education for enabling the new generation of Architects to face emerging technological and environmental challenges of the profession most effectively and efficiently. As per the Minimum Standards prescribed by Council of Architecture (COA) under the Architects Act, 1972, admission of candidates to first year of Fiveyear B.Arch. degree course shall be subject to their passing of an aptitude test in Architecture.



The students will be admitted in the 1st year of B.Arch. degree course on the basis of marks obtained in the National Aptitude Test in Architecture (NATA) administered by COA.

The Aptitude Test in Architecture shall consist of 2 papers:

- Test-I-Mathematics & General Aptitude of 120 marks-duration of test-One hour plus two hours.
- Test-II-Drawing-80marks-duration of test-Two Hours. Drawing Test Candidate has to attempt two questions within 120 minutes. The drawing aptitude is judged on the following aspects:
- Students are also admitted on passing the JEE paper- 2 Examinations conducted by the CBSE or any board of Govt. of India.

## Duration of the Programme

- The Programme is of Five academic years, (each year comprising two semesters of 18 working weeks each) inclusive of Sixteen weeks of practical training after the first stage in the eighth semester, in a professional's office.
- The Five years Bachelor's Degree Programme is conducted in two stages.
- First Stage: The first stage is of three years (six semesters) of institutional academic studies. Maximum permissible period for the successful completion of first stage shall be five years from the date of admission.
- Second Stage: The second stage is of two academic years (four semesters) including Sixteen weeks of practical training.
- The maximum permissible period for completing the Bachelor's Degree Programme in Architecture for which the prescribed Programme duration of Five years shall be Eight years.
- The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.

## EMPLOYMENT OPPORTUNITIES

Professional Architects can build careers as independently practicing Architects, as Architects working within Architectural firms, as academicians focused on teaching and research, or within non-governmental organizations. In India, the Architectural profession is regulated by the Council of Architecture (CoA), which was established by Parliament through the Architects Act, 1972



## BACHELOR OF SCIENCE - INTERIOR DESIGN (3 YEARS)

The Interior Design course encourages the student to develop imaginative, responsible solutions to problems created by social needs and economic constraints, as well as the material and physical limitations of the built environment. The integration of fine art classes elevates the student's ability to develop innovative solutions & further balances the increasing demands of technology.

Since interiors are an extension of one's personality, an interior designer has to essentially be a people's person. Designers need to understand attitudes, lifestyles and cultural preferences and take all three into account in their designs. In addition, they have to keep in mind the hobbies and habits and let's not forget the budget (good taste need not necessarily be expensive) of the person they are designing for.

The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.

### EMPLOYMENT OPPORTUNITIES

The B.Sc. Interior Design Programme trains professionals to design and create spaces for various sectors of industry. Graduates may find employment in sectors such as Residential, Retail, Hospitality, Exhibition/Events, Lighting, or Furniture design.

They may work for architecture, interior design, or construction firms or they may choose to be self-employed. Graduates of the Bachelor's Programme in Interior Design can exercise their skills both in third sector businesses as well as in private sector.

### Curriculum Salient Features

- Supported by industry professionals
- Vital exposure given to students during the training to comprehend the subject in totality.
- Curriculum and content ensures learning of the subject by focusing not only on Interior Design but also Interior Architecture & Design aspect.
- Imparting quality education
- Shift from theory based teaching to application based learning
- Authentic assessment, be it formative or summative
- Reaching conclusions & making recommendations
- Evaluations are held at frequent intervals
- Focus on overall personality development.
- Centralized course content, E-Library which can be accessed 24/7
- Extensive knowledge of the contemporary world, ongoing & International design trends
- Also focusing on complexity of the consumer market & real world which create a designer who knows how to combine technical and creative design knowledge.

## MASTER OF SCIENCE - INTERIOR DESIGN

The Master of Science (Interior Design) course is addressed for graduate students with B.Sc. (Interior Design), who want to be practicing professional or academicians, so as to broaden their horizons to encompass new forms of experimentation and new aesthetic opportunities.

Interior Designers must be able to manage both technical strategic sides of a project, starting from an accurate analysis, and to provide the best solutions in terms of space enhancement and service design. They are asked to create spaces that convey strong feelings, combined with the right selection of furniture, lights, materials and colours.

The objective of the program is to produce a new professional quality by linking creative and technical skills. Students will be trained to be an Interior designer to manage the team of craftsmen engaged to realize your master piece.

The programme culminates in a formal research thesis in which students are encouraged to systemically develop and test research based design solutions, theories, and methods.

Students are imparted advanced learning in:

- Analyzing designs of Architecture & construction
- Interior design environment.
- sensitive use of light, paths, transparency, rhythm and the tectonic condition of the materials.
- Implementing context-based design.
- Synthesize existing knowledge, identifying and accessing appropriate resources and other sources of relevant information and critically analyzing and evaluating one's own findings and those of others.
- Apply existing research methodologies, techniques, and technical skills.
- Communicate in a style appropriate to the discipline
- Demonstrate advanced understanding of design process and methods
- Understand the contextual implications related to design process including culture and whole systems impact.
- Keep abreast of current advances within one's field (e.g., environmental psychology, design research, facility planning and management, ergonomics, etc.) and related areas

## B. DESIGN

At MRIIRS, B. Design is taught in tandem with industry research, development and requirement. We focus on hands on, practical based education with a keen focus on developing professionals that are readily deployed into the industry upon graduation. Our practical approach in design inculcates developing a 'Design Schema' that is complimentary to Digital as well as Analogue methodologies with the final learning outcomes in the digital deliverables. This approach is deployed from the first semester itself and is followed in every semester till graduation. Study Design at MRIIRS and be future ready.

B.Design is being offered with following specializations and the student can offer any one of the specializations:

- Animation and VFX
- Product Design
- Communication Design

### Animation and VFX:

Contemporary media be it Television, Internet streaming content or Film blockbusters are overwhelmingly reliant on Animation and Visual Effects. Big budget franchises like Star Network, Sony Entertainment Television, Electronic Arts, Disney, Industrial Light and Magic, Weta Digital, Marvel, DC Comics etc depend on highly creative, realistic effects to satisfy cravings for more immersive and unique experiences.

### What is a Visual Artist (Animator/VFX artist)?

Animation and Visual effects today is a complex professional field with many specialties, a visual artist (Animator/VFX artist) is someone who creates special imagery and effects mainly for live-action Films, Television commercials, Television series, High-End computer games and performing arts events such as live shows.



All Visual artists (Animator/VFX artist) share a basic understanding of filmmaking, image designing, storytelling and ability to create magic on the digital screen. However, at some point in their careers, all Visual artists develop and master a unique specialty that leans them towards either Animation or VFX.

### Scope:

Technology is moving at a fast pace and developments in analytics tools are helping artists to track projects and provide detailed analysis of the work they are doing. This provides production companies/studios with accurate data, as well as the ability to monitor projects in real time. Example: Shotgun from Autodesk.

Developments in cloud computing are also making tasks easier and more accessible, reducing time spent on technological tasks and empowering freelance artists to access industry leading tools from anywhere in the world. The democratization of VFX work means that VFX companies are able to outsource smaller tasks and spend more time on specialist, higher paid work.

Above all, the work of VFX artists is becoming more recognized within the entertainment industry and beyond. As the quality of visual effects become more important in filmmaking. The success of films like Lion king, Alita, Jungle Book, Avengers: End Game etc. shows that the Animation and VFX industry is the catalyst for success in Films and digital distribution platforms such as Netflix, Prime Video etc. Animators and VFX artists can find work in all major companies such as Weta Digital, ILM, Prime Focus, Double Negative, Red Chillies Entertainment etc. in roles such Animator, 3D Modeller, Rigging Artist, Compositor, Roto Artist, Lighting Artist, Concept Artist, Digital Painter etc.

### Product Design:

Product design is process, a process that enables the learner to Imagine, Design and Create an entity or an artefact that is used as a utilitarian tool in singular or in multitude as part of a larger process of mass producing an entity. Example a mobile phone, a car or an airplane. The study of various processes such as research, ideation, execution, deployment etc. associated in creating these entities is known as Bachelor of Design in Product Design.

### Scope:

Product Designers can be full-time employees in design and development based organisations. They can be employed as product designers, product

development managers in the manufacturing industry either in domestic or in international markets. Product Designers can find work with design focused companies like Apple, Tesla, Samsung, Tata, Mahindra, etc. Students can also choose to specialise in a wide variety of domains such as like consumer electronics, clean energy, industrial production, electric transportation, sustainability etc.

### Communication Design:

Communication design is an eclectic mix of design, media and messages within a specific culture or a society where entities (digital or physical) are designed as an integrated process focussed on spreading awareness for a specific product or a process. This is done through communication channels in broadcast television, print media or internet streaming content that aims to attract the attention of consumers. Design competence adheres and caters to different cultures and maintains an appealing visual design that aims to leave an impact on the consumers memory for a particular product.

### Who is a Communication Designer?

The term Communication Designer is a generic term and its practitioners work in myriad mediums (Digital, print, outdoor and analogue) to get a message across to the target audience. They can be categorised as Graphic Designers, Advertising artists, Illustrators, Web designers, Motion graphic artists, Printmakers, Concept Artists, Video Editors etc.

### Scope:

The Indian Advertising industry currently stands at \$10 billion. Digital advertising is set to grow at 31.96 per cent CAGR, with the market set to expand to Rs 24,920 crore (\$3.52 billion), according to the Dentsu Aegis Network Digital Report 2019. Pegged at 61,878 crore (\$8.76 billion) in 2018, the Indian advertising market is estimated to grow with a CAGR of 10.62 per cent till 2021, to reach a market size of 85,250 crore (\$12.06 billion). Television and print media would continue to corner the largest share of media spends at 70 per cent aggregated.

The shift of advertising spending from traditional to digital media is happening at a rapid pace. While digital media currently contributes 17 per cent to total advertisement expenditure, it is expected to zoom past 29 per cent by 2021. This presents a massive opportunity to students seeking a career as a Communication Designer.



# FACULTY OF ALLIED HEALTH SCIENCES

The present era is marked by specialization, technological innovations, intra-disciplinary amalgamation and interpretation. To cater to the emerging needs of the changing world, Faculty of Applied Sciences offers Under Graduate, Post graduate and PhD. Programmes in Physiotherapy, and Nutrition & Dietetics. The Post Graduate Programme in Physiotherapy offers specialization in Sports, Musculoskeletal, Cardio-pulmonary and Neurology. The Post graduate Programme of Nutrition & Dietetics offers specialization in Clinical Nutrition, Sports Nutrition, Food Science and Technology and Public Health Nutrition, all of which have vibrant scope in clinical as well as industrial setting. These Programmes provide in-depth study and comprehensive practical as well as professional knowledge of immense value in view of global acceptance. The Faculty of Allied Health Sciences imparts practical based curriculum, backed by state-of-the-art laboratories, sound infrastructure as well as innovative and interesting learning procedures.

Since its inception in 2009, Faculty of Allied Health Sciences has focused on Research Programme which has evolved from the initial focus on fundamental research to vital contributions to experiential and empirical research in various academic disciplines and interdisciplinary areas. This shift has been gradual without any major impediment. It has yielded the desired objective of the creation of a viable, socially relevant research outputs. The endeavor is for the creation and continual expansion of this research temperament. The prime objective of MRIIRS Research Programme is to have strong focus on generation of original ideas and thoughts which thereupon would be connected with empirical works of subject-oriented researchers in sciences, social sciences, humanities, management, technology and other disciplines offered by the University as areas of probe and investigation from time to time and shall subsume out-of-box thinking and innovation. This is further extrapolated to solution findings to social

problems. Our research programme has practical import component which also sets in an important ingredient of social outreach and service.

**ABOUT FACULTY OF ALLIED HEALTH SCIENCES:** The Faculty prides itself on creating an environment of substantial academic freedom overlaid by rigorous, self-imposed standards of excellence and socially responsive practices. We at FAHS, willingly submit ourselves to a unique, rigorous, open, and continuous process of appraisal and feedback from the students. Our faculty plays a hands-on role in the governance of the teaching methodology and assumes total ownership of collective decisions, while keeping themselves abreast of current developments in the related fields of Physiotherapy & Nutrition & Dietetics. The intellectual capital of FAHS is highly qualified, well experienced and research oriented. The faculty members actively participate in academic activities other than teaching and research engagements and extend every support in organizing academic and professional activities of high credentials from time to time. FAHS maintains active interface with the public and private entrepreneurs of the health industry and other promotional organizations to understand the future needs and demands.

## PROGRAMMES OFFERED

- Bachelor of Physiotherapy (B.PT)-(4 1/2 Year) Regular course divided in eight semesters with six month internship
- Master of Physiotherapy (M.PT) - (2 Year) with specializations in Musculoskeletal, Sports, Neurology and Cardiopulmonary physiotherapy.
- B.Sc.- Nutrition & Dietetics (3 year) including two month clinical/ industrial training.
- B.Sc. (Hons.)- Food Science and Technology (3 year) including two month industrial training
- M.Sc.- Nutrition & Dietetics (2 year) with specialization in: Clinical Nutrition and Dietetics, Food Science & Technology, Sports Nutrition, Public Health Nutrition.
- Ph.D in Nutrition & Dietetics
- Ph.D in Physiotherapy

## CLINICAL TRAINING PARTNERS

Students of Physiotherapy & Nutrition & Dietetics undergo internship/training at the prestigious hospitals and institutions

- Fortis Escorts, Faridabad
- Fortis Escorts, New Delhi
- Metro Hospital, Faridabad
- Batra Hospital, Delhi
- Research & Referral Army Hospital, Delhi
- St. Stephens Hospital, Delhi
- VIMHANS Hospital, Delhi
- Bara Hindu Rao Hospital, Delhi
- Holy Family Hospital, Delhi
- ESI, Basai Darapur, Delhi
- Asian Institute of Medical Science, Faridabad
- Institute of Brain & Spine, Faridabad
- Sarvodaya Hospitals, Faridabad
- Sunflag Hospital, Faridabad
- Primus Hospital, New Delhi



- Columbia Asia Hospital, Gurgaon
- Jaipur Golden Hospital, Delhi
- Majidia Hospital, Delhi
- Artemis Hospital, Gurgaon
- Apollo Hospital, New Delhi
- Paras Hospital, Gurgaon
- Medanta Medicity Hospital, Gurgaon
- Kailash Hospital, Noida
- Metro Heart Hospital, Faridabad

## DEPARTMENT OF PHYSIOTHERAPY

### CLINICAL SERVICES

#### Out-Patient Clinical Services

The outpatient department has a busy practice catering patients from all over Haryana, NCR and from various sports teams. The OPD is very well-equipped with sophisticated instruments like LASER, MWD, US Therapy, KINCOM ISOKINETIC DYNAMOMETER, EMG Biofeedback and supported by our experienced clinical staff. The department offers community services in the form of regular health camps under the aegis of Dr. O. P. Bhalla Foundation. Also, the department provides medical and physiotherapy support to major sports tournaments in National Capital Region like Shooting, Wrestling and Marathon etc.

#### OPD at FAHS

The Department of Physiotherapy runs specialized OPD in the form of

- Cerebral Palsy Clinic • Stroke Clinic
- Geriatric Clinic • Sports Injury Clinic
- Obesity Clinic

### CLINICAL RESEARCH

Department of Physiotherapy offers State-of-the-art labs to perform in depth assessment & analysis & research opportunities.

All labs are supported by well-equipped therapeutic gymnasium.

The FAHS conducts both basic and applied research in the aforementioned areas. Currently many diverse research projects have been undertaken in many different spheres for the development of professionals and disciplines.



## DEPARTMENT OF NUTRITION & DIETETICS

### CLINICAL SERVICES

The Department of Nutrition and Dietetics runs its specialized Diet and Nutrition Clinic which is an initiative towards the preventive and curative care of different disorders and to promote healthy eating practices.

### CLINICAL RESEARCH

Department of Nutrition and Dietetics provides in hand research by providing research facilities in its labs namely

- Food Science and Testing Lab
- Anthropometry and Public Health Nutrition Lab • Biochemistry Lab
- Microbiology Lab • Anatomy and Physiology Lab

The Department offers following streams in the curriculum to the students

- Clinical Nutrition • Food Science • Sports Nutrition • Public Health Nutrition

### KEY HIGHLIGHTS:

- Department has 3 DST funded Start ups. Students of Nutrition and Dietetics under the mentorship of faculty members of the department, exploring the opportunities of being an Entrepreneur.
- The Department has association with hospitals, fitness instructors, nutritionists, food analysts and quality assurance officers on project basis to provide hands-on practical training with national and international organizations like UNICEF Saffola, IBM, Nestle, etc.
- Industry visits to different corporate giants like DIPAS, Yakult, Mother Dairy, Tilda Rice, Ambassador Sky Chef, FICCI Research and Analysis Centre, Haldirams, Britannia, Parle Biscuit etc.
- The Department pays special attention to Industry-University Collaboration to leverage student's placements, Joint R&D Projects with various National and International Organizations. It organizes various events in association with Indian Dietetic Association (IDA) and Nutrition Society of India (NSI).





## FOOD SCIENCE & TECHNOLOGY (FST)

### NEED AND SCOPE

Food Science and Technology is a global endeavor, with the international exchange of information leading to the development of new food knowledge, processes and products. The emergence of new pathogens, environmental changes and the developments of modern biotechnology offer both threats and opportunities to the world food production. Globalization of food has impacted on lifestyle in most parts of the world both positively and negatively. The study of food science and technology aims to develop internationally minded people whose enhanced understanding of food science and technology can facilitate the development of creative and appropriate solution.

### PROGRAM HIGHLIGHTS

- The program envisages on covering all the technical aspects of Food Science & Technology. It will combine principles from disciplines like microbiology, biochemistry, engineering, etc.
- The program proposes to offer internship/ in-plant training to students, which will provide them a competitive edge over their counterparts.
- The student will imbibe insights related to various aspects related to research methodology. This will also ensure a research driven attitude.

#### Job Prospects

- Food Handler/ Food Processing Operator
- Food Inspector/ Expert
- Bacteriologist/ Toxicologists
- Analytical Chemists
- Research and Development'
- Food Managers
- Quality Control Officer or Quality Assurance/ Management professionals in food/ retail industry and laboratories,
- Food safety officer in the regulatory bodies,
- Food Auditor in Certification and Inspection bodies,
- Trainer/ Counselor in Food Safety & Quality Management Systems and
- Self- Employment as food certifying/ auditing professionals for the Food Safety and Quality Management Systems.

#### Major Recruiters:

- Parle G
- Britannia
- Mother dairy
- FSSAI
- APEDA
- Nestle
- Vita
- Coca Cola
- Haldirams
- Bikanerwala
- Perfetti

One of the largest and important wings in modern healthcare Sector. With the advancement of medical science, the requirements of skilled persons / employees are increasing sharply. For accurate diagnosis of a disease doctors need the help of the medical laboratories.

By undertaking the course the student is enabled to handle all testing procedures conducted in a medical laboratory. Skills in diagnostic procedures in routine medical check-up of patients are imbibed by the students during the term of the programme.

The students also are able to absorb the knowledge and the expertise in handling the latest sophisticated state - of - the - art medical equipment to obtain the accurate results and also are enabled with the ability to identify the readings that are made available after the testing.

Employment opportunities are available in plenty. He/she will find ready employment in all types of diagnostic centers both in government and private sector. What is needed is to make concerted efforts to provide with required training to take on the challenging world of health care.

A gap has been developed between the requirement and the availability of trained laboratory techniques due to its fast growth in laboratory, X-Ray and other related fields.

To fulfill this gap and to make the young student carrier oriented in his / her early age Manav Rachna International Institute of Research and Studies is starting education programme to meet the demand of Para medics in this area.

This course aims at developing competence and providing students with facilities for quality education, complete laboratory training & clinical exposure. The University has well equipped high technology laboratories and well qualified faculty who not only impart academics but also guide students in their quest for excellence.

Programme Objectives: Medical laboratory technologists do routine laboratory testing under stipulated conditions. Technologists may prepare specimens & operate machines that automatically analyze samples.

- To impart in-depth knowledge and skill to a student to become professionally competent in techniques of Medical Laboratory Technology.
- To perform routine and special laboratory investigations on clinical and non clinical subjects independently.



- To interpret the results and explain underlined principle of each investigation.
- To assist and take part in research work.
- To participate in teaching learning activities.
- To introduce quality control system in laboratory to have qualitative result.
- To perform managerial works - supervision of subordinates, or preparation of periodic reports and maintenance of inventory etc.
- Students will be given sufficient training to examine blood, tissue and other body substances, make cultures of body fluid and tissue samples to determine the presence of bacteria, fungi, parasite, or other micro organism.

#### Career Opportunities:

- A certified medical laboratory technician may find a challenging career in a hospital, minor emergency centers, private laboratory, blood donor centers, doctor's office or clinics.
- A technician can become a technologist through further education and work experience.
- Laboratory technologists can assist the doctors in taking samples, centrifuging, making slides, using specified stains etc.
- Laboratory manager/ Consultant/ supervisor, health care Administrator, Hospital Outreach coordination, laboratory information system Analyst/Consultant, educational consultant/ coordinator/ director, health and safety officer etc.
- In the clinical areas, drug testing, therapeutic drug monitoring and biogenetics are other specialties with openings.



### INTERNATIONAL COLLABORATIONS OF FAHS

- University of Tsukuba, Japan
- Lahti University of Applied Sciences, Lahti Finland
- Binawan Institute of Health Sciences, Indonesia
- University Sains, Malaysia
- Leeds Metropolitan University, UK
- Teesside University, UK
- Gerlev Physical Education & Sports Academy, Denmark

#### AWARD HIGHLIGHTS:

The students of Department of Physiotherapy and Nutrition and Dietetics have been awarded scholarships every year by Tsukuba University, Japan for their Summer Training Program.

#### PLACEMENT OPPORTUNITIES AT FAHS

- Multi Specialty Hospitals/ Nursing Homes/ Rehabilitation Centres
- Team Physiotherapist and Sports Nutritionist in various sports & Sports & fitness Centre
- Nutritionists and Dieticians
- Research and development works in the pharmaceutical companies and institutional laboratories
- Teaching Faculty in Colleges and University.
- Schools for mentally retarded and physically disabled children
- Defense medical establishments
- Medical Underwriting
- Excellent jobs opportunities in countries like USA, Australia and Canada.
- Health departments
- Self Entrepreneurship
- Airlines and Railways



- Counselors in Schools
- Non-Governmental Organizations
- Food Industry
- Consultant for Multinational Companies
- Quantity food service establishments
- Health and wellness industries
- International Organizations (UNICEF, UNDP, WHO)

#### STRENGTHS OF FAHS

- The faculty keeps organizing regular workshops for updating knowledge of staffs and students.
- The faculty has state-of-the-art OPD and nutritional counseling facilities with a good patient load.
- FAHS focuses on evidence based practice which is carried out in well equipped labs designed for research purposes.
- FAHS focuses on complete holistic development of the students as Personality Development Programs and Interdisciplinary learning is incorporated in to the curriculum.
- FAHS is keen on providing international exposure to its students in the form of international conferences.
- Hosted 7th Asia Pacific Conference on Exercise and Sports Science (APCESS) in October in association with Asian Council of Exercise and Sports Science (ACCESS) where approximately 1000 national and international delegates participated.

#### TOP RECRUITERS

AIIMS, Batra Hospital, Bharti Enterprises, Apollo Hospitals, Qi Spine, Religare, United Health Group, Jindal, Genpact N-Lite, VLCC, Nutrilite, SAI, Hindustan Wellness, Sports Authority of India, Haldirams, British Biological, Guardian Pharmacy, Fitness First, Spice Industry, Shikha Sharma Nutri health, Shikha Sharma Nutri Health, Talwarkars, N-Lite, Personal Point, Total Health.



# FACULTY OF COMMERCE AND BUSINESS STUDIES (FCBS)

Faculty of Commerce and Business Studies (FCBS) is one of the oldest departments of the university engaged in teaching and research in Commerce and Business Studies. Incepted in 2009 as Faculty of Business Administration and Computer Applications, the faculty was renamed as Faculty of Commerce and Business Studies to reflect its true character. It offers contemporary & cutting-edge programmes in Commerce and Business studies which are in great demand in the market. The present economic scenario calls for all the countries in the world to be interconnected and interdependent on each other for development and better health of the world. The consequence is that all the global economies are now progressing in unison, striving hard for economic prosperity. This has resulted in the specialized jobs not only within the country but across the globe.

To grab this lucrative and challenging opportunity, the present-day student needs to be well informed on all aspects of the development and stay competitive. With this end in view and to produce students of high caliber and employability, we at MRIIRS are sincerely treading this path with

attractive and appropriate technical and professional courses. Our over-riding objective, across all disciplines, is to stimulate creativity, intellectual curiosity and independent thinking and foster love for learning. During planning, teaching and final assessment, due diligence is exercised to determine the students understanding and accordingly the curriculum is tailored so that it is as effective as possible. In the delivery of curriculum, due emphasis is laid on the development and use of critical thinking skills.

Currently, the Faculty consists of two departments, namely, Department of Commerce and Department of Business Studies. The Department of Commerce offers B.Com (Hons) at the undergraduate level and M.Com programmes at the postgraduate level. Simultaneously the department offers Doctoral programmes in Commerce to fulfill the aspiration of PG students as they wish to go for research.

The thrust areas of the departments inter-alia include Accounting Standards, Auditing, Mergers and Acquisitions, Financial Markets, E-Commerce, Banking, International Business, Business Economics,

Economic Policy, Brand Management, Micro Finance, etc. All the courses in the Faculty follow choice-based credit system as per UGC guidelines. The Departments under FCBS have highly qualified faculty with wide industrial/ teaching experience and research orientation. The faculty has published research papers in reputed professional journals. The Departments run special Enrichment Lecture Series Programme (ELSP) apart from regular teaching. The objective of ELSP is to expose the students through a series of lectures by different experts on the current issues and areas of inter-disciplinary interest so as to broaden their mental horizon, improve general awareness and strengthen critical thinking to excel in their future career.

Academia-Industry interface development is given utmost importance. A 12-weeks summer training for all the BBA programmes has been embedded in the curricula. The course work is supplemented by industrial visits and lectures from eminent persons from academics/experts from industries and Government. We also arrange educational tours for our students. The students / faculty members jointly organize various activities such as panel discussions, seminars, business news analysis and case discussions to give fillip to their professional knowledge. The departments lay great emphasis on practical and interactive teaching and undertake special measures for personality development, leadership qualities, business communication, decision-making, negotiation skills and value creation. Apart from rigorous classroom teaching, the students are given online practical assignments from time to time. There are regular mentoring sessions for each student in which academic problems of students are individually discussed and resolved.





The faculty has modern classrooms with quality state-of-art audio-visual equipment and computer labs with latest software and equipment. The entire campus is Wi-Fi enabled with good connectivity. The students have access to world-class library with a catalogue of large number of books, professional journals and other academic material. The departments regularly conduct sessions under Faculty Recharge Programme which provides a unique opportunity to the faculty to upgrade and rejuvenate themselves through experiential learning. Business Process Course of SAP has also been embedded as a part of curriculum for Bachelor in Business Administration (all specializations) & B.Com (Hons) to make our students recruitment ready for job opportunities in IT Industries and other innovative enterprises. Equipping our students with knowledge of technology can give them an extra edge once they leave their institutions and enter the workplace. The programme helps to close the skills gap in the information and communication technology market.

## DEPARTMENT OF BUSINESS STUDIES

To foster ingenuity in management education, Department of Business Studies, better known as DBS, prods students to participate in co-curricular and extracurricular activities. The idea is to develop wholesome personality. DBS, being one of the two departments under the

Faculty of Commerce and Business Studies at Manav Rachna, puts greater thrust on the application of theory and the best practices of the business world. The industry is more dynamic; the knowledge becomes obsolete faster. Keeping that in view, the curriculum is revised and updated regularly in order to keep it in sync with the industry. The students are encouraged to participate in interactive lectures, case studies, personality development, sports and other team building and leadership activities. The industry experts are invited; the alumni share their experience of the industry vis-à-vis their time spent at the university. The management games are arranged; the industrial visits are organized et al. All this enables the students in learning management education and getting firsthand experience while studying. Not only that the curriculum has been made flexible keeping with the present trends of global education. The students can choose and customize about one third of the curriculum of their choice. There are courses on business etiquettes and corporate social responsibility and ethics in order to inculcate sound moral principles of long-lasting business. Our faculty members come from varied backgrounds, with strong academic and industrial experience which considerably enriches the department. The various clubs such as Literary, Marketing, Finance and HR, run by the students under the supervision of the faculty members, expose the students, through a series of activities, to current issues and areas of inter-disciplinary interest. This widens their horizon and vista

of thinking and strengthens the critical thinking and improves general awareness which help the students in their career progression.

Latest software packages are used in the labs to provide the students real-life exposure. Professional modules are integrated into the curriculum to make the students understand the real world of business and enhance their employability. Stock market training programmes are conducted which give the students a unique opportunity to understand real stock market operations. Massive Open Online Courses (MOOCs) help the students learn a few courses at their own pace and convenience. An initiative of the department, a Programme on "Entrepreneurship" launched under the aegis of Pradhan Mantri YuvaYojna, Ministry of Skill Development, Government of India a few years back has already produced a few startups. The sole objective is to help students learn entrepreneurial skills. The students are encouraged to bring their innovative and novel ideas which can be further pursued and honed. The university provides assistance in setting up startups as well.

To further help the students, the following courses are being contemplated/implemented:

- Advanced Excel
- CAT (Common Admission Test) rigorous training programme
- Specialization in Aviation
- Marketing Analytics

## PROGRAMMES OFFERED

- Bachelor of Business Administration (General) (3 Year)
- Bachelor of Business Administration (Banking & Financial Markets) (3 Year)
- Bachelor of Business Administration (Global) International Business (3 Year)

The detailed semester-wise course structures, designed on CBCS (choice-based credit system) pattern along with study schemes for the programmes are available on MRIIRS website.

Bachelor of Business Administration (BBA) is the general course in business administration. It is accepted & recognized world-wide because of its general as well as specific orientation. MRIIRS gets overwhelming response for the Programme from the students who plan to excel in the corporate world in the areas of Human Resource Management, Marketing, Financial Management, Entrepreneurship and Computer-based solutions. In the past, many students have gone to pursue higher education in management domain and are excelling in their professional fields.

The course is rigorously designed to provide evolving practices and knowledge in the field of Business Administration. The students of BBA course are given immense opportunity to grow horizontally in the upcoming contemporary fields.

The course structure of BBA (Banking and Financial Markets) programme focuses more on practical banking related areas which are delivered by ICICI Direct in each semester. The course is designed so as to impart specific skills to acquire competence in the financial world.

Additional courses include:

- Fundamentals of Financial Planning
- Equity and Derivatives Markets
- Fundamentals and Technical Analysis
- Investment Products and Management
- Private Banking
- Project-Report & Presentation

The Course also includes appropriate usage of virtual Stock Trading Platform and MS Excel for practical exposure. Joint Certification is awarded on successful completion of Post Training Assessment or Certificate of Participation on completion of course with attendance of 90%.

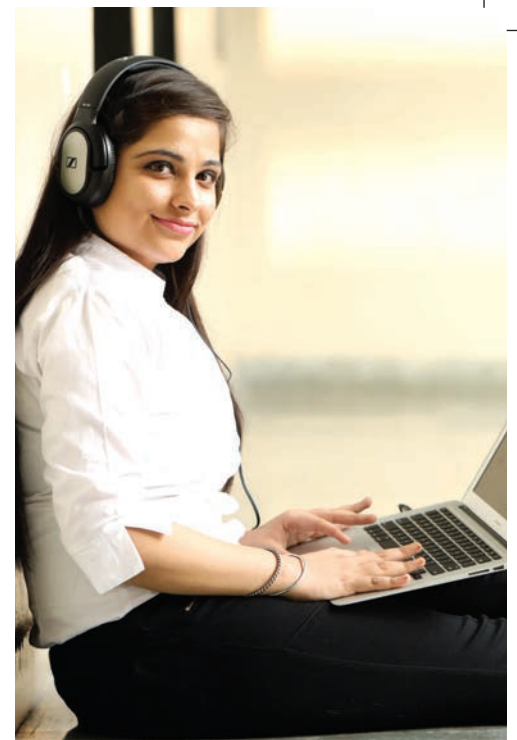
The programme of BBA (Global) International Business is offered in collaboration with Auckland Institute of Studies (AIS), Auckland, New Zealand (a unique tertiary institution providing NZQA Accredited programmes) as an academic knowledge partner with in-built 4 week internship Programme at AIS New Zealand.

Technology has developed so much that an entire series of courses can, and must, be taken to build a sophisticated and unusual on-line retail business. The philosophy in programme is that it is more important to have the creative idea, the gem, the golden moment that can support the investment of a lifetime's worth of income, rather than to focus on the mechanics. In other words, a great site will wither and die if it has no strategic business value. The issues of competitive advantage and sustainability of that advantage are more important than the mechanics. Strategies in the course will focus on competitive advantage and sustainability in this course, it is aimed at helping an existing business looking at new ways to leverage e-retailing. Of course, some new e-commerce businesses are created, but new businesses are also created in the physical brick and mortar world, even in mature enterprises like stores, restaurants, and service firms.

Under this programme, the eligible students shall have a provision/ possibility to proceed to University of New Castle (UoNC), Australia in 2nd year directly with transfer of credits of all courses/subjects studied at MRIIRS and completes the rest of their programme of Bachelor of Business of UoNC with award of their degree of Bachelors of Business.

UoNC Australia shall be providing academic support in terms of course details and delivery during the first year of this programme at MRIIRS through the faculty members of UoNC Australia. The eligible students who shall be moving to UoNC, Australia in their 2nd year of this programme with the transfer of credits (provided they do earn all the offered credits during first year) and completes their 2nd and 3rd year shall be required to pay the fee and other charges as per UoNC Australia during that period and shall be awarded the degree of Bachelor of Business of the respective University - New Castle (UoNC), Australia only and those who shall complete their 2nd and 3rd year from MRIIRS shall be awarded BBA- Global (IBM) at MRIIRS.

Financial sector in India is becoming very challenging in the current times, with worldwide transformation happening. Insurance professionals have to be on their toes to keep their knowledge levels about changing regulatory requirements updated and are required to be proactive to renew and refresh their skills. This programme would impart





education and training in the field of Insurance and Risk Management through insurance and empower the candidates by enhancing their professional skills. This programme is to create a cadre of insurance professionals to be well versed with managing risk through insurance and be ready for employability in the banking and insurance sector. It would include the following:

To understand the Conceptual Framework of Insurance Regulation,

To impart and develop domain knowledge and field knowledge in the area of insurance for better employability,

To give an insight about the statutory provisions contained in various legislations applicable in the country,

To impart technical and soft skills to be adapted as per the market requirement.

The detailed semester-wise course structures, designed on CBCS pattern along with study schemes for the programmes are available on MRIIRS website.

#### PLACEMENT OPPORTUNITIES

After qualifying, graduates and post graduates may be employed by MNCs, Business Houses, Manufacturers and Export Houses in finance and taxation departments. They can choose to work with Stock Broking firms, Banks, Insurance Companies and Mutual Funds. Areas like Trading/Selling/Marketing, Government Services, Actuarial Services, Consultancy in all fields of Commerce, Own business, Practice in accounts and taxation, Academic positions, e-Business, Stock market operations, Retail sector and Managerial positions in corporate world, CA firm etc. are also open to the qualified students.

All the programmes are comprehensive and are complemented with extensive classroom teaching & practical assignments based on industry requirements. The graduates are prepared to work as managers in multinational companies and reputed Indian companies such as Management Trainees, Marketing Executives, Human Resource Executives, Business Development Executives, Technical or Non-Technical Support staff at KPO/BPOs, General Administration, Sales Executives, Client Services, Executive Associates, Telesales etc. across industries including Financial Services and Insurance Sector, Supply Chain Management, Customer Relationship Management, Operations Management, Marketing etc.

#### DEPARTMENT OF COMMERCE

Commerce education has always been the most demanded in the country as it develops the required knowledge, skills and attitudes among the students for the successful handling of trade, commerce and industry. Department of Commerce works with an aim of fostering in the students an attitude of objective enquiry. The department equips students with latest developments in the field of business and commerce and trains them in the practical application of the same in modern organizations. It seeks to enable them to handle the challenges of growth and transformation of businesses through critical thinking, rational attitudes and quality decision making. It is dedicated to develop the students into responsible citizens of the country with high moral values,

understanding the problems of human relationships and developing capacity to appreciate the finer values of life.

The Department is committed towards promoting high quality professional accounting standards. The thrust areas of the Department include Accounting Standards, Risk Management, Capital Markets, e-commerce, Economics, Corporate Laws, Taxation and Financial Management. The course is designed to include a diverse range of academic offerings & experience to a multiplicity of paradigms including industrial visits, faculty which seeks to prepare well equipped accountants who can tackle new emerging challenges in the market and excel in their chosen fields. The department emphasizes critical thinking, practical and real life training. In order to provide hand on experience, value added courses are offered on entrepreneurship and capital market in collaboration with BSE Institute Ltd.

#### PROGRAMMES OFFERED

- Bachelor of Commerce (Hons) -(3 Year)
- Master of Commerce (M.Com) (2 Year)
- Ph.D

#### PLACEMENT OPPORTUNITIES

Reputed companies and MNCs regularly visit the campus to interview the students. The graduates are chosen by MNCs and business houses in the areas of Manufacturing, Export/Import, Operations Management, Human Resource Management, Financial Management, Marketing, Banking, Aviation, IT and other allied fields.



# FACULTY OF MEDIA STUDIES & HUMANITIES (FMeH)

Faculty of Media Studies & Humanities (FMeH) aims at imparting quality experiential education in order to cater to increasing demands of the Media industry. At FMeH, we take up challenges that come with the existing as well as emerging corporate, academic and literary environments. Constant teaching, updation and training in new media tools is taken up on a continuous basis. The core strength of FMeH lies in providing a congenial and healthy environment to all its stakeholders: Students, Faculty, Staff & Management.

FMeH conducts workshops on various aspects of broadcast journalism for both programmes of B.A and M.A-Journalism and Mass Communication. Keeping in view the current technology trends, innovations in journalism and up to date workflows for news television, these workshops cover reporting, anchoring, breaking news, news production and the role of a producer, different departments

of a news channel, writing for television news, the newsroom scenario, operations-live PCR/ camera/ editing/ technical overview of modern television newsrooms and Digital Media.

Apart from the workshops, short term training courses during summer break are offered free of charges to students. In order to develop a research mindset amongst the students and provide practical training, media tracking on topical issues is done under the guidance of faculty. Guest lecturers from experts are arranged for students on weekly basis so as to expose students to the best in the media and the industry. Students are encouraged to work for regular in-house publications like Campus Buzz and the Reporter so as to give them an insight into reporting, composing, layout designing & printing. This is done on rotation basis amongst students so that all the students have first hand exposure to printing technology and

desktop publishing. Students are also involved in writing press releases and reporting for various events like conferences and conclaves. Training in preparing, editing and delivering news bulletins is provided with the state of the art television studio in the campus itself.

The core strength of the department lies in the not limiting teaching to structured syllabus but to provide practical training in all aspects of mass communication and its allied fields. It is our firm faith that value based learning can transform a student into an efficient professional and a responsible citizen.

## DEPARTMENT OF JOURNALISM & MASS COMMUNICATION

Department of Journalism and Mass Communication aims at imparting quality education in order to cater to the increasing demands of the industry and trains the students in various techniques of Communication. We take up challenges which come due to day-to-day innovations in communication technology. Faculty members are sincere, dedicated, well qualified and experienced. They have been associated with national and multinational organizations such as Aajtak, Zee News, NDTV, India TV, Sahara Group, Discovery Channel, Doordarshan, All India Radio, India Today, Fairfax Business Media (Australia), Dainik Bhaskar, Navbharat Times (TOI Group), Indian Institute of Mass Communication (IIMC, JNU campus) and prominent universities of the country. Some faculty members are actively engaged in guiding research projects. They are

encouraged to design syllabi that impart contemporary relevance to the various programmes of study. Teaching & Research go hand in hand in this department. The programme are designed in such a manner where- in almost all branches of knowledge are incorporated to make the students more self-reliant and industry oriented.

### Activities and workshops

- Organizing National Media Conclave has become a yearly phenomenon at FMeH organized in the month of August, for the past 3 years. Deliberating on burning issues, the conclaves have seen media luminaries; corporate communicators and students meet together under a common roof. The topics of the conclaves have been Fake News: impact and challenges (in 2018), Media Outreach: Responsibility & Accountability (in 2017) and Media & Society: Prospects & Challenges (in 2016). Leading Journalists namely Mr. Sanjaya Baru who has been editor of India's major financial newspapers, The Economic Times, Financial Express and Business Standard, Ms. Anuradha Prasad, Chairperson & MD, BAG Network; Mr. Pankaj Pachauri, Founder & Editor in Chief, Go News; Mr. M.K Venu, Founding Editor, The Wire; Dr. Chandan Mitra (Editor, The Pioneer), Dr. A. Surya Prakash (Chairperson, Prasar Bharati), Mr. K.G. Suresh (DG, IIMC) have been some of the eminent speakers.
- A workshop on Social Media writing was conducted in February 2018 by "Talk 360" comprising a team of journalist including Sh. Pradip Bagchi from Times of India.
- A workshop on anchoring was conducted wherein eminent news anchor Ravish Kumar of NDTV News Channel, described and shared his experiences & techniques about different areas of production of a television channel. The students were told about Reporting, Editing, Packaging, Production Control Room, Sound, Lights, etc.



- 'Avlokan' a national level Inter University film festival was organized in February 2019, It had participation from more than 50 Universities and Institutes across India.
- ABHIMANCH a theatre workshop was conducted in August 2019.

### TEACHING METHODOLOGY

- Classroom lectures are delivered by highly qualified and experienced faculty.
- The content for lecturers is planned keeping syllabus and research in mind.
- Special guest lecturers by the experts from the media industry are a regular feature.
- Lesson plans are uploaded on the ERP system at the beginning of each semester.
- Media Analysis classes are held every day to keep students abreast with daily news and happenings.
- Students experience hands-on-training at the television studio.
- Regular visits to the library is encouraged.
- Students are encouraged to do independent projects and field work.
- Research work is encouraged through media tracking assignments.
- Regular Industry visits for students are organized to give them an insight into the real world of media.

### COURSE-SPECIFIC FACILITIES

Classrooms have been provided with TV Sets, LCD & Audio System. J&MC has modern equipment (camera, edit bays, teleprompter, Chroma wall etc.) and has a state-of-the-art studio which is comparable to any Television studio in the capital and NCR region. The students enjoy access to Manav Rachna Community Radio where they are trained in radio techniques and production. The Computer lab has 30 computers and has all the required software for design and print production. This helps the students in framing their TV and Radio Programmes and contributing towards putting together, designing and publishing of the in-house tabloid newspaper 'News of the Week', as part of their curriculum.



Job Prospects after the completion of the course:

Television: Reporter, News anchor, Programme Anchor, Producer, Copy Editor, Script Writer, Researcher, Production Assistants, Media Executive, Video Jockey. Radio: Radio Jockey/ Anchor, News Reader, Reporter, Producer, Programme Executive, Script Writer, Copy Writer. Internet & Mobile: Content Writer, content designer. Newspaper and Magazine: Reporter/ Correspondent, Feature Writer, Business Writer, Copy editor, Sub-editor, Photographer. Event Management: Event Executive, Event Manager & Event Designer.

There is a plethora of career opportunities in both Public and Private sectors for the students of Journalism and Mass Communication

### PLACEMENT OPPORTUNITIES

FMeH is proud to claim that we have been able to offer 100% placement opportunities to the batch 2017-18. This record holds good for the previous batches as well. It is our endeavor to provide placements to all our students. Infact the students who are still pursuing their course and are in the 2nd and 3rd year are given internship opportunities during their summer break

Our students have been placed in well known organizations like NDTV, Zee news, Delhi Press, Ministry of IB, UC News, Times Internet, Purani Delli Production House, Haryana news, DNA News Agency and many more.

A number of our students have been entrepreneurs and have started their own business and companies.

### PROGRAMMES OFFERED

- BA - Journalism and Mass Communication (3 Year)

The eligible students shall have a provision/ possibility to proceed to Western Sydney University (WSU), Australia in 2nd year directly with transfer of credits of all courses/ subjects studied at MRIIRS and completes the programme of Bachelor of Communication of WSU with award of their degree of Bachelors of Communication.

WSU, Australia shall be providing academic support in terms of course details and delivery during the first year of this programme at MRIIRS through the faculty members of WSU Australia. The eligible students who shall be moving to WSU, Australia in their 2nd year of this programme with the transfer of credits (provided they do earn all the offered credits during first year) and completes their 2nd and 3rd year shall be required to pay the fee and other charges as per WSU Australia during that period and shall be awarded the degree of Bachelor of



Communication of the WSU, Australia only and those who shall complete their 2nd and 3rd year from MRIIRS shall be awarded B.A. Journalism and Mass Communication (International) at MRIIRS.

- M.A - Journalism and Mass Communication (2 Year)
- Ph.D

Detailed semester-wise course structures, designed on CBCS pattern along with study schemes for the programmes are available on MRIIRS website.

Post-Graduate Diploma in Advertising & Public Relations An Industry-Integrated Professional Course

The Objective of this programme:

To train Graduates, who are industry ready and can excel in fields of Advertising & Public Relations and are well versed with the modern digital PR and advertising tools. They will have the options to work in Public Sector Enterprises, Ad Agencies and in various spheres of Advertising & Public Relations.

The programme is divided in two semesters:  
Semester I (July -December)

Semester II (January - May)

The programme concludes with one month internship for the students. There are in all five papers taught in each semester and each paper has a Unit devoted to Research and digital aspects of the subject. Each semester ends with exams comprising the papers taught in the respective semester. We follow Choice based credit system where in all the students get to choose the electives they want to study apart from their core and foundation courses.

### DEPARTMENT OF ENGLISH

The Department was established in the year 2013 and offered the degree of B.A. Honors to the students. It became a part of the Faculty of Media Studies and Humanities in 2015. In addition to the B.A Degree course, the Department initiated M.A. Degree Course in 2015. At present, more than 145 students are pursuing their undergraduate and post graduate programs. The Department has a number of research scholars with specialization in major areas of literary studies like Postcolonial Literature, Translation Studies, Feminist literature and so on. Our commitment to the quality of education that we offer is reflected in our determination to maintain a relatively low student/teacher ratio and to provide our students with the benefit of direct contact with experts in the field. The department organizes extra-curricular activities, in addition to lectures and interactive sessions with eminent national and international scholars and writers. The department has been actively involved in nurturing the talents of the students. The department publishes its annual Literary Compendium called "Unwinding Creativity", tapping and publishing the creativity of the students. The department also has a culture of an annual Poetry Event "Expressing in Verse" and has introduced "Manav Theatre" for street plays and performances.

The aim of the department is:

- To conduct high quality research in English literature and English language teaching.
- To enable the students demonstrate their critical thinking, especially the skills to analyze, synthesize, and evaluate ideas and texts, conduct and understand the process of research through identifying, analyzing, synthesizing, and documenting credible source material,
- To help the students understand and describe the role of literature in the development of cultures.
- To provide education and training of excellent quality both at undergraduate and post-graduate levels, the department utilizes its resource of Language Lab. The prime objective of the lab is to facilitate efficient teacher-student interaction, correct phonetic accent, and improve language proficiency and to develop their effective communication skills in the present world. A vast collection of audio, video, and printed materials is available for use, complemented by institutional-grade audio-visual equipment.
- To impart proficiency in major European languages to students, teachers and wider community for living & working successfully in multicultural and multilingual settings.

### PROGRAMMES OFFERED

- B.A (Hons) English - (3 Year)
- M.A English (2 Year)
- Ph.D

Detailed semester-wise course structures, designed on CBCS pattern along with study schemes for the programmes are available on MRIIRS website.

### JOB/ PLACEMENT OPPORTUNITIES

The students have placement opportunities in the various fields:

Academics: Teaching in various organizations, private and government universities, and colleges, as language and literature teachers, translators, going for higher research.

Literary Sphere: Writing books, Poetry, prose, writing as free lancers, translators, literary critics and reviewing.

Editor: Editing job in newspapers, magazines, in various publications divisions.

Electronic Media: As a script writer (in TV serials, in stage plays, in Radio program, editing and preparing materials for various programs like Documentaries and films.

Print Media: As news readers, copy editors, writing stories and preparing materials for news papers and magazines.

Writers: Writing books for organizations like NCERT, SCERT, CBT, for schools and colleges.

Trainers: Training the students and teachers for English language proficiency in various institutions and organizations like District Institute of Education and Training, jobs as trainers in various TV channels like Google.





# FACULTY OF MANAGEMENT STUDIES (FMS)



Padma Shree Prof. Dr. Pritam Singh  
Chairman- Strategic Mentoring Board  
Ex-Director, MDI Gurgaon & IIM Lucknow,  
Ex-DG IMI

“The Faculty of Management Studies, MRIIRS is one of the premier Business Schools in India. The intellectual capital and the quality of its faculty are par excellence. It strives to groom and architect students by inculcating necessary leadership skills in them by engaging them in real-life leadership and problem-solving activities. It is very effectively engaged in grooming and architecting students who can play outstanding role in managing the task assigned to them. The MRIIRS MBA students are groomed to be innovative, creative and entrepreneurial with powerful zest to make the difference wherever they go and work.

Students aspiring to have a great career and outstanding leadership profile must join its MBA program. MRIIRS state-of-the-art campus with the serenity of the old Gurukula ambience.”

## DEPARTMENT OF MANAGEMENT STUDIES (FMS)

In today's fast changing environment, businesses need to develop systems to understand and prepare for dynamism. It is only through people that this may be achieved.

Faculty of Management Studies aims and endeavours to create thought leaders for the future. The aim has been to build the Faculty of Management Studies as a center of total quality education through holistic development.

In this pursuit, the Department works towards developing and inculcating competencies in students, prominent among which are:

- Domain expertise
- Capability to synthesize theoretical knowledge
- Capacity to accept interdisciplinary roles
- Entrepreneurial capability and risk taking approach
- Ethical leadership
- Sensitization towards society

Over the years, the Department has worked with students and other stakeholders to foster a culture of commitment, transparency, creativity and excellence. This foundation makes FMS a progressive institution, symbolized by:

- Academic programs centered on students and driven by faculty members
- Faculty with wide experience and diverse industry background
- Updated curriculum based on the needs of learners and the industry
- Industry relevant research, directed towards nation building
- Robust linkages with industry for experiential learning

## RECOGNITION AND RANKINGS

- Times B-School Survey 2019: Ranked among the Top 20 B-schools in India and among the Top 7 B-schools in North India.
- National HRD Network and Shine.com Management Institutes Ranking 2019: Ranked no. 38 in India.
- Business India B-School survey 2017-18: Ranked among top 40 B-Schools of India.
- Careers 360 Top Business Schools 2017: Rated AAA among the Top Business Schools across Haryana.
- ASSOCHAM 2017: Bestowed with the title 'Best University providing Global exposure to its Students'.
- India Today B School Survey 2017: Ranked among Top-50 B-Schools of India.

## PROGRAMS OFFERED AT DEPARTMENT OF MANAGEMENT STUDIES (FMS)

1. Master of Business Administration (MBA) with Dual Specialization (2 Years):

It is the flagship MBA program wherein students can opt for 2 specializations. The traditional specializations include the functional disciplines, that is, • Marketing • Finance • Organization Behaviour and Human Resource Management • International Business • Banking and Insurance • Aviation Management • Management Information Systems • Entrepreneurship & Small Business Management • Events & Media Management • Business Analytics • Operations Management

2. Ph.D in Management Studies

The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.



Number of seats, Fee Structure, Minimum Eligibility criteria and criteria for preparation of merit list are given at page no. 68 onwards of this brochure.

## INDUSTRY AFFILIATIONS

- Intercontinental Hotels Group • NHRDN
- FICCI • AIMA • ASSOCHAM • FISA
- MSME

• Master of Business Administration (MBA) (2 Year)

Commencement: July 2020

Program Delivery: Regular (on Week Days)

Academic Term: Semester Basis

## HIGHLIGHTS OF MBA PROGRAMS

1. Highly application centric industry integrated curriculum with focus on Industry-orientation and employability skills.
2. 4-tier mentoring program (peers/industry/faculty/alumni).
3. Corporate experts and renowned visiting faculty.
4. In-house Entrepreneurship Cell-UDYAM.
5. Learning by doing and experiential pedagogical approach to ensure quick and practical learning.
6. Option to opt for Course of Independent Study (CIS) or Alternative Study Credit Activities (ASCA) to pursue special interest or educational background
7. Outbound Experiential Learning Programme (OELP) and Industry visits
8. Social Sensitization Projects (SSPs)/ Community Development Projects (CDPs) and Rural Innovation Projects (RIPs)



9. Field or Live Projects/ Internships (FLPs)
10. Study Abroad Programme/ Student Exchange Programme
11. Regular courses on Professional Competency and Communication delivered in the mode of a Finishing School.

## PLACEMENT OPPORTUNITIES

Our students have carved out their careers across industries and verticals. They are also successful entrepreneurs.

Prominent recruiters: American Express, Ernst & Young, Reliance Jio, ICICI Bank, Jaro Education, Ericsson, J. Walter Thompson (JWT), Byjus, Wacom India, Infoedge Ltd, Zomato, HT Media, Times, KPMG, Fortis, India Bulls, Grofers, Axis Bank PayTM, Oyo Rooms, RBS, Lenskart etc.

Placement Preparation Programme is run regularly for students. It includes modules on communication, social skills, business scenario comprehension and planning, aptitude training etc.

## DEPARTMENT OF HOSPITALITY & HOTEL ADMINISTRATION

Hospitality is a blend of skill sets such as positive attitude, warmth, empathy, good communication and confidence. If you can relate to others and empathise when they are in need, you are the one made for this profession. The Hospitality industry is global, glamorous, growth oriented and rewarding. The boom and demand for manpower offers career choice in five-star hotels, restaurants, cruise lines, airlines, railways, retail, hospitals, clubs and tourist offices. This program B.Sc Hospitality and Hotel Administration is all set to widen the horizon for all the hospitality aspirants who want to make their career in this industry.





The unique features include choice-based credit system for imparting knowledge. It has a strong industry link, highly experienced and well-qualified faculty to lead the next generation of hospitality professionals.

The Industry driven curriculum is geared to strengthen the foundation and it challenges the students to develop Hospitality Entrepreneurship, conceptual, analytical, technical and managerial skills thus enabling them to compete and meet the changing needs in the challenging world of hospitality.

Wishing all the new aspirants a happy beginning with Manav Rachna International Institute of Research and Studies.

Hotel Management is a vast, fast moving, and rapidly growing industry and includes all kinds of hotels from budget & independent operations to international brands and sophisticated luxury resorts.

A career in the hotel industry can be exciting and varied and may involve working in different environments. There are opportunities for rapid progress in this area and one can focus on specialist roles. Success in the Hotel Management industry requires more than just knowledge of hotel operations. One needs to develop excellent organizational skills, time management, multi-tasking and interpersonal skills.

B.Sc. in Hospitality and Hotel Administration gives students the knowledge and skills to become perfect hospitality personnel.

Students gain an understanding of the industry and learn how to identify and act on changing patterns of customer demand. FMS-HMA provides the students with a mix of strategic and operational skills that they need to succeed in the role.

MRIIRS is proud to be associated with Inter-Continental Hotels Group (IHG)-The Crowne Plaza. An Academic Partnership has been signed with the IHG Academy, through which MRIIRS department of Hospitality will provide opportunities to students to build their hospitality skills and improve their employability.

#### PROGRAMS OFFERED

- B.Sc - Hospitality and Hotel Administration (3 Year)

#### KEY AREAS OF STUDY

- Food and Beverage Production Operations and Management
- International Culinary Arts and Wines
- Rooms Division and Guest Relations
- Housekeeping Management
- Restaurants, Bar and Banquet Operations and Management.
- Hospitality Entrepreneurship

#### INDUSTRIAL TRAININGS

An elaborate industry exposure to compliment a contemporary curriculum.

#### INDUSTRY PARTNERS

- ITC • DLF • Claridges • Vivanta by Taj
- Country Development and Management Services • Leela Kempinski • Jaypee Group of Hotels • Radisson • Hilton • Le Meridian
- Holiday Inn Hotels & Resorts • Shangri-La Hotels and Resorts • Crown Plaza
- Westin • Hyatt Regency • Oberoi Hotel
- Sarovar Hotels & Suites • Indigo • Airlines
- Lemon Tree • Nestle • Savoy Suites
- Fortune Hotels • County Inn & Suites
- Park Plaza • Oberoi Flight Services
- Ambassador's Sky Chef • Millennium Hotel • The Grand.

#### PLACEMENT OPPORTUNITIES

- Hotels and Restaurants • Resorts
- Eateries and Bakeries • Food Processing Industry • Corporate Houses • Airlines and Airport Ground Staff • Cruise Liners
- Railway Catering/ Defense Forces Catering • Travel Agencies • Tour Operators • Government Tourism Departments • Call Centers • Multinational Companies • Amusement Parks • Banks & Insurance Companies • Hospitals
- Institutes • Colleges Schools • Sales & Marketing • Customer Care • Event Management • Shopping Malls • Own Business Entrepreneurship • Higher Studies Like: IAS • IPS • IFS • MBA with specialization in: Finance/ HR/ Sales & Marketing/ Materials & Purchases/ Retail/ Health Care/ Media Management/ Training/ Advertising/ Public Relations etc.

# FACULTY OF BEHAVIOURAL & SOCIAL SCIENCES (FBSS)

The Faculty of Behavioral & Social Science was launched with commitment to contribute to the university mission by supporting the pursuit of excellence in the field of behavior and social science. At FBSS, we not only provide an intellectual ecosystem for our students to acquire knowledge and to deliberate some of the important issues in behavior and social science, but also to create solutions and new knowledge in the field pertinent domain as well as life long learning perspectives.

We provide excellent facilities to our students including a modern contemporary campus and state-of-the-art library offering wide variety of journals, databases, books.

The student mix at FBSS makes it diverse as the students come from a variety of backgrounds, including psychology, economics, social work, and lifelong learning from all stages of life.



The students develop a strong theoretical foundation through a rigorous training sessions, course delivery with experiential learning pedagogy. The faculty brings tremendous research strength and a wide variety of industry and government experience across diverse and functional domains. At FBSS the students and faculty work closely with each other in the classrooms as well as on individual research projects. The faculty has been derived from vast National as well as International exposure.

It is important to mention that degree from FBSS could lead to rewarding careers filled with inquiry and intellectual growth. The contributions of students extend not only to behavioral practices, but also to governance economics and social work including behavioral economics. I am proud and privileged to have a wonderful team of well experienced and learned faculty to take this mission forward.



## DEPARTMENT OF APPLIED PSYCHOLOGY

Our curriculum and pedagogy stems from our belief in 'Multiple Intelligence'. Our pedagogy and diverse teaching and learning methods are based on 'Experiential Learning'. We have an active Human Lab which is the foundation through which all students explore the various avenues of applied psychology including areas like clinical, organizational or counseling amongst others. Some of the ways our students learn is through live field projects, workshops, action research, simulations, role-playing scenarios, case studies, seminars, industry interface and guest lectures.

We lay tremendous stress on the inculcation of ethics, values and good governance skills in the students. Social responsibility and community service form an integral part of the FBSS culture. FBSS believes that holistic development should be the goal rather than creating islets and silos of knowledge.

### PROGRAMME OFFERED

- BA (Hons.) - Applied Psychology (3 Year)
- MA - Applied Psychology (2 Year)
- Ph.D

The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.

### PROGRAMME OVERVIEW

B.A. (Hons.)

Applied Psychology provides the foundations for a career in psychology and affiliated fields, offering modules in the core areas of modern psychology, including cognitive, biological, developmental, abnormal psychology, etc.

Students of the program are comprehensively trained in research skills, as throughout the degree the student will conduct qualitative and quantitative research, & also complete an independent research project in your final year.





Applied Psychology offers a rich and diverse curriculum. Students will complete courses that examine psychology from a philosophical and cultural perspective, enhance their critical thinking and help them develop a strong understanding of the modern fields of psychology. The combination of courses offered will enable them to develop confidence, knowledge and capability in both the research and practical application of psychological theory. This course examines how psychology is applied to work and in the community, and how psychological interventions might help real world problems.

The study of human behavior is of paramount importance in understanding how a human being behaves in a given situation, under the influence of varying external and internal factors.

Applied Psychology has evolved to be the most important branch of Social Sciences in recent times, particularly when it comes to the prediction of individual human behavior.

#### MA -Applied Psychology (2 Year)

The MA Applied Psychology programme lays an emphasis on understanding and applying psychology through experiential learning and hands on activities, apart from classroom learning. This includes the use of the The Human Lab, which is a Centre for Psychometric Assessment, Psychological Counseling, Psychotherapy & Training & Development at the Department of Applied Psychology.

The objective is to help the Applied Psychology student strengthen domain knowledge and to hone applied skills which are needed in the real world workplace.

The specializations offered in the MA Applied Psychology programme are:

Clinical, Counseling, Industrial and Organizational, Educational, Health, Sports, Psychological Assessment and Psychometric Testing, Personality Assessment, Social, Cognitive & Perceptual, Community, Consumer, Developmental, Engineering, Environmental, Evolutionary, Experimental, Forensic & Criminal, Neuropsychology, Rehabilitation & School Psychology.

#### The Human Lab

A centre for Psychometric Assessment, Psychological Counselling, Psychotherapy, Training and Development.

The Human Lab is an attempt to integrate and apply the principles and fundamentals of psychology. Physical wellbeing alone does not guarantee success in life; what we also require is psychological wellbeing. So the goal of The Human Lab is to create holistic wellbeing.

#### HIGHLIGHTS

1. Perfect blend of industry-academia exposure
2. Infrastructure conducive to promote learning and skill building
3. Experiential and interactive approach for curriculum delivery

4. Trained faculty from different R & D Organizations like Defence Research and Development Organization, Sports Authority of India, Institute of Banking Personnel Selection, Department of Experimental Psychology etc
5. Psychology students are placed with prestigious institutions like Kendriya Vidyalaya, Ministry of Woman and Child Development, Tagore International School etc.
6. Students are involved in different research projects of Haryana Police, ICSSR and UGC
7. For Psychology students regular fields visits are organized to different places like old age homes, counseling centers, hospitals, and research labs.
8. Equipped with state of art Psychological Laboratory and Testing facilities

#### DEPARTMENT OF ECONOMICS

In today's world, where economies across the globe are interconnected, studying Economics has become vital. The Department of Economics, Manav Rachna International Institute of Research and Studies, aims at building required analytical and critical skills and attitude in its students that enable them to successfully participate in the world at large. The primary objective of the Economics programme is to offer educational opportunities to students by preparing them as accomplished citizens, capable of critical thinking and independent analysis with discipline centered theoretical and applied knowledge. The Department is committed towards promoting high quality teaching and research with its undergraduate and postgraduate studies and doctoral research programmes.

## PROGRAMMES OFFERED

- B.A. ( Hons) Economics - (3 Years)
- M.A. Economics - (2 Years)
- Ph.D. in Economics

The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.

## PROGRAMME OVERVIEW

The undergraduate program in Economics deals with the study and application of economic theory and economic decision making. Exposure to different sectors (Industry, Agriculture, Services) through dissertation builds the analytical capacity of the students. The Department is committed to a liberal education philosophy and development of leadership skills in the field of economics. The program develops its students' professional competencies and responsibilities, and prepares them for a variety of careers as proficient economist.

The postgraduate programme in Economics is designed for comprehensive and in-depth study of Economics as a discipline at advanced level. It includes the study of economic theories with a blend of hands-on issues, quantitative techniques for analysis and applications to specific economic and public policy concerns. The specializations offered in the M.A./M.Sc. in Economics are: Advanced Economics including game/behavioural theory, Econometrics with advanced techniques/time series analysis and software application, Money-Banking and Financial Economics, Environmental and Natural Resource Economics, Industry and Agricultural Economics, Economics of Health and Education, Development Economics, Spatial and Network Economics, etc.

The doctoral program in Economics offered by the Department is framed according to standards set by UGC new Regulations, 2016 for Awards of M. Phil. / Ph.D. Degree under the guidance of highly qualified and widely recognized faculty in their respective fields. The Ph.D. programme has been able to create substantial impact on teaching, research, projects, and consultancy. The department has brilliance in the areas of Applied Economics, Econometrics Modeling, Financial Economics, Environmental and Natural Resource Economics, Industry and Agricultural Economics, Economics of Health & Education, Development Economics, Public Policy and Economics. The department has a robust Ph.D. program with a well-structured 6 month coursework supported by state of the art infrastructure, well stocked up-to-date library.

These courses are anticipated to support developing professionals and experts who would be able to apply economic reasoning in real world issues. It would also expose students to the complexities, dynamics and challenges of current global economic scenarios. The course aims to build up skills for economic analysis and decision making. An emphasis on data analysis and interpretation throughout the course would also encourage critical thinking and logical reasoning. It would provide a learning platform for students thereby equip them with main tools of the professional economist who wish to pursue their career in national and international development agencies, government organizations, public administration, corporate sector, banking/non-banking financial institutions, non-governmental organizations, academic and policy research institutes as well as economic consultancies.

## HIGHLIGHTS

- Perfect blend of industry-academia exposure
- Infrastructure conducive to promote learning and skill building
- Experiential and interactive approach for curriculum delivery
- Trained faculty from different academia and research organizations
- Well-equipped library with sufficient number of books

## DEPARTMENT OF SOCIAL AND POLITICAL STUDIES

### PROGRAMMES OFFERED

- B.A - Liberal Arts (3 Years)

The detailed semester-wise course structure along with study schemes for the programme is available on MRIIRS website.

## PROGRAMME OVERVIEW

The undergraduate program in Liberal Arts is designed to empower students for dealing with complexity and diversity in rapidly changing society. The study of liberal arts courses would provide students with broad knowledge of the wider world with multidisciplinary perspective covering social and natural sciences, culture and society as well as in-depth lesson in their specific areas of interest. Such a liberal approach of education is expected to help students develop their sense of social responsibility with strong and transferable intellectual capacities involving communication and professional skills, analytical and problem-solving abilities, and demonstrated aptitude to apply critical thinking in the real-world scenario.





Liberal Arts program covers a range of subjects wherein students have to be opted papers from foundation course, minor course and major course. The major course gives specialization in a specific subject and minor course is intended to offer a fairly intermediate level of knowledge about wide range of diverse subjects as per choice. The program is designed in way to create thoroughly informed intellectuals for the academia. In the program, a student gets liberty to choose subjects that provide him/her an opportunity to learn alternative levels of proficiency in the chosen subjects after completion of the course.

Political Science/Public Policy/Public Administration is the scientific study of the politics of institutions, structures and organizations. Whereas Political Science deals with the theoretical aspects of the discipline, Public Administration and Public Policy studies the applied aspects of political science. It seeks to explain how institutions, organizations, and the public interact within various governance structures to develop the policies that they do.

Sociology is the study of the way people live and interact in the world. It is a scientific approach to the study of society, social structures and practices. It has played a central role in the intellectual growth of social sciences across the globe.

Sociology aids in the overall growth of students as individuals and citizens. It teaches to be empathetic and non-judgemental in one's approach. It makes the student understand the tight rope between abstract and immeasurable social facts and maintaining scientific and logical reasoning. It makes one rational, analytical and curious

#### Job Prospects

Inimitable and matchless programme for future careers in the civil services and local government services, journalism, non-governmental organisations, Human Rights organisations, and several other areas

#### Academics

Research organisations

Think-Tanks

Direct entry into market research jobs in corporate houses

Civil services and local government services,

Journalism

Non-governmental organisations

Human Rights organisations

Others

The student develops skills in implementing policies, projects, and programs that resolve important societal problems; addressing organizational,

human resource, and budgetary challenges; and analyzing public policy with an emphasis on research and analysis and developing solutions to policy issues.

The objective of both the Bachelor's and Master's is to provide a solid platform for students who want to launch themselves in the field of Political Studies with an understanding of governance, the structure of state and political institutions and policy. The endeavor is also to develop their skills to understand multiple scenarios in both depth and complexity so as to be in a position to critically analyze and question policy matters.

The Public Policy and Economic Research Unit is the Social Action Research Centre for both the B.A. (Hons) Political Science and M.A. Public Policy and Public Administration and Department of Economics.

#### PLACEMENT OPPORTUNITIES

The study of Political Studies is a well established route to a Civil Services career either at the central and state level. It also provides avenues into Journalism, working within Think Tanks and Research Organizations, both government and independent while establishing oneself as a Thought Leader of eminence. Another flourishing area is that of academics, particularly with the popularity of the subjects across colleges and schools. Additionally NGO's are an area in which there is ample opportunity to blend both work and giving back to society.



The changing dynamics in our society create need of human service profession to appropriately address the concerns of people at varied levels. Gradually, development and empowerment of people is being considered as a mean for overall development of a society which can be facilitated by trained professionals. Master of Social Work (MSW) is a professional course with aim to develop critical insight among the students to appraise social issues. This course intends to develop students' personality through inculcation of democratic and humanitarian values. The course structure is inclusive of 3

days of theory classes and 2 days of concurrent field work in a social welfare organisation as assigned by the department. Rigours training imparted as part of this course will familiarize students with principles and values of the profession. This course will equip students with appropriate skills for social work practice.

This course would prepare learners for job opportunities both in government and non-government sectors in varied settings like education, hospitals, hospitality, environment, corporate, development of special groups, legal system like family courts & crime against women cell. Admission to this programme would be made through a combination of Entrance Test, Group Discussion and Personal Interview.

### Field Work Components

**Orientation Programme:** Three-day orientation programme will be organized at the commencement of the course of the semester-I & III before starting concurrent filed work. Orientation visits to welfare agencies/communities will be an integral part of the orientation programme.

**Concurrent Field Work:** Concurrent filed work will begin simultaneously with classroom teaching of theory paper from the very beginning every semester. Two days in a week will be allotted to the students to perform concurrent field work. A minimum of 15 hours (including report writing) per week of concurrent field work will be required for each student. Students will be required to complete 200 hours of field work in each semester.

**Rural Camp:** Five-day rural camp will be organized for the students of semester 3 to provide them exposure to the socio-economic, political, cultural situations & problems of rural life.

**Block Field Work:** At the end of semester-4, students will be required to undergo four-week block field work training in a social welfare agency in or outside Delhi. It is treated more as pre-employment experience and mandatory for awarding degree.

**Supportive fields instructions/ Skill Development Workshops:** Special sessions, workshops and 'learning by doing' exercises for inculcating values, principles, methods, techniques, tools of the social work profession.

**Criteria for successful completion:** Eighty percent (80%) attendance in the concurrent field work and seventy five percent (75%) attendance in theory classes is compulsory. Students failing in field work would be deemed to be failed in entire semester. Such students would be required to repeat all the theory papers, in addition to field work of that semester

### PLACEMENT OPPORTUNITIES

The study of economics opens up career opportunities in both the government and private sectors. It provides ample scope and prestigious positions nationally and internationally. Well-trained economists are placed across the government sector (including the Indian Economic Service and Reserve Bank of India Officer), corporate firms, several premier research institutes in India and abroad, international development agencies (like various organizations under the World Bank Groups, United Nations), banking/financial sector and several academic institutions. In the job market, there is an increasing demand for economic analysts, researchers and consultants.



# FACULTY OF DENTAL SCIENCES (FDS) MANAV RACHNA DENTAL COLLEGE A CONSTITUENT INSTITUTION OF MRIIRS



## Principal's Message

It is my pleasure to welcome you all on behalf of all the staff to Manav Rachna Dental College. MRDC imparts Dental education of very high standards to its students. The college has adopted innovative methods in teaching with community based teaching education and research. The educational goal of MRDC for its students is to ensure a holistic development in theoretical, practical and clinical skills with the aim to prepare compassionate human beings, caring, responsible and courteous dental professionals along with responsible and society conscious citizens. This Institute believes in training the students not only to excel as Dental Surgeons but also as responsible citizens who will blend into today's competitive social fabric. We are committed to a comprehensive approach to managing patient care while simultaneously applying the benefits of discipline-based clinical instruction. It gives me immense pleasure to welcome you to the professional world of dentistry. Hope you enjoy your formative years of your career at Manav Rachna Dental College.

Dr. Arundeeep Singh, Principal, MRDC





**Programmes offered at Manav Rachna Dental College**  
Undergraduate Programme  
Manav Rachna Dental College, Faridabad is offering following Undergraduate Programme:

| Name of the Programme      | Sanctioned Seats |
|----------------------------|------------------|
| Bachelor of Dental Surgery | 100              |

BDS Programme is recognized by Ministry of Health & Family Welfare, GOI vide Notification F No. V.12017/ 116/ 2005-DE dated 30.11.2010. (Refer website [www.manavrachna.edu.in](http://www.manavrachna.edu.in))

Postgraduate Programmes

Manav Rachna Dental College, Faridabad is offering MDS Programme in the following speciality:

| Name of the Programme                        | Sanctioned Seats |
|--|------------------|
| MDS - Prosthodontics and crown & Bridge      | 3                |
| MDS - Pediatric and Preventive Dentistry     | 3                |
| MDS - Orthodontics & Dentofacial Orthopedics | 3                |
| MDS - Periodontology                         | 3                |
| MDS - Conservative Dentistry & Endodontic    | 3                |
| Total  | 15               |

\*Recognized vide Ministry of Health & Family Welfare, Govt. of India (MHFW, GOI), Department of Dental Education letter no. V.12017/20/20/2011-Edated17thMarch2016 (Refer website [www.manavrachna.edu.in](http://www.manavrachna.edu.in))

Manav Rachna Dental College has well-established specialty clinics in Orthodontics, Oral Surgery, Oral Implantology, Micro-

Endodontics, Minimal Invasive Prosthodontics, apart from Advanced Dental Centre and Rural Health Centres. Moreover, many Rural Dental Health Camps and school children Dental Health Camps are routinely undertaken by the College. The public response to MRDC Dental Camps, held at various places for the welfare of needy people, has been very encouraging. The ultimate mission is to bring this Institute at par with the best in the world, so that our trained doctors become the global players of tomorrow.

At MRDC, the spirit of innovation defines us. Our professionals create the new ideas that are transforming the future overall. And they bring that into the classroom, so our students take the lead in innovating new ideas of the future. MRDC has specialized faculty in all the courses, it offers. They know how to prepare students for tomorrow needs because they are working directly with those issues, everyday. The teaching of dental courses at MRDC is conducted on the laid down practices and principles of NAAC.

#### BDS Programme

| Sanctioned Intake | *Seats to be filled via All India Quota | NRI/ Foreign Nationals |
|-------------------|---|------------------------|
| 100               | 85                                      | 15                     |

#### Eligibility

A person seeking admission in BDS programme must fulfill the following eligibility criteria:

- He / She will attain the age of 17 years or more on 31-12-2020. The age shall be determined as per entry in the Matriculation/ Higher Secondary or its Equivalent Certificate.

- Must have passed Senior School Certificate Examination (10+ 2) of Board of School Education Haryana or an examination recognized as equivalent thereto with atleast 50% marks in Physics, Chemistry and Biology taken together and must have passed in the subjects of Physics, Chemistry, Biology and English individually in qualifying examination.

- He/ She should be NEET 2020 qualified.

In case of candidates belonging to scheduled castes/ Scheduled tribes/ Other Backward Classes the marks obtained be read as 40% instead of 50%.

Note:

The candidate who have passed qualifying examination from National Open School shall be eligible provided they fulfill

- the conditions laid shown at ii) and iii) above.
- Diploma in Pharmacy and Dresser's Course are not equivalent to 10+ 2 for the purpose of admission in BDS Programme.

#### Duration of Programme

The undergraduate dental programme leading to BDS Degree shall be of 4 (four) academic years with 240 teaching days in each academic year, plus one year rotating internship in MRDC. The internship is compulsory \* BDS Degree shall be granted after completion of one year internship.

#### Process of Admission

Admissions by adhering to the directions of the Government of India, the Dental Council of India on the basis of merit of the NEET 2020. For complete details please visit [www.mcc.nic.in](http://www.mcc.nic.in) (UG Counselling & Deemed University section)

## Syllabus

Syllabus of the subjects of study is prescribed by Dental Council of India and approved by Academic Council of MRIIRS Faridabad, which is a Deemed-to-be-University under Section 3 of the UGC Act 1956 University Examination. The curriculum and study scheme for BDS programme is available on Institution website : [www.mrdc.ac.in](http://www.mrdc.ac.in)

The University examinations shall be held in the months June-July in each academic year as per Scheme of Examinations approved by the Academic Council of the University.

- i. Result shall be declared within 30 days after the date of the last university examinations.
- ii. A candidate who has failed in any one or more subjects in I year or II year or III year BDS university examination shall be permitted to go to next higher B.D.S. class and may be allowed to appear in that/those subject in subsequent examination which will be held within one month of declaration of results. However, he/she has to pass the university examination in that/those subject before he/she is allowed to take next higher B.D.S. university examination.

A candidate who fails in the second attempt will then be allowed to take a third attempt in that/those subjects in subsequent examination which will be held again in the month of Nov/Dec. If a candidate does not pass in these three attempts will then loose one year. A pass in all the eight subjects is mandatory for completion of the 4th BDS Programme before undergoing internship programme.

1. The date fixed for the receipt of application form and fee for examination without and with late fee, as fixed by the Vice-Chancellor shall be notified by controller of examination.

BDS Examinations will be held as per the ordinance and rules of examination laid down by MRIIRS Faridabad.

A student who satisfy the following requirements duly certified by the Principal (MRDC) shall be eligible to appear in the first second, third and fourth year BDS examinations as the case maybe

- a) of having good character,
- b) of having attended the prescribed course,
- c) of having attended not less than,
  - i) 75% of all course of lectures delivered and
  - ii) 75% of full course of practical's held separately in the subjects of study as per scheme of examination
- d) of having cleared all the college fees and dues of the next year. (i.e. the Professional examination for which appearing).

A deficiency in the required number of lectures clinical & practical may be condoned by the Principal up to the extent of 5%

- I. If the percentage of attendance is deficient on account of:
  - a) Participation in university or inter-college sports tournaments/ youth festivals with the previous sanction of the Head /Principal
  - b) Participation in inter- sports tournaments/youth festivals with the previous sanction of the Head /Principal
- II. Attendance at the NCC / NSS camps or University educational excursions certified by the Head /Principal.
- III. Attendance at mountaineering courses by students selected by the University /College

Credit may be given for the number of days on which lectures were delivered or tutorials or practical work done during the period of attendance or participation in a aforesaid, provided that the period of absence in the case of (I) a, (II), and (III) above shall not exceed 21 days and in case of (i) (b) 30 days in an academic year.

A candidate who has completed the prescribed course as laid down and is unable to appear in the examination or having

A person who has passed the 1st BDS examination of this University shall be eligible to join 2nd year of BDS class. However, a candidate who fails in 1st BDS examination may be allowed to attend the 2nd year of BDS class but will not be allowed to appear in the 2nd BDS examination till he passes in all the subjects of 1st BDS examination.

A person who has passed the 2nd BDS examination of this University shall be eligible to join 3rd year of BDS class. However, a candidate who fails in 2nd BDS examination may be allowed to attend the 3rd year of BDS class but will not be allowed to appear in the 3rd BDS examination till he passes in all the subjects of 2nd BDS examination.

A person who has passed the 3rd BDS examination of this University shall be eligible to join 4th year of BDS class. However, a candidate who fails in 3rd BDS examination may be allowed to attend the 4th year of BDS class but will not be allowed to appear in the 4th BDS examination till he passes in all the subjects of 3rd BDS examination.

For reappearing in 1st, 2nd, 3rd or Final BDS examination the candidate will be charged Rs 3000/- per subject as the cost of using the college laboratories and materials for the University practical examination. The amount so due will be recovered by the college at the time of submitting the examination application to the University.

Any student who does not clear the BDS Programme in all the subjects within a period of 9 years including 1 year compulsory rotatory paid internship from the date of admission shall be discharged from the course.





After commencement and joining of the BDS Programme if a candidate leaves it before completion of full period, the Bond/Bank Guarantee for three Year Tuition fee of the BDS degree course, furnished by the candidate at the time of admission, will be invoked.

Admission to the BDS programmes shall be provisional subject to final registration by the affiliating University i.e. MRIIRS Faridabad, which is a Deemed-to-be-University under Section 3 of the UGC Act 1956

The medium of examination shall be English.

### CREDIT BASED SYSTEM

Education at the MRIIRS is organized around the credit based system of study. A student's performance/progress is measured by the number of credits that he/she has earned, i.e. completed satisfactorily. Based on the course credits and grade obtained by the student, grade point average is calculated

#### (a) Course credits assignment

Each course has a certain number of credits assigned to it depending upon its duration in periods for lecture, tutorial and laboratory/clinical practice in a week. A few courses/activities are without credit (s) and are referred to as Audit Pass Courses (APC) but are mandatory to pass as a partial fulfillment of award of degree.

#### (b) Earning credits

At the end of every course, a letter "Grade" shall be awarded in each course for which a student has registered. On obtaining a minimum Pass Grade, student shall

accumulate the course credits as Earned Credits. A student's performance shall be measured by the number of credits that he/she has earned and by the weighted grade point average.

Grades obtained in the audit courses shall not be counted for computation of grade point average.

### Choice Based Credit System

For Award of Degree of a programme, for which the student is enrolled, he/she has to earn minimum required credits as prescribed in the study scheme / curriculum booklet of that programme. During the entire programme the student is required to successfully complete various courses with minimum Pass Grade broadly classified under category of Compulsory Courses and Elective Courses. All the specified courses / activities covered under

compulsory category are mandatory to successfully qualify without choice. Some of the total minimum credits required for award of Degree come under Open Elective Category and includes some Domain Specific Elective Courses, Interdisciplinary Courses and Generic Elective Courses which shall be notified by the Academic Branch of MRIIRS. The students shall have the complete option to select any of the courses of his/her choice out of the listed courses under Open Elective category to earn the total minimum credits required for award of Degree. Under this category, the students shall also have the option to select any online course (MOOCs) or go for additional industry attachment / internship with prescribed credits as approved by Academic Council/ Vice Chancellor on the recommendation of Dean-Academics, MRIIRS.

### GRADING SYSTEM

Letter Grade System Students' academic performance, as the aggregate of both Formative/ Internal assessment and Summative/ University examinations, shall be reflected by letter grades on a 10 point scale, the descriptions of which are provided below.

| Range of Percentage of Marks | Grade | Grade Point GP | Description of Performance |
|------------------------------|-------|----------------|----------------------------|
| 95.0-100                     | O     | 10             | Outstanding                |
| 85.0-94.9                    | A+    | 9              | Excellent                  |
| 75.0-84.9                    | A     | 8              | Very Good                  |
| 65.0-74.9                    | B+    | 7              | Good                       |
| 55.0-64.9                    | B     | 6              | Above Average              |
| 45.0-54.9                    | C     | 5              | Average                    |
| 40.0-44.9                    | P     | 4              | Pass                       |
| 0-39.9                       | F     | 0              | Fail                       |
|                              | Ab    | 0              | Absent                     |
|                              | AP    |                | Audit pass                 |



### (i) Calculating Annual Grade Point Average (AGPA)

The performance of a student in a particular semester is indicated as the Annual Grade Point Average (AGPA). The AGPA is the weighted average of Grade Points of all letter grades received by a student for all the course units in the academic year.

The formula for computing AGPA is given below:

$$\text{AGPA} = \frac{\sum (\text{C} \times \text{G}) \text{ for each course with atleast pass grade in a particular academic year}}{\sum (\text{C}) \text{ for each academic year}}$$

### (ii) Calculating Cumulative Grade Point Average (CGPA)

The performance of a student over different academic years of study is indicated as Cumulative Grade Point Average (CGPA).

$$\text{CGPA} = \frac{\sum (\text{C} \times \text{G}) \text{ for each course with atleast pass grade in all completed academic year}}{\sum (\text{C}) \text{ for all completed academic year}}$$

### iii) Conversion of AGPA / CGPA to Percentage Marks:

AGPA / CGPA obtained by a student shall be multiplied by a factor of 10.0 to convert it to percentage marks.

Example: AGPA / CGPA of 6.4 is equivalent to  $6.4 \times 10 = 64\%$  marks

The Annual results (including both Formative/Internal assessment and Summative/ University examinations) shall be declared by the Controller of Examination.

The Detailed Award List containing the Annual Grade Point Average (AGPA) and Cumulative Grade Point Average (CGPA) obtained by a student in various courses shall be issued by the Controller of Examinations, at the end of each academic year, after the declaration of the result.

### Assessment

The minimum number of marks required to pass in each examination shall be:

- a) 50% in theory including written, oral and internal assessment of each theory subject; and 50% in the practical including internal assessment of each subject

### Grace Marks

The grace marks up to a maximum of five marks may be awarded at the discretion of the University to a student who has failed only in one subject but has passed in all other subjects.

### Declaration of Results

1. The Controller of Examinations shall publish the result of the examination. The successful candidate of the first, second, third and final Professional Examination will be awarded Detailed Marks Card.
2. Successful candidate who obtains "A" Grade in any subject shall be declared to have passed "With distinction" in that subject provided he passes in all subjects of the examinations at one and same time.
3. BDS Degree with 'Honors' shall be awarded to a candidate who:
  - (a) has completed the course in the minimum stipulated period; and
  - (b) has passed each of the first, second, third and final examinations in first attempt obtaining not less than "B+" Grade in each of every examination.
4. A successful candidate of the first/ second/ third and final examination shall be granted a certificate.

### Migration

Migration from one dental college to other is not a right of a student. However, migration of students from one dental college to another dental college in India may be considered only in exceptional cases of extreme compassionate grounds provided following criteria are fulfilled.

- i. Both the colleges, i.e. one at which the student is studying at present and one to which migration is sought, are recognized by dental council of India.
- ii. The applicant candidate should have passed 1st professional BDS examination.
- iii. The applicant candidate submits his application for migration, complete in all respects, to all authorities concerned within a period of one month of passing (declaration of result) of the first professional Bachelor of Dental Surgery (BDS) examination.
- iv. The applicant candidate must submit an affidavit stating that he/she will pursue 240 days of prescribed study before appearing at 2nd professional BDS examination, which should be duly certified by the registrar of the concerned university in which he/she is seeking transfer. This transfer will be applicable only after receipt of an affidavit.

Note:

- i) Migration is permitted only in the beginning of II year BDS Programme in a recognized institution.
- ii) All applicants for migration shall be referred to dental council of India by the college authority for obtaining NOC.
- iii) Council reserved the rights, not to entertain any application which is not under the prescribed compassionate grounds and also take independent decisions where applicant has been allowed to migrate without referring the same to the council.

Note: Compassionate ground criteria

- i) Death of supporting guardian.
- ii) Disturbed conditions as declared by Govt. in the Dental College area.





### BDS- Fee Structure 2020-21

The candidates shall be required to deposit the fee of 1st year Rs 476500/- (including security of Rs. 50000/- to be adjusted against fee of 4th year) on the spot, at the time of physical counselling for admission through Demand Draft payable in favour of Manav Rachna International Institute of Research and Studies drawn at a RBI approved Bank and payable at Faridabad. Payment through cheque shall not be accepted. The detailed fee structure of BDS programme is given in the table at page No. 92.

### Admission to NRI/Foreign Nationals Category for BDS Programme

Eligibility He/ She should be NEET 2020 qualified. Number of Seats

15% of the sanctioned intake i.e. 15 seats out of 100 are reserved for NRI / Foreign Nationals.

### Fee Structure

Tuition Fee US \$ 44000 for the entire course in addition to University charges on back to back basis. Hostel and / or Transportation charges shall be extra as applicable. The entire Tuition Fee is payable in full at the time of admission. In exceptional cases, if a NRI student is permitted to pay fees in installments, he / she will be required to submit a bank guarantee for the balance of fee. However, the fees mentioned above are subject to change with the approval of State Govt. of Haryana or Hon'ble Courts of Law or any other competent authority.

After commencement and joining of the BDS Programme if a candidate leaves it before completion of full period, the Bond/Bank Guarantee for three Year Tuition fee of the BDS degree course, furnished by the candidate at the time of admission, will be invoked.

Admission to the BDS programme shall be provisional subject to final registration by the MRIIRS Faridabad, which is a Deemed-to-be-University under Section 3 of the UGC Act 1956

Preference of Admissions as below:

Category I: Foreign National and Actual NRIs candidates who originally belonged to the State of Haryana.

Category II: NRIs who originally belongs to an Indian states and Union Territories other than Haryana.

i. If sufficient numbers of eligible candidates under first category are available then they will be admitted first on merit in qualifying examination even if students under subsequent category are higher in merit.

ii. The NRI students will have to give a bank guarantee for the balance of fee, if they opt to pay the fee in installment as provided.

iii. Any seats remaining vacant under NRI category shall go to the Management category.

iv. Admission shall be made on the basis of merit as laid down by the State Government of Haryana / Honorable Court of Law or any other competent authority.

### MDS PROGRAMME

Eligibility Criteria for Admission

1. A candidate will be eligible for admission to the MDS Programme if he/she:

He/ She should be NEET 2020 qualified.

(a) has passed the BDS examination from any Dental College/ Institution approved/ recognized by the Dental Council of India.

(b) has completed satisfactorily one year compulsory rotating internship by 31.03.2019 from colleges recognized by Dental Council of India for this purpose.

(c) has been registered permanently with the State Dental Council/ DCI at the time of admission, & Possess a certificate of good conduct from the Head of Institution last attended.

2. The candidate is also required to produce the above-mentioned certificates in original at the time of counseling without which the admission shall not be granted.

3. A candidate who is already admitted to a course in any institution is eligible to apply for another course only after having passed the first course. He/She will be required to give an undertaking to this effect. Concealment of facts will invite disqualification.

4. After commencement and joining of the MDS Programme if a candidate leaves it before completion of full period, the Bond/Bank Guarantee for two Year

Tuition fee of the MDS degree course, furnished by the candidate at the time of admission, will be invoked.

5. Candidates already in service must submit their application form through their employer or produce 'No Objection Certificate' from the employer on or before the last date of receipt of application form.
6. Admission to the MDS programmes shall be provisional subject to final registration by MRIIRS Faridabad

#### DURATION OF PROGRAMME

The normal period of completing the MDS Programme shall be three academic years including the period of examination.

#### Process of Admission

Admissions will be done by adhering to the directions of the Government of India, the Dental Council of India and policies laid down by the Govt. of Haryana and on the basis of merit of NEET 2020. For complete details please visit [www.mcc.nic.in](http://www.mcc.nic.in) (PG Counselling & Deemed University section)

#### Syllabus

Syllabus of subjects of studies in the specialties of MDS / P. G. Diploma course will be as prescribed by Dental Council of India and Approved by Academic council of MRIIRS Faridabad, which is a Deemed-to-be-University under Section 3 of the UGC Act 1956.

#### Probation Period

- (i) A report on every student shall be obtained from his/her Supervisor (Countersigned by the Dean) four to six months after the start of the course regarding his/her satisfactory participation /work in the course. The admission is liable to be cancelled if the report is unsatisfactory.
- (ii) On completion of the probation period each candidate will be re-assessed. In case his/her performance is satisfactory the admission shall be regularized. However, if his/her performance is unsatisfactory, the admission will be cancelled.

#### University Examination

The examination shall be held twice in a year one regular in the month of April and the other supplementary in the month of October without and with late fee as fixed by the Vice-Chancellor. The dates fixed for receipt of application form and fee for examination without and with late fee as fixed by the Vice-Chancellor shall be notified by the Controller of examinations/ Registrar.

#### MDS-Fee Structure for 2020-21

The candidates shall be required to deposit the following 1st year fee on the spot, at the time of physical counselling for admission through Demand Draft payable in favour of Manav Rachna Dental College drawn at a RBI approved Bank and payable at Faridabad. Payment through cheque shall not be accepted.

MDS 1st year fee for specialization in Conservative, Orthodontics and Prosthodontics: Rs 10,00,000/- (including security of Rs. 50000/- to be adjusted against fee of 3rd year)

MDS 1st year fee for specialization in Pedodontics & Periodontology: Rs 8,00,000/-(including security of Rs. 50000/- to be adjusted against fee of 3rd year)

If a candidate fails to deposit the fee on the spot immediately after allotment of seat, he /she will lose the opportunity and these at shall be allotted to the next candidate in the merit list. The detailed fee structure of MDS programme is given in the table at page No. 92.

In addition to the above, hostel, mess, Transport charges etc. where ever applicable will be charged accordingly.

#### Admission to NRI/ Foreign Nationals Category for MDS Programme

Eligibility He/ She should be NEET qualified. Number of Seats 15% of the total sanctioned intake in all MDS Programmes i.e. 02 seats out of 15 are reserved for NRI / Foreign Nationals.

#### Fee Structure

Tuition Fee US \$ 75000 for the entire programme in addition to University charges on back to back basis. Hostel and/ or Transportation charges shall be extra as applicable. The entire Tuition Fee is payable in full at the time of admission. In exceptional cases, if a NRI student is permitted to pay fees in installments, he / she will be required to submit a bank guarantee for the balance of fee.

Preference of Admissions as below:

Category I: Foreign National and Actual NRIs candidates who originally belonged to the State of Haryana.

Category II: NRIs who originally belonged to an Indian states and Union Territories other than Haryana.

- i. If sufficient numbers of eligible candidates under first category are available then they will be admitted as per the procedure laid by the Government of India/ Dental Council of India/ any competent authority.
- ii. The NRI students will have to give a bank guarantee for the balance of fee, if they opt to pay the fee in installment as provided.
- iii. Any seats remaining vacant under NRI category shall go to the Management category.

#### CERTIFICATE COURSE

##### Course- I

##### Certificate Course - Oral Implantology

This course is intended for dental practitioners ( dentists, dental surgeons, oral surgeons )who want to develop their theoretical knowledge and practical clinical experience in treatment planning, surgical placement, prosthetic restoration and maintenance of dental implants. Dental implantology is concerned with replacement of missing teeth and supporting oral tissues with dental implants. The programme comprises of didactic lectures, live demonstrations of basic and advanced procedures in oral implantology.







### Learning Objectives.

Upon completion of this course the dental professional should be able to

1. Understand surgical and soft tissue healing protocol.
2. Discuss the importance of proper implant positioning.
3. Understand the use of different type of abutments.
4. Understand factors affecting crown form.
5. Explain the relationship between implants and facial aesthetics.
6. Outline steps to avoid prosthesis discolouration.
7. To enable a full proof treatment plan to be made of the commencement of each case.

### Eligibility:

Minimum qualification of B.D.S or equivalent from recognized Institution in India or Overseas

### Duration:

1 year (6 modules and each module for 3-4 days)

No. of seats - 10

Fees-350000/-

### Course- II

Certificate course in "Aesthetics" by laser dentistry.

Objectives- The participant will obtain knowledge about various applications of Lasers in dentistry and will be in a position to perform treatment procedures using lasers independently. The trainee will attain thorough understanding of the various parameters that affect the treatment outcome, the science of Laser dentistry and application of the knowledge in clinical practice. The participant will be able to treat all the surgical as well as nonsurgical cases in dentistry with expertise.

Eligibility - Qualification of BDS / equivalent from a recognized institution from India or overseas, post graduates and dental practitioners.

No. of module- Four modules of 3 days in a gap of 2 months. (Total Duration - 1 year)

Certificate programme will be completed in 4 modules. Each module consists of didactic lectures and hands on pig jaws, chicken leg pieces, mentor guided aesthetic surgical cases on patients, viz. Gingivectomy, Periodontal plastic and aesthetic surgeries namely frenectomy / frenotomy, vestibuloplasty, depigmentation procedure, pocket sterilization, crown lengthening, photobiomodulation, TMJ therapy, desensitization. A lecture on hard tissue laser application procedures namely bleaching, caries removal, root canal therapy, resective osseous surgeries.

No. of seats - 10

Fees- 2,00,000/-

### Course- III

### Certificate Programme in "Aligners therapy"

Eligibility Criteria: Candidate must have M.D.S. (Orthodontics) Degree from a Recognized Dental College or University Intake - 5

Fee for all 3 modules= 30000 INR (For Indian National Only)

Collaboration: 32 Watts Aligners Company  
Special USP / Highlight of Course : This program includes a combination of practical skills and theoretical foundations to Aligners . The candidates will be able to finish 3 clinical cases with aligners with step by step guidance from experts

Total no. of modules - 3

Expenditure to the Dept- 200000 INR (Lab Charges, Consumables & Resource Faculty)





# DOCTOR OF PHILOSOPHY PROGRAMME



Prof. (Dr.) N. K. Chadha  
 Chairperson, Council for Doctoral Program  
 Dean, International Relations.  
 Qualifications: Ph.D (Delhi University) Post  
 Doctorate (University of Virginia, USA)  
 Experience: 38 Years  
 Area of interest: Research Methodology,  
 Psychometric testing, Career Counseling,  
 Positive Psychology, HRM & Gerontology



Dr Nandini Srivastava  
 Professor In Charge  
 Council for Doctoral Program  
 Qualifications: Ph.D  
 Experience: 23 Years  
 Area of interest: HR and OB

For doctoral scholars and faculty who thrive on research, Manav Rachna International Institute of Research and Studies provides and promises an excellent environment. With focused approach and dedicated efforts a great emphasis is put on high quality academic research and knowledge creation.

We invite researchers from all disciplines to collaborate, and partner in the inspiring journey as well as the success!

I invite you to consider our programs and would be happy to discuss your academic interests, if you have the inclination and commitment to undertake a rewarding career.

We promise to take the mission forward along with our students to compete with the International forum for research and generation of knowledge.

MRIIRS strives to propagate the international research agenda across the University's disciplinary spectrum and through interdisciplinary initiatives. Our aspirations and actions are influenced by our vision defined for learning, scholarship, research and public engagement.

MRIIRS expresses a commitment to disciplinary excellence across the spectrum of Engineering including Biotech and Core Sciences, Management, Psychology, Economics, Media, English Physiotherapy, Commerce including supporting research in strategically important and relevant areas. The range and health of the core academic disciplines provides an ideal foundation for the continued development of interdisciplinary research initiatives.

We aim to maximize the benefits of research by advancing fundamental knowledge and contributing to efficacious public policy, improved health outcomes, economic prosperity, social cohesion, international development, community identity, arts, culture and the quality of life.

Our high-level strategies retaining and recruiting researchers of the highest distinction, processes and potential across the Institutions, attracting the very best research students nationally and internationally. We provide a supportive research environment in which scholars at every stage of their career, can flourish and develop. We aim at encouraging collaboration- regionally, nationally and internationally and effective partnerships with other research institutions, research agencies, funding bodies/sponsors and benefactors thus ensuring that the fruits of the Institution's research activities are leveraged and disseminated for the benefit of society and the economy. We also strive to provide the academic and administrative services and facilities needed to facilitate research excellence and knowledge transfer.

The Institution will continue to develop multidisciplinary and interdisciplinary programs and new ventures designed to address many of the major challenges that confront our society.

### CRITERIA FOR ADMISSION

The admission to Ph.D programmes would strictly be done on the basis of regulations contained in the Ph.D Ordinance 8(B) of

the Institute available on its website, which is in total conformity with the UGC new Regulations, 2016 for Awards of M. Phil/ Ph.D Degree. An applicant possessing any of the following qualifications shall be eligible to apply for admission to a Ph.D programme of the Institution:

- A Master's degree with not less than 55% marks in aggregate in Engineering including Biotech and Core Sciences/ Psychology/ Economics/ Media/ English/ Physiotherapy/ Commerce/ Management of a recognized Indian University, or a degree approved by Association of Indian Universities, or any other equivalent qualification to the satisfaction of Academic Council of the Institution.
- Applicants with a Bachelor's degree in Engineering/ Technology/ Medicine / any other professional discipline of at least four year duration after 10+2 or higher duration, with either 70% or more marks in aggregate and a minimum of fifteen years of relevant experience in recognized Institute/ University/ Industry/ Government Organization, may be considered eligible for admission, on the recommendation of BOS and approval by Academic Council provided that such applicants may, in case considered essential, be required to qualify in the course/s specified by the DRC/BOS.

### REGISTRATION PROCEDURE

- Online applications for joining the Ph.D. programme shall be submitted. All eligible candidates shall have to appear for Entrance Test (of 70 Marks) to be conducted by MRIIRS as per UGC new Regulations, 2016 for Awards of M.Phil/ Ph.D Degree. The syllabus for the entrance test shall consist of 50% of Research Methodology as Part-A and 50% shall be subject specific as Part-B. The entrance test shall be followed by an interview/ presentation carrying a

weightage of 30 marks. Those applicants who are short listed based on the latest UGC notification of 50% pass marks in written and are found to be suitable shall appear before the DRC of the concerned department for judging the suitability of the research plan and availability of the supervisor.

The candidates who qualify UGC / CSIR (JRF) and UGC NET examination/foreign national will be exempted for the PhD Entrance Test. Candidates who have cleared coursework of M.Phil from any UGC approved University with at least 55% marks in aggregate may directly appear for interview to Ph.D. A person who's M.Phil. Dissertation has been evaluated and the viva voce is pending may be admitted to the Ph.D. programme of the same Institution.

A relaxation of 5% marks (from 50% to 45%) shall be allowed for the candidates belonging to SC/ST/OBC (Non Creamy Layers)/ Differently-abled Category in the entrance examination conducted by the Universities for Admission to Ph.D programmes. The research plan shall be written in English in the specified format in accordance with the instructions contained in the Ph.D. Ordinance 8(B). In case of a suitable candidate, the DRC shall assign some specific topic as area of research found suitable. A candidate will ordinarily be allowed twice for such presentation before the DRC. A third attempt may be allowed only with the approval of the Vice Chancellor in special circumstances.

- The recommendations of the DRC regarding the research plan of the candidate and proposed supervisor(s) shall be put up in the meeting of the BOS for approval and for further submission to the Board of Faculty.
- While recommending approval of the Research Plan, the BOS/BOF will also recommend the research supervisor(s).





- After the recommendations of BOS/BOF of the research plan and the name(s) of the supervisor(s) of a candidate, the case shall be submitted to the concerned Academic Council for its approval through Council for Doctoral Program.
- After the approval of the Academic Council and the payment of fees prescribed by the Institution, a candidate shall be formally registered as a research scholar / student. The PhD tenure to be counted from the day of paying the fee provided his candidature gets subsequently approved by the Academic Council.
- A Research Scholar shall be required to renew his registration every semester / year and pay the fees in the manner prescribed by the Institution.
- Ph.D Programme shall be for a minimum duration of three years, including course work and a maximum of six years.

For more rules and regulations concerning admission to Ph.D programmes, the Ph.D Ordinance No 8(B) of the MRIIRS may be referred to for additional information about research programmes and various faculties offering Ph.D programmes at MRIIRS, please log on to <http://www.manavrachna.edu.in>

#### Fee for PhD Programme for Academic Session 2020-21

| Description           | Amount in Rs. | Remarks  |
|-----------------------|---------------|--|
| Registration Fee      | 25,000/-      | One time, to be paid at the time of registration.  |
| Course Work Fee       | 35,000/-      | One time, to be paid at the time registration.   |
| Research Fee          | 70,000/-      | Per annum, Rs. 35,000/- to be paid at the time of registration and balance Rs. 35,000/- within 6 months from the date of registration. |
| Thesis Evaluation Fee | 35,000/-      | One time, to be paid at the time of submission of Thesis.  |

#### Fee structure for PhD admissions 2020-21 for NRIS/PIOs/Foreign students

PhD Programs: Course Fee (One time) US \$650, Research Fee (Annual) US \$ 1800, Thesis Evaluation Fee (One time) US \$ 650. In year 3 and onwards, Research Fee payable on Semester basis @ US \$ 900 till the date of final submission of Thesis.

It is further clarified that minimum duration for PhD is 3 years and hence a Research Scholar will be required to pay Research Fee of Rs. 70,000/- per annum for a minimum period of 3 years in two equal installments per year. If a Research Scholar submits his / her Thesis within 15 days from the completion of 3 years from the date of registration, he / she shall be required to pay Research Fee only for 3 Academic Sessions aggregating to Rs. 2,10,000/-. However, if the Research Scholar submits his /her Thesis after 15 days from the completion of 3 years from the date of registration, he / she will deposit the Research Fee @ Rs. 35,000/- per semester with the same analogy.

The Fee chargeable from the Research Scholars admitted in 2020-21, therefore, shall be as under:

|  |                  |
|--|------------------|
| Before 31st July, 2020   | - Rs. 95,000/-   |
| Between 1st January, 2021 - 31st January, 2021<br>(Semester 1st January 2021 to 30th June, 2021) | - Rs. 35,000/-   |
| Between 1st July, 2021 - 31st July, 2021<br>(Semester 1st July 2021 to 31st December, 2021)      | - Rs. 35,000/-   |
| Between 1st January, 2022 - 31st January, 2022<br>(Semester 1st January 2022 to 30th June, 2022) | - Rs. 35,000/-   |
| Between 1st July, 2022 - 31st July, 2022<br>(Semester 1st July 2021 to 31st December, 2021)      | - Rs. 35,000/-   |
| Between 1st January, 2023 - 31st January, 2023<br>(Semester 1st January 2023 to 30th June, 2023) | - Rs. 35,000/-   |
|  | - Rs.2,70,000/-  |
| Thesis Evaluation Fee  | - Rs. 35,000/-   |
| Total  | - Rs. 3,05,000/- |

Note: If a Research Scholar does not submit Thesis within 15 days from the date of completion of 3 years from the date of registration, he/ she shall pay Rs. 35,000/- per semester on the above stipulation.

If a Research Scholar fails to deposit fee on or before 31st Jan or 31st July, as the case may be, a fine of Rs. 100/- per day shall be charged for 31 days and the name of the Research Scholar shall be struck off if the fee is not paid by Feb 28 or August 31 as the case may be. In such eventuality, the Vice Chancellor may consider re-admission of the Research Scholar on valid grounds and recommendations of the Dean concerned and the student shall be required to pay re-admission fee of Rs. 5000/-

The form submission for the Ph.D Batch 2020-21 will be commencing from May, 2020- onwards followed by the entrance exam in the last week of June, 2020 tentatively.





# FOREIGN NATIONAL STUDENT ADMISSION POLICY (2020-21)

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES ALSO ADMITS FOREIGN NATIONALS AND PERSONS OF INDIAN ORIGIN (PIO) TO VARIOUS PROGRAMS OFFERED BY THE INSTITUTION. 5% SEATS ARE RESERVED FOR FOREIGN NATIONALS / PIOS IN ALL THE PROGRAMS. IN CASE ADEQUATE NUMBERS OF SUCH CANDIDATES ARE NOT AVAILABLE, VACANT SEATS MAY BE FILLED UP BY INDIAN NATIONALS. HOWEVER, THE NUMBER OF SEATS FOR FOREIGN NATIONALS / PIOS CAN BE INCREASED TO THE EXTENT OF 5% OVER AND ABOVE THE SANCTIONED INTAKE, IF REQUIRED, WITH THE APPROVAL OF COMPETENT AUTHORITY OF THE INSTITUTION.

## ADMISSION & APPLICATION

(For all programmes other than programmes of MRDC)

For last date of admission to all UG and PG programmes visit [www.manavrachna.edu.in](http://www.manavrachna.edu.in). However, the admission to Ph.D programme shall remain open throughout the year, subject to the availability of seat in the area of research in which the candidate wants to do Ph.D and fulfillment of other eligibility criterion for admission. The admission form can be downloaded from our website [www.manavrachna.edu.in](http://www.manavrachna.edu.in).

## ELIGIBILITY CONDITION

Minimum eligibility condition as laid down in respective Admission Brochures for any academic year will be followed, wherever required, the qualification will be mapped as per AIU norms.

## ADMISSION PROCEDURE FOR FOREIGN NATIONAL/ PIO STUDENTS

1. The candidate desirous to seek admission to MRIIRS is required to forward the following documents by mail to [coordinator.iec@manavrachna.edu.in](mailto:coordinator.iec@manavrachna.edu.in):
  - a) Scanned copy of the attached application form duly filled-up and signed with photo (pasted).
  - b) Scanned copy of the passport
  - c) Scanned copy of Academic transcripts, duly attested by the Indian Embassy in Applicant's country or candidate's country's Embassy in India.
2. On receipt of the required documents and subject to confirmation of candidate's eligibility based on the documents provided, the candidate will be registered and intimation will be sent to him/her about eligibility.
3. After confirmation of eligibility, the application fee of US\$250/- by Bank Transfer to Institution Bank account quoting name and passport number of the candidate is required to be deposited by the candidate.
4. On receipt of US\$250/-, the Eligibility Confirmation Letter will be sent with the instruction to deposit US\$1000/- for Provisional Admission Letter (PAL) to enable the candidate to apply for VISA.
5. Once the VISA is received by the candidate, the candidate can travel to India & pay the balance of required fees.
6. After checking and verification of the original documents by the Institution Bonafide Certificate will be issued on the basis of candidate's proof of residence in India and proof of residence in the home country.

7. Further, the student will be issued S Form ID (Unique ID Number requires for online tracking throughout INDIA as per GOI norms) and C Form ID- Only for Hostellers (Residence ID Number requires for stay in INDIA as per GOI norms during the study period in India). The students, other than Hostellers, need to get it from their concerned landlord.

8. The student will be required to report to FRRO for Registration. Mandatory instructions for Foreign National Students while applying for Bonafide Certificate:

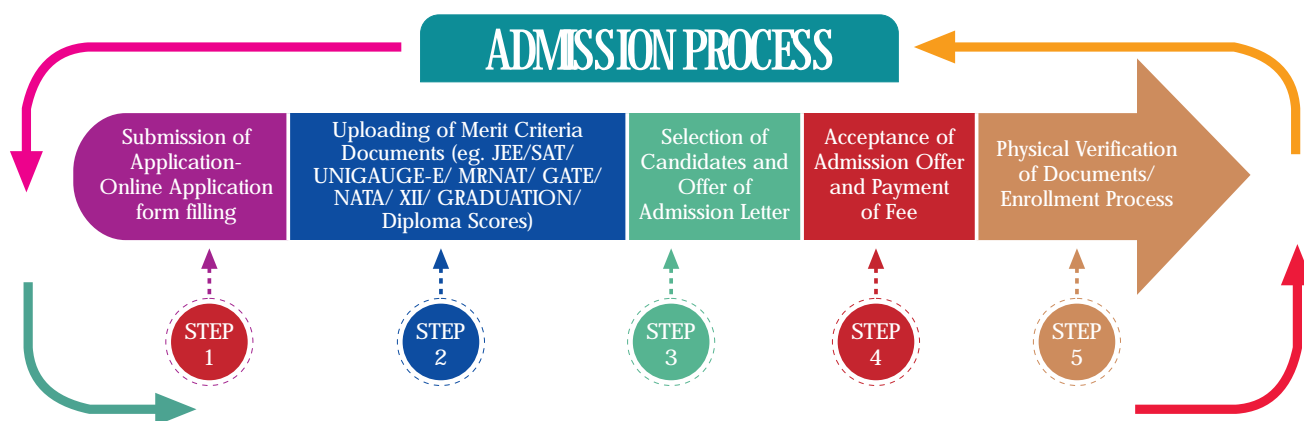
The students are required to submit their Bonafide Application with the Self Attested photocopies of the following for Visa Extension purpose. One month before the due date to their respective Department/ Faculty to enable to get their Bonafide issued well in time from Registrar office for document upload purpose while taking their online appointment for above said purpose:

- Passport
- Visa
- Stay Visa
- Institution ID
- Rent Agreement/ Hostel ID etc.

The student (Existing and New) who is on fresh Visa also needs to submit his/her application along with the Self Attested photocopies of the above stated documents within two days of joining his/ her respective Department/Faculty keeping in view the FRRO Registration clause of 14 days.



# IMPORTANT INSTRUCTIONS FOR ADMISSION SEEKERS



## STEP- 1 SUBMISSION OF APPLICATION- ONLINE APPLICATION FORM FILLING

Application for admission shall be submitted online only on the portal [www.manavrachna.edu.in](http://www.manavrachna.edu.in). The candidate may fill the application form without waiting for the results of qualifying examination (XII/Graduation/Diploma as the case may be). The prospective student is advised to carefully fill all the details and prioritize the choice of programs he/she wishes to apply. Total 3 (three) choices are allowed. Application fee of Rs. 1200/- is payable. Payment can be made through Net Banking/ Credit/Debit card/E wallets at the time of submission of application. Alternatively, candidate may procure the Admission Brochure from Manav Rachna Campus, Administrative Headquarters or City Centers, details of which are available on Manav Rachna website. Admission Brochure contains a Scratch Card (voucher code) consisting of a covered number, which will facilitate submission of application form online. Admission Brochure without Scratch Card (voucher code) may be downloaded from Manav Rachna website free of cost. Once online application for admission is submitted successfully, the system will generate a unique application number which must be noted by the candidates as the same shall act as a Reference Number for all subsequent correspondence till the candidate is actually admitted.

## DIRECTIONS FOR FILLING ONLINE APPLICATION FORM

1. Read Instructions for filling up Online Application Form carefully on the opening page after you Click 'Apply Now' on the Manav Rachna website Home Page.
2. Keep a Digitized Photograph ready on your Computer Desktop for uploading with maximum 80 KB memory, 30mm x 45mm in size in a formal dress against plain background. Candidates are advised to avoid photographs in T-Shirts/ Tops/Flashy Clothing because this photograph will be used for all subsequent transactions including preparations of ID card and Academic Transcripts. Also keep ready scanned copy of Secondary School Examination Certificate (10th as proof of Date of Birth), Senior Secondary School Examination Certificate (10+2 mark sheet), final year consolidated mark sheet/ Provisional Certificate Degree/ Diploma Certificate of the qualifying examination, if any.
3. Fill-up all fields with the correct information; Applicant's & Parent's detail as given in the mark sheet/testimonial of last qualifying examination. Do not use all Capital/ Small Letters. Use Sentence case. Mandatory fields are marked with Asterisks, without which application will not be submitted. You will have the liberty to edit certain fields as indicated in the format of application including Address, Mobile Number, Qualifying Examination Result etc.

4. Take out print-out of the final version of the online application form which must be brought at the time of Physical Verification of Documents/ Enrollment Process.

## STEP- II UPLOADING OF DOCUMENTS

Every candidate shall be required to upload the following documents along with the application:

- Class 10th mark sheet: Mandatory for all Programmes
- Address Proof: For all Programmes

### UG Programmes

- 12th standard mark sheet (if result is yet not announced : school ID card + score card of XI class / predictive score of XII class issued by school authorities): Mandatory
- For UG Engineering Programmes, mark sheets/ score of merit defining document i.e. Valid Score of JEE Mains-2020/ SAT/ UNIGAUGE, as applicable, in which the candidate has appeared.
- For B.Arch Programme, mark sheets / score of merit defining document i.e. Valid Score of JEE Mains-2020/NATA, as applicable, in which the candidate has appeared.

### PG Programmes

- 12th standard mark sheet: Mandatory
- Pre-final Year Mark sheets of higher education qualification (For PG Program): Mandatory
- Valid Score of GATE-2020 for M.Tech Programme, if candidate has appeared



### STEP- III SELECTION OF CANDIDATE AND OFFER OF ADMISSION LETTER

**Merit Defining Document:** Admission to various programs is based on merit as specified in Admission Brochure under heading PROGRAMS OFFERED AT MRIIRS for various programmes. For details refer page no. 81 to 90. Admissions to all programs (except B.Arch Programme) are also made on the basis of Manav Rachna National Aptitude Test (MRNAT) for which the scores shall automatically be picked up for merit. The complete details of MRNAT-2020 is given at page 71 of Admission Brochure.

- All Candidates shall be allowed to prioritize choices amongst the programs at the application stage itself. A candidate, who initially does not get the choice program in the first list, shall be offered admission in subsequent choices filled. University shall announce vacancy, if any, at a later date and desirous candidate shall have an option of appearing in the 'on the spot counseling' and may get up graded as per the merit of the participating candidates.
- Seats in the programs shall be allotted on the basis of preferences indicated in the application form, strictly in order of merit.
- The program wise merit, amongst applications received shall be drawn based on the actual marks scored by the candidate in Merit Defining Exam Score. For JEE mains 2020 Exams, marks in Overall category shall only be considered and marks under any special category or state etc. shall not be taken into account.
- The vacant seats, if any, after filling the seats for each programme on merit with relevant score in JEE Mains-2020/ SAT/ UNIGAUGE/NATA/GATE/MRNAT entrance test, shall be filled-up on the basis of qualifying examination on merit.
- More than one list may be announced.

All selected candidates shall be communicated with Admission offer letter, further guidelines and other details through e-mail. Candidates are advised to check their SPAM or JUNK folder as well regularly and white-list the following email id: [facilitationcentre@manavrachna.edu.in](mailto:facilitationcentre@manavrachna.edu.in) Please note that this is the only official mail ID of the University, for all communications related to admissions in the year 2020.

#### NOTE

- It is essential for the candidate to provide the marks of the merit criteria determining examination to the University immediately, after declaration of results. Candidate is required to log in to application form, fill in details and submit the application form. The details have to be filled before the due date of merit announcement. Non-compliance shall be at candidate's risk and no claim can be made for consideration for merit.
- Candidates who are offered provisional admission based on declared scores in the application, will be required to produce proof of having passed the qualifying examination to the University authorities at

the time of physical verification of documents failing which, such provisional admission will stand cancelled. No representations for extension of dates shall be entertained. IB/ Cambridge qualified Candidates shall be required to obtain the 10+2 equivalence certificate from AIU before above deadlines. Failure to do so may lead to cancellation of admission.

Any wrong declaration of marks/ Scores, which affects the merit/provide undue advantage, shall lead to disqualification of the candidate and withdrawal of admission.

The detailed schedule for Admission for various programmes is tabulated in Admission Calendar. Please refer page no. 90 of Admission Brochure.

### STEP-IV- ACCEPTANCE OF ADMISSION AND PAYMENT OF FEE

All the selected candidates, who receive Admission Offer Letter from the University shall be required to send the Acceptance of Admission for the offered programme in the format which shall be sent by the University Authority along with the Admission Offer Letter. Thereafter, the candidate shall be required to deposit the 1st installment of fee as detailed at page 91-92 in the Admission Brochure for various programmes within one week of offer of admission by using any mode as given at page 72 of Admission Brochure.

### STEP-V PHYSICAL VERIFICATION OF DOCUMENTS AND ENROLLMENT PROCESS

- All the candidates, who have accepted the admission after receipt of Admission Offer Letter, shall be required to report at designated venue's for "Physical Document Verification/ Enrollment Process" as per the slots given to them. Candidates are required to bring Letter of 'Offer of Admission' and all the original fee receipts.

Candidates shall also carry all relevant documents in original along with a set of self attested photocopies. Candidates shall upload all the documents (see list on University website at [www.manavrachna.edu.in](http://www.manavrachna.edu.in)) on Admission Portal prior to verification process.

- Candidates can appear in the "Physical Document Verification/ Enrollment Process" after deposition of 1st installment of academic fee, as given on the website. Fee can be deposited using any mode as given at page 72 of Admission Brochure (at least 3 days prior to appearing for this process).

After verification of relevant documents, all successful candidates shall be issued the Provisional Admission Letter along with temporary I-card of the University.

However, in case any provisionally admitted candidate fails to prove his/her eligibility as stated in Admission Brochure from page 81 to 90 by 14th August (for all UG/PG Engineering, B.Arch, MCA and MBA Programmes) and by 30th September for all other programmes, his/her provisional admission shall automatically stands cancelled, for which he/she will have no claim.







# MANAV RACHNA NATIONAL APTITUDE TEST (MRNAT) -2020

MRNAT (Manav Rachna National Aptitude Test) shall be conducted by the University across various disciplines. The test is applicable for candidates seeking admission to under graduate and post graduate programs of all disciplines. The test has 2 major components:

- 1 Online exam: It is an objective type online exam of 90 minutes duration with questions from syllabus covered in the qualifying exam (eg. XII or Graduation as the case may be) and/or aptitude for the program applied for. (For details check website [www.manavrachna.edu.in](http://www.manavrachna.edu.in))
- 2 GD and/or PI: Candidates shall be assessed for communication skills, ability to express themselves effectively and put across their point of view. They may be challenged to demonstrate their problem solving skills and their ability to be a team player.

University has deployed technology developed by India's leading assessment agency to ensure fair and transparent conduct of online test. The candidates shall be allotted a designated computer system in the examination centre and shall be required to login using Application Sequence Number and Password as conveyed to the applicant through email or in the exam hall prior to the examination. It is therefore advised not to share Email IDs and Password with others to avoid complications. The questions shall appear on the monitor and the candidates shall submit answers by using mouse only.

The computer system is connected to a Central Server which delivers the test in real time without web connectivity. All other functions are disabled in the machine and there is no Human involvement in the test. No formal computer knowledge is required to appear for the test. The candidate will be intimated about the place, date and time of the Test, through email and SMS well in time. For all Programmes, the Test would be conducted at Manav Rachna Campus & other locations as given on the University website.

## NOTIFICATION OF SCHEDULE FOR MRNAT FOR ADMISSION

1. The detailed admission calendar/key dates is appended at Page No 90 of this brochure.
2. The candidates shall be notified through official E-mail for slot and venue for conduct of MRNAT-2020 depending on the date of submission of his/her on-line application for admission and address. However, under exceptional cases the University Authority may consider the candidate's request for change of time slot/ venue.
3. Candidates are advised to look for notices/alerts by clicking the 'Admissions' Tab on Manav Rachna website.
4. The selected candidates on the basis of MRNAT-2020 shall be sent Offer of Admission as mentioned above under step III of Admission Process.

## MODE OF DEPOSIT OF FEES BY THE APPLICANTS/STUDENTS

Institution has provided various modes for depositing the fees as per details given below:

1. Payment Gateway from ERP. Please follow the following steps-
  - 1) Login through following URL - [app1.cloudeducationerp.com/mrei](http://app1.cloudeducationerp.com/mrei)
  - 2) Enter your login (user ID and password)
  - 3) Click on Fee Tab
  - 4) Click on Challan button to Print challan after entering the mode of payment.
  - 5) Pay Fees online by clicking on Pay online button through Credit card and Internet Banking.
  - 6) After successful transaction, Fee receipt can be downloaded from academic Paid transaction head below challan head.
2. Cash payment at any of the branches of IndusInd Bank in India through Pre-Printed Payment Challan.

In this case, students are required to download challan from their ERP portal and submit the same at IndusInd Bank along with the requisite fee. Convenience Charges @ Rs. 25 per transaction are payable to the Bank.

3. Through Credit Card at Campus: In this case the convenience charges @ 1.50% are payable in addition to fee due.

4. Through login at Paytm.com/education: Please choose 'Manav Rachna International Institute of Research & Studies' on Paytm page/app. Transaction charges will be as applicable.6. Through DD in favour of MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES payable at Faridabad/Delhi.

For Fee detail please see schedule of payment at in the subsequent paras.

#### LATE FEE PAYMENT

Note: In semester's subsequent to 1st, those students who fail to deposit fee by the due date shall be levied a fine of Rs. 100/-per day including Sunday / Holidays up to 15 days. The name of those students, who fail to deposit the fee with requisite fine within 15 days from the due date as mentioned above, shall be struck off from the rolls of the University immediately thereafter. However, such students may be re-admitted with the approval from Registrar after they deposit Rs. 2000/- as re-admission charges along with the fees and fine Rs. 1500/-. The period during which the name of the student remains struck off, will not be treated as inactive period for the purpose of calculation of attendance.

For any further query contact at following phone number between 9:00 am to 5:00 pm on all weekdays:

Admission Help Desk - 0129-4259000

#### PAYMENT OF FEES

SCHEDULE OF PAYMENT OF FEES AT THE TIME OF ADMISSION/FIRST YEAR

- a) First Installment: At the time of ACCEPTANCE OF ADMISSION OFFER
- b) Second Installment: On or before 14th November 2020



SCHEDULE OF PAYMENT OF FEES IN SUBSEQUENT YEARS

- a) First Installment: On or before 30th April of the calendar year.
- b) Second Installment: On or before 14th November of the calendar year.

Instruction for students opting BBA (Global) IB, B.Sc. IT and B.Sc. ID Program

The students will be required to open their accounts in any Branch and provide us the proof of it.

Further, students of above Programs are expected to be in possession of their Aadhar Card/ Passport and PAN Card while reporting for Physical Counseling for Admissions.

The above mentioned documents are required for the payment of their Foreign Educational Institution fee through Zenith Leisure Holidays Limited, New Delhi to AIS St. Helens, New Zealand for BBA (G)-IB & B.Sc. IT Programs and Algonquin College, Canada for B.Sc. ID Program.

#### PROCEDURE FOR CHANGE OF PROGRAM

Under exceptional circumstances, request for change of program may be considered with the approval of competent authority the recommendations of the Dean of Faculty concerned in which admission has been already sought on payment of requisite processing charge of Rs. 3000/, provided the seat in which the candidate wants to shift is/are lying vacant.



## IMPORTANT INSTRUCTIONS FOR ADMISSION SEEKERS FOR PROGRAMMES AT MRDC

### SUBMISSION OF REGISTRATION FOR ADMISSION

Registration for enquiry admission shall be submitted online only at the College website [www.mrdc.ac.in](http://www.mrdc.ac.in) for which fee of Rs. 1200/- is payable. Payment can be made through Credit/ Debit card at the time of submission of application.

All candidates need to register themselves at [www.mcc.nic.in](http://www.mcc.nic.in) (UG Counselling & Deemed University section) for BDS and [www.mcc.nic.in](http://www.mcc.nic.in) (PG Counselling & Deemed University section) for MDS. Merit list generated on the basis of NEET score and accordingly seats are allotted. It is advised to kindly follow the website for any change of rules & regulations with respect to counseling. The candidate called for the counseling will be required to produce all the original documents/certificates/marks sheets etc. at the time of counseling. Under no circumstances, will any relaxation be allowed to the candidates as regards appearing in person before the board on the fixed date and time and producing the requisite original documents/certificates/marksheets. The candidates will be called for the counseling before the Admission Committee according to the respective merit and will be entitled to exercise their choice regarding subject according to the availability of the seat (s) at their respective merit at the time of counseling. The admissions will close on as per the mandate of the Supreme Court of India. Note: If two or more candidates secure identical marks in the merit list of NEET, their relative merit will be determined as per the procedures laid down by the competent admission authority.





### Other Conditions for MDS Course

On receiving unsatisfactory report about any student from his/ her Supervisor and the Head of Department during the course, the admission is liable to be cancelled.

Admission will also be subject to the following conditions:

1. Students coming from universities other than MRIIRS, Faridabad will be required to deposit migration certificate and all other original certificates immediately after the start of the session.
2. Candidates admitted to the MDS course will be required to submit synopsis of research work to be undertaken by them to the concerned post - graduate Board of Studies within six months of their joining. The period of six months may be relaxed in exceptional cases, for which the candidates will have to apply to the concerned Board of Studies, along with the recommendations of the supervisor and head of the department. The students must submit their final thesis at least six months before the theory and clinical/practical examination. Relaxation up to one month may be given in exceptional cases.
3. The candidates will be required to pay the fees and other dues etc. as prescribed from time to time, by a prescribed date.
4. A candidate can be fined, suspended or expelled from the College/Hostel by the Principal / Director for reason like indiscipline, misconduct, absence from classes/ academic duties, non- payment

of College/ hostel dues in time and use of unauthorized electrical/ electronic appliances etc. The quantum of punishment, mode of enquiry etc. will be decided by the concerned Principal/ Director/ head of the Department.

5. No candidate, after joining the P.G. course, will be allowed to apply for/ accept any appointment (including senior residency/Demonstrator-ship) till the completion of the course.
6. If a student absents himself / herself from duty, intimation to the effect will be sent by the concerned Head of the Dept. to the Principal / Director within 48 hrs. If the period of absence exceeds 2 days, the Head of the Department/ Unit, shall not allow any such student to join his / her duty without prior permission of the Director /Principal.
7. The candidates selected for the admission to the P.G. Degree course will be required to give an affidavit to the effect that they are not undergoing any training at any other Institution and will not appear in other All India Entrance Examination.
8. If a student remains absent continuously for two weeks or total of six weeks in one year (without getting leave sanctioned), his/ her Admission shall stand cancelled. For reasons like illness, certificate (up to for four weeks continuous or with breaks) issued only by the Director, P.G. Studies/ Principal will be accepted. If a candidate leaves the station with permission and falls ill, certificate on simple OPD card or prescription slip will not be treated as

Medical Certificate. For Medical leave beyond four weeks, the candidate will have to apply and appear before a medical Board to be constituted by the Principal. Only a medical certificate issued by a medical Board will be accepted. However, the period of such leave sanctioned will have to be compensated by undergoing training for the extended period equal to the period of leave availed before appearing in the examination. If a candidate fails to appear before the medical Board, his/ her admission shall be cancelled without any further notice. Further, if a candidate leaves the country during his/her course without permission of the competent Authority, his/her admission shall be cancelled without any notice.

9. In case a female student avails maternity leave during the course, the same will be allowed as per the DCI instructions.

### Bank Guarantee Bond

Each candidate will be required to execute a bank guarantee / bond as per notification issued by MRIIRS, Faridabad

These guidelines are available on MRIIRS website- [www.manavrachna.edu.in](http://www.manavrachna.edu.in)

However, refund of fees is governed in accordance with the guideline issued by UGC/AICTE from time to time.



Candidates may withdraw their admission by submitting a request of withdrawal application in person along with the original copy of Admission letter, Receipt of the fee deposited and Temporary identity card issued at the time of admission to the office of the Registrar, MRIIRS through Deputy Registrar, Registration & Scholarships, MRIIRS in Block-'F' Ground Floor, MRIIRS Campus for which he/she must obtain acknowledgement.

Correspondence in respect of refund of fee against withdrawal shall not be entertained until and unless it is in reference to the Acknowledgement No. and Date given by the Deputy Registrar, Registration & Scholarships, MRIIRS at the time of receipt of Withdrawal application.

A student admitted in the MRIIRS shall be required to pay the fee for the entire duration of the course on annual basis in two installments. If a student is detained due to whatsoever reason, he/ she shall be required to pay the fees again, when he/she is re-admitted, as per rules/ policy.

Once a candidate has been admitted and has reported to respective faculty, all further dealings including withdrawal are to be made through the respective head of the faculty/ Registrar of the MRIIRS.

#### PHYSICAL VERIFICATION FOR ADMISSION

- It is absolutely mandatory for the candidates to appear in person for physical verification for admission before the Admission Committee. No relaxation of any kind is permissible in this regard.
- Candidate must bring the following documents in original along with two sets of attested photocopies:
  1. Secondary School Examination Certificate (10th) - as proof of Date of Birth
  2. Senior Secondary School Examination Certificate (10+ 2)
  3. Detailed Mark sheets / Provisional Certificate / Degree / Diploma Certificate of the qualifying examination.

On the day of physical counseling, candidates shall report on the Registration Desk, arrange documents in the specified sequence in the file cover given on the spot, appear before the Document Verification Committee for verification of documents and move to the Admission Committee if found eligible.

4. Character Certificate from the Institution last attended.
5. Result card of the NEET entrance examination.
6. 4 passport size coloured photographs in formal dress.
7. All other documents must be submitted during orientation after start of classes or within 3 days from the date of admission, whichever is later

- Admission committee shall allot the seats to the Candidates in order of merit subject to its availability and the candidates shall be required to deposit fee on the spot either through Demand Draft, Credit / Debit Card or in Cash. Cheques shall not be accepted. Additional convenience charges are payable as per rules in case of payment is made through Credit / Debit Card.
- The seat shall be deemed to be allotted only on submission of fee. If a candidate fails to deposit the fee on the spot, the right to admission shall be forfeited and the seat shall be offered to the candidate next in the merit list.
- If a candidate reports late for admission on the designated day and time, he / she will be offered the seat available at the time of his appearance before the Admission Committee.
- All Candidates are advised to report on the day of physical counseling in a formal and presentable dress as a fresh photograph may be required to be clicked on the spot.
- All Students admitted in various programs shall collect their original testimonials / certificates at the time of allotment of seat against acknowledgement. All such students are also advised to keep a watch on MRDC Website for further instructions if any.
- The Admission Committee shall ensure allotment of seats purely on merit. Canvassing of any kind may result in denial of admission.

#### LIST OF OTHER DOCUMENTS TO BE DEPOSITED AFTER ADMISSION

In addition to the documents mentioned under clause 4 above, all students will be required to deposit following documents either during the orientation program or within 3 days from the date of admission whichever is later:

1. Certificate of Medical Fitness
2. Migration Certificate
3. Proof of Residence (Ration Card/Electricity Bill/ Telephone Bill/PAN Card/Driving License etc.)
4. Affidavit by candidate and by parents for "Anti Ragging"
5. Any other document required/ notified later

#### GENERAL INSTRUCTIONS

- The student would be liable for necessary action as deemed fit by the MRDC for any wrong information filled in the application form. If a candidate is admitted on the basis of information submitted by him/ her, which is found to be incorrect or false on a later date, his/ her admission shall be cancelled and all fees & other dues paid by him/ her shall be forfeited. The University may also take further action as deemed fit against such candidate &/ or his/ her parents/ guardians as considered suitable.
- All fees through Demand Draft are payable in the name of Manav Rachna International Institute of Research and Studies only.





- Mere inclusion of the name of a candidate in the merit list would not ensure his / her admission. Candidate would be required to prove his / her eligibility for admission by providing original and genuine documents in support of the claims made.
- The admission made by MRDC shall be provisional, till the same is confirmed by the Registration Branch of MRIIRS.
- If the Institutions Authorities are not satisfied with the character, past behavior and antecedents of a candidate, they may refuse to admit him/her in the College. In order to ensure academic standards, discipline and congenial atmosphere in the College, the Vice-Chancellor of MRIIRS may cancel the admission of any student who is found to be involved in activities which are prejudicial to maintaining harmony on the campus.
- The College has a streamlined method of redressal of grievances. The Grievances Redressal Committee addresses all kinds of grievances including those pertaining to admissions, examinations, conduct on the campus etc. on top priority.
- The College has a Vishakha Committee to deal with all Sexual Harassment related issues, which are handled on utmost priority. The candidates who are admitted in the College would be required to follow all rules and regulations in letter and spirit, conduct themselves in an orderly manner and maintain the best decorum, failing which suitable penal action would be taken against them.
- Canvassing in any form for influencing the admission by any candidate and / or his/her parents/guardians would result in his/her summary rejection for admission.
- The admission procedure is subject to modification, without notice, as per directions of DCI/ State Govt./ Affiliating University or any competent authority.
- The final cut off date for admission to all the courses is 31st May for MDS and 30th September for BDS course, as per guidelines of DCI.
- All applicants are instructed to follow the MRDC website on a regular basis for date of counseling and other details related to the admission process.
- The contents of the Admission Brochure are subject to change without prior notice. All disputes pertaining to admission under the domain of Admission Brochure are subject to the jurisdiction of Courts at Faridabad only
- The cost of Registration form will not be refunded under any circumstance.
- The candidate is admitted on the basis of information submitted by him/her and if, at any subsequent stage, it is discovered that any portion of this information is incorrect, the student will be removed from the Institution and all fees & other dues paid/ liable to be paid up till the date of such removal shall be forfeited/ charged. Any further action, as deemed suitable, may also be taken by the institution against such student.
- In case of any ambiguity in the rules, the interpretation of the same as drawn by the Director-Principal, MRDC.
- A student who violates the above conditions willfully or otherwise shall be liable to expulsion.
- Instructions/direction to modify / change the condition (s) can be issued by the MRDC prior to counseling with the prior approval of the competent authority.
- The candidates placed in the merit list provisionally must produce all the documents in original along with their attested copies at the time of counseling.
- The Admission Committee shall have the power to call any document from the candidate in support of his / her claim and reject any certificate not considered valid.
- The decision of the Admission Committee in this regard shall be final.
- All admissions are subject to their approval by the affiliating university, after completing necessary requirements as per rules/ordinance.
- A candidate already admitted in any Dental College in BDS/ MDS course will not be considered eligible for admission to BDS / MDS course
- It is clarified that BDS / MDS course is a regular full time course. A candidate selected for the same is barred from private practice during the tenure of the course.
- The selection for admission will be treated as cancelled, if the selected candidate does not join the college on the stipulated date fixed by the Admission Committee.
- If any candidate or his / her parents or guardian are found to have submitted any false undertaking / affidavit / certificate, not only the candidate's admission will be cancelled but the person filing the undertaking / affidavit will also be liable to be prosecuted in accordance with law.
- On the failure of the selected candidate to report for admission, the vacancies caused would be filled from the candidates from the waiting list in the order of merit Method of Selection and Admission

## SCHOLARSHIP/ FREE SHIP SCHEMES/ POLICIES

A) Schemes 'Utkarsh' and 'Uttam' for the candidates on the basis of MRNAT-2020 Score for UG & PG programmes:

| MRNAT 2020 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 1st April 2020 to 31st May 2020

\*\* Scheme 'Uttam' is for candidates taking Admission within a period from 1st June 2020 to 31st July 2020)

B) Free ship/Scholarships to students on the basis of marks/CGPA in the qualifying examination as per following criteria: UG level programmes (Except B.Tech. Mechanical Engg. Industry Integrated (in association with JBM) & BDS Programme)

| Marks/ CGPA in Qualifying Examination | Tuition Fee Waiver |
|---------------------------------------|--------------------|
| 90% and above                         | 100%               |
| 85% to 89.99%                         | 50%                |
| 80% to 84.99%                         | 25%                |

B.Tech. Mechanical Engg. Industry Integrated (in association with JBM)

| Marks/ CGPA in Qualifying Examination | Tuition Fee Waiver |
|---------------------------------------|--------------------|
| 90% and above                         | 50%                |
| 85% to 89.99%                         | 25%                |

PG level Programme (other than MDS programme)

| Marks/ CGPA in Qualifying Examination | Tuition Fee Waiver |
|---------------------------------------|--------------------|
| 80% and above                         | 100%               |
| 75% to 79.99%                         | 50%                |
| 70% to 74.99%                         | 25%                |

C) Free ship/ Scholarships to students seeking admission for B.Tech-Engineering programmes on the basis their JEE-2020 Overall All India Rank as per following criteria

| JEE-2020 Overall All India Rank | Tuition Fee Waiver |
|---------------------------------|--------------------|
| Upto 50000                      | 100%               |
| 50001 - 100000                  | 50%                |
| 100001-150000                   | 25%                |

D) Free ship/ Scholarships to students seeking admission for BDS programmes on the basis their NEET-2020 Score/Marks as per following criteria

| NEET-2020 Score/ Marks | Tuition Fee Waiver |
|------------------------|--------------------|
| 501 & above            | 100%               |
| 451 - 501              | 50%                |
| 401 - 450              | 25%                |

E) Free ship/ Scholarships to students seeking admission for MBA programmes on the basis their CAT/MAT/CMAT/ATMA-2020 Score/Marks as per following criteria: On the basis of CAT-2020

| CAT-2020 Score / Marks | Tuition Fee Waiver |
|------------------------|--------------------|
| 80% and above          | 100%               |
| 75% to 79.99%          | 50%                |
| 70% to 74.99%          | 25%                |

On the basis of MAT/CMAT/ATMA-2020

| MAT/CMAT/ATMA-2020 Score / Marks | Tuition Fee Waiver |
|----------------------------------|--------------------|
| 95% and above                    | 100%               |
| 90% to 94.99%                    | 50%                |
| 85% to 89.99%                    | 25%                |

F) Free ship/ Scholarships to students seeking admission for B.Arch programmes on the basis their NATA-2020 Marks/Score as per following criteria

| NATA-2020 Marks/Score | Tuition Fee Waiver |
|-----------------------|--------------------|
| 121 & above           | 100%               |
| 101 to 120            | 50%                |
| 91 to 100             | 25%                |

G) Free ship/ Scholarships to students seeking admission for any UG programmes on the basis their SAT-2020 Marks/Score as per following criteria

| SAT-2020 Marks/Score | Tuition Fee Waiver |
|----------------------|--------------------|
| 1301 & above         | 100%               |
| 1201 to 1300         | 50%                |
| 1101 to 1200         | 25%                |

There is a Provision of Teaching Assistantship for the candidate enrolled for M.Tech and MPT Programmes, as detailed below:

The selected candidates having more than 70% overall marks or 7.00 CGPA in the qualifying examination shall be provided teaching assistantship on the recommendations of the committee constituted by the Vice-Chancellor of the University. Under this provision, such candidates shall be required to engage with Professors/ Associate Professors of the University for Practical and Tutorial Classes with total assignments of 8-10 periods/week and they shall be paid stipend of Rs. 10000/- per month with a maximum limit of payment for 12 months during the complete duration of the M.Tech programme.

The candidate of M.Tech and MPT Programmes can either avail the above free ship policy for PG programme or Teaching Assistantship.

Note: Total Free ship/ Scholarships to students under all categories stated above (from B to G) put to together shall be limited to maximum 10% of the sanctioned intake for the programme of admission.

H) Free ship /Scholarships to the Wards of MREI Employee: 25% Tuition fee Waiver (limiting up to maximum of Rs. 12500/ per semester) to First Child only, however, if first child is already getting scholarship on the basis of Merit then this benefit would be passed to second child, if applicable.

I) Free ship /Scholarships to the Siblings of Manav Rachna Student in the same HEI: 10% Tuition fee Waiver (limiting up to maximum of Rs. 5000/ per semester) to the Sibling (brother/sister) of Student already enrolled in any of the Programme at HEI of MREI. Only elder one of the siblings would get the said benefit. In case, candidate is eligible for any freeships/ scholarships in either of above stated categories from A to I, he/she shall be getting this benefit over and above to freeship/scholarship of that category with a maximum limit upto 100% Tuition Fee Waiver.





J) Free ship /Scholarships to the Alumni of Manav Rachna Educational Institution: Student who is an Alumnus of any of the ManavRachna Educational Institutions (Schools or HEI), eligible for 10% Tuition fee waiver (limiting up to maximum of Rs. Rs. 5000/ per semester) during admission to the programs offered by any of the HEI. In case, candidate is eligible for any freeships/ scholarships in either of above stated categories from A to I, he/she shall be getting this benefit over and above to freeship/scholarship of that category with a maximum limit upto 100% Tuition Fee Waiver.

Note:

- Proof of relationship is to be provided wherever applicable
- For continuity, University Scholarship policy would be applicable from 2nd semester

Conditions for Continuation of Free ship/ Scholarship in Subsequent semesters for above categories

Progress of students awarded scholarship in subsequent semesters shall be reviewed after end of every semester for continuation, based upon his/her performance in the previous semester. For continuation of scholarship student shall be required to:

- Maintain a minimum SGPA of 7.0 in each semester without any backlog.
- Have 75% attendance in all courses in each semester.
- Applicants should not have been suspended for any grave act of indiscipline by the university.
- No disciplinary action against the applicant is established or pending in case of ragging or eve teasing.

- The applicant should not be receiving any other scholarship from any other source whatsoever, for which a certificate signed by student & parents is to be provided.

NOTE:

- For purpose of Scholarship/tuition fee waiver, the marks will not be rounded off to the next higher figure and calculation of percentage of marks shall

be made on the basis of eligibility subjects in the qualifying examination (same number of subjects).

K) Suitable free ship shall be available to high achievers in the field of sports, persons suffering with Thalassaemia Major, sons / daughters of Army Personnel who have been killed in war/ terrorist attack, physically handicapped students etc. on case to case basis.

L) Scholarship for outstanding achievers in sports category

A provision of scholarship for outstanding achievers in sports is available for admission seeker at Higher Educational Institutions (HEIs) as per following categories:

| Event/ Level                                      | Participation       | Medal Win           |
|---|---------------------|---------------------|
| Olympics  | 100% of Tuition Fee | 100% of Tuition Fee |
| Asian Games / Asian Championship                  | 75% of Tuition Fee  | 100% of Tuition Fee |
| Common Wealth Games                               | 50% of Tuition Fee  | 75% of Tuition Fee  |
| World Cup   | 50% of Tuition Fee  | 75% of Tuition Fee  |
| National  | 25% of Tuition Fee  | 50% of Tuition Fee  |
| State (with compulsory participation in National) | -                   | 25% of Tuition Fee  |

The candidate seeking admission under any of the above categories of sports shall be required to produce the relevant documents of proof of his/her participation and Medal Won. Sports Committee under Director-Sports will take the final decision regarding Scholarship.

The scholarship under this category shall be given in the first semester and its continuation shall be decided by a committee constituted by the Competent Authority of the Institution / University.

#### MERIT SCHOLARSHIP OTHER THAN ABOVE SCHOLARSHIP/ FREESHIP

In order to motivate the students for better and sustained academic performance MRIIRS offers Merit Scholarship other than Scholarship/ free ship enumerated below, for students securing first, Second and Third positions in the Odd & Even semester exams (based on the amalgamated SGPA/ CGPA) every year for each programme being run at MRIIRS, as under:

- First Position : 25% of Tuition Fee or Rs. 25000/- whichever is less
- Second Position : 15% of Tuition Fee or Rs. 15000/- whichever is less
- Third Position : 10% of Tuition Fee or Rs. 10000/- whichever is less



The following are the guidelines for grant of above Merit Scholarships:

1. Any programme must have strength of 90 or more in semester exam to qualify for first, second and third position scholarship; otherwise only a solitary topper shall be given a solitary first position scholarship.
2. If the strength of a course is 10 or less no scholarship will be awarded for that course.
3. A student shall be eligible to benefit for tuition fee waiver only from one source only.

### MOTIVATION AND REWARDS

Manav Rachna International Institute of Research and Studies (Deemed to be University), Faridabad aims to make a difference in the accomplishments and success of its students. Through Awards & Medals to the deserving students, MRIIRS provides an opportunity to be the catalyst that sets our students on an upward path. By motivating, rewarding and honoring them, we encourage students to set high goals and meet the challenges with stretched limits. Teach them the value of persistence. And perhaps, inspire a lifelong passion for learning.

### AWARDS & MEDALS

- Chief Patron Medal: Awarded to a female student who best exemplifies the attributes of engaged leadership; inexhaustible optimistic aptitude about challenges and opportunities, integrity, courage and honesty.
- President/Chancellor Medal: This medal will honor a student who has evidenced significant achievement at International level in the following areas:
  1. Research
  2. Sports
  3. Creative arts
  4. Community involvement
  5. Professional
- Vice President Medal: This medal will honor a student who has evidenced significant achievement at National level in the following areas:
  1. Research
  2. Sports
  3. Creative Arts
  4. Community involvement
  5. Professional
- Vice Chancellor Medal: This medal will honor a student who has successfully passed out and has the best academic record (highest CGPA) in the University examinations across all UG Programmes offered by the University.
- Academic Proficiency Medal: Awarded to highest scorer student who has successfully completed the program. This is applicable for each program.
- Student Leadership Medal(s): Awarded to student(s) who has / have evidenced ability to motivate other students and has/ have successfully lead terms for specific organizational goals.
- Outstanding Achievers Awards in the Area of:
  1. Research
  2. Sports
  3. Creative Arts
  4. Community involvement
  5. Best Internship/ Placement.

### STUDENT STAFF & ALUMNI WELFARE FUND (SSAWF)

1. The young and the budding talent in MREI should not go a begging for want of resources in the field of technical education,

research in physical science, social science & any other topic of topical interest emerging in the environment. To fulfill the ibid vision, the MRVF has taken a conscious decision to muster financial resources in the name & style of STUDENT STAFF AND ALUMNI WELFARE FUND (SSAWF).

2. The SSAWF resources would be utilized for accomplishing the under mentioned objectives
  - a. Rendering financial assistance to students, staff and alumni for research and higher studies for improving the overall well being of the under privileged and have knots of the society.
  - b. To provide financial assistance/ scholarship to needy students for continuation of their higher studies.
  - c. To render assistance including ex-gratia payment to alumni for higher studies, distress and other contingency.
  - d. To honor MREI students, staff and alumni for their outstanding achievements in studies, profession, sports and entrepreneurship.
  - e. To provide financial and other resources for families of MREI owing to any natural calamity such as earthquakes, floods etc.
  - f. To provide financial support.

### POLICY FOR WITHDRAWAL AND REFUND OF FEES

- AICTE guidelines for all technical programmes i.e. B.Tech, M.Tech, MBA, MCA & B.Arch are applicable as per AICTE letter/notification no. F.No. North-West/2018-19/ 1-3634045571 dated 10.04.2018. For all other pogrammes it shall be as per UGC latest notified policy.
- For Withdrawal from the Course of MRDC after the commencement of the Academic Session: Those candidates who withdraw their admission before the start of classes to be notified separately on the College website ([www.mrdc.ac.in](http://www.mrdc.ac.in)) / Notice Boards, in writing to the Principal after having the receipt of the withdrawal application would be refunded the fees after the final cut off date of admissions as notified by the State Govt./ DCI/ MRIIRS through cheque after deducting Rs. 25000/- (for BDS)/ Rs. 50000/- (for MDS) as administrative charges. Refund of fee shall be made after the final cut off date of admissions as notified by the State Govt./ DCI/ MRIIRS, which shall be normally 31st May (for MDS)/ 30th September (for BDS) of the calendar year, through Cheque in favour of the Candidate only and sent at the address for correspondence through recorded delivery.
- It is made clear that no refund of fee shall be made after the commencement of classes, even if the fresh admission continues against the vacant / dropout seats. It is, further, made clear that if candidate seeks admission after the commencement of the classes and later, withdraws his / her admission, no refund of fee in such case shall be made.







- A student admitted in the Institute/ College shall be required to pay fee for the entire duration of the course on annual basis. If a student is detained due to whatsoever reason, he/ she shall be required to pay the fees again, when he/ she is readmitted. It is made clear that if a student leaves the programme in between, without completing the programme for whatsoever reasons, he/ she will be liable to pay fees for the balance duration of the programme as well, as per directions of Hon'ble Supreme Court of India in Islamic Academy of Education case.

#### INSTRUCTIONS FOR CURBING RAGGING

As per orders of the Hon'ble Supreme Court, UGC Regulations on curbing the menace of Ragging in Higher Educational Institutions, 2009 and The Haryana Prohibition of Ragging in Educational Institutions Ordinance, 2012 and AICTE guidelines available on MRIIRS website (available on the Manav Rachna Website) Moreover, DCI has take a very serious view of incidents of ragging in Dental Colleges and directed to incorporate the following provision in the Admission Brochure vide their letter no. DE-167-2008/a-3441 dated 29.07.2008.

Ragging is a Grievous Offence. Any one indulging in ragging will be severely punished. The punishment may take the form of expulsion from the Institution, suspension from the Institute or classes for a limited period or fine with a public apology.

The punishment may also take the shape of (i) Reporting to the police and lodging an FIR (ii) Withholding scholarships or other benefits, (iii) Debarring from representation in events, (iv) Withholding results, (v) Suspension or Expulsion from hostel or mess, and the like. If the individuals committing or abetting ragging are not/ cannot be identified, collective punishment may be awarded to act as a deterrent. All cases of ragging will be referred to Anti Ragging Committee of the Institution. All affected students are at liberty to approach Anti Ragging Committee/ Squads on Telephone Numbers prominently displayed in the Institution.

The following will be termed as the act of ragging:

Any disorderly conduct whether by words spoken or written or by any act, which has the effect of teasing, treating or handling with rudeness any other student(s), indulging in rowdy or in-disciplined activities which may cause or are likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in fresher or junior student(s) or asking the student(s) to do any act or perform something, which such student(s) will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or a junior student.

All students enrolled in the Institution are bound by the directions of UGC/ AICTE and other regulatory bodies in respect of prevention of ragging in educational institution campuses. Hence they are advised to keep themselves updated on their websites.

#### ATTENDANCE RULES AND CODE OF CONDUCT

Clause 8 of Ordinance No. 3 titled, "Conduct and Evaluation of Examinations for Programmes Leading to All Bachelor's/ Master's Degrees and Diplomas following Semester System" provides as under:

"A student shall be required to have a minimum attendance of 75% in the aggregate of all the courses taken together and 75% in each individual theory/ lab course in a semester.

Student who has been detained due to shortage of attendance shall not be allowed to appear for end-semester examination for the courses in which he/she fails to attain the minimum required attendance. Under such circumstances he/she shall be required to repeat all such courses for which the he/she is declared ineligible on account of shortage of attendance, through re-registrations for such courses during subsequent semesters when the same are offered by the respective departments after paying the notified fee. The Institution enrolment number of such student shall however remain unchanged and he or she shall be required to complete the programme in a maximum permissible period as mentioned in clause 4(c) of the Ordinance.

Dean of the Faculty concerned shall announce the names of all such students who are not eligible to appear in the semester-end examination, at least 4 calendar days before the start of the semester-end examination and simultaneously intimate the same to the Controller of Examinations. In case any student appears by default, who in fact has been detained by the Faculty, his/ her result shall be treated as null and void."



The students are advised to ensure that they meet the minimum attendance requirement for appearing in the semester end examination failing which they shall not be allowed to sit in the examination. Students are also advised to maintain utmost expected discipline in and outside the Institution Campus. Disturbance of tranquility of the Campus in particular and society in general, through any means shall be treated as an act of indiscipline and suitable disciplinary action shall be taken against the defaulting students. Students are also advised to dress appropriately, while in campus, as per the demands of the occasion.

Institution has zero tolerance for indiscipline in and outside the campus by the students. Drinking, taking drugs, damaging Institution property, indulging in any kind of violence, misbehaving with fellow students/ teachers, ragging etc. are included in the list of undesirable activities and constitute the moral turpitude. Very strict action including suspension/ rustication from the roles of the Institution may be taken against the defaulting students.

### GENERAL INSTRUCTIONS

The admission made by MRIIRS shall be provisional, till the same is confirmed by the Registration Branch of the Institution. If the Institution Authorities are not satisfied with the character, past behavior and antecedents of a candidate, they may refuse to admit him/her in the Institution. In order to ensure academic standards, discipline and congenial atmosphere in the Institution, the Vice-Chancellor of the Institution/ Dean of the concerned Faculty may cancel the admission of any student who is found to be involved in activities

which are prejudicial to maintaining harmony on the campus. The Institution has a streamlined method of redressal of grievances.

The Grievances Redressal Committee addresses all kinds of grievances including those pertaining to admissions, examinations, conduct on the campus etc. on top priority.

The Institution has a Prevention of Sexual Harassment Committee to deal with all Sexual Harassment related issues, which are handled on utmost priority. The candidates who are admitted in the Institution would be required to follow all rules and regulations in letter and spirit, conduct themselves in an orderly manner and maintain the best decorum, failing which suitable penal action would be taken against them. Canvassing in any form for influencing the admission by any candidate and/ or

his/ her parents/ guardians would result in his/ her summary rejection for admission. The admission procedure is subject to modification, without notice, as per directions of UGC or any competent authority.

All applicants are instructed to follow the MRIIRS website on a regular basis for date of counseling and other details related to the admission process.

The contents of the Admission Brochure are subject to change without prior notice. All disputes pertaining to admission under the domain of Admission Brochure are subject to the jurisdiction of Courts at Faridabad only.

Disclaimer: The details given in the Admission Brochure are correct as at the time of going into press. The Institute reserves the right to add/delete/modify the contents without prior notice. However, the same will be notified on the website.



## PROGRAMS OFFERED AT MRIIRS

The details of programmes offered at MRIIRS including intake, fees, minimum eligibility criteria and criteria for preparation of merit list are tabulated below:

| FACULTY OF ENGINEERING AND TECHNOLOGY (FET) |  |          |          |   |  |   |  |
|---|--|----------|----------|---|--|---|--|
| S. No.                                      | Name of the Programme                            | Duration | Intake   | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students   | Minimum Eligibility Criteria  | Criteria for Selection   |
| Bachelor of Technology                      |  |          |          |   |  |   |  |
| 1.  | Aeronautical Engg                                | 4 Yrs    | 30       | 1,81,500  | US \$5000  | Pass in 10+2 examination with at least 50% marks (60% marks for programmes listed at S.No. 4 & 5 i.e. B.Tech in CSE and B.Tech in CSE with specializations) in aggregate in 5 subjects and eligibility shall be determined on the basis of percentage of aggregate marks in<br>i. English, Physics & Mathematics and<br>ii. One subject out of Chemistry, Computer Science, Biology or Biotechnology and<br>iii. One subject with the highest score out of the remaining subjects | Merit preparation/ short listing of candidates shall be on the basis of score in JEE Mains 2020/ SAT/ Uni Gauge E 2020/ MRNAT 2020/ XII Qualifying Examination |
| 2.  | Automobile Engg                                  |          | 30       | 1,81,500  | US \$5000  |   |  |
| 3.  | Civil Engg                                       |          | 30       | 1,81,500  | US \$5000  |   |  |
| 4.  | Computer Science and Engg                        |          | 240      | 1,91,000  | US \$5000  |   |  |
| 5.  | Computer Science and Engg (See Note 1)           |          | 60       | 2,21,500  | US \$5000  |   |  |
|   | a. Digital Forensics & Cyber Security            |          |          |   |  |   |  |
|   | b. Gaming Technology                             |          |          |   |  |   |  |
| 6.  | Electrical & Electronics Engg                    |          | 30       | 1,81,500  | US \$5000  |   |  |
| 7.  | Electronics & Communication Engg. (See Note : 2) |          | 60       | 2,21,500  | US \$5000  |   |  |
| 8.  | Mechanical Engineering                           | 60       | 1,81,500 | US \$5000                                       |  |   |  |
| 9.  | Biotechnology                                    | 30       | 1,81,500 | US \$5000                                       | Pass in 10+2 examination with at least 50% marks in aggregate in 5 subjects and eligibility shall be determined on the basis of percentage of aggregate marks in<br>i). English, Physics, Mathematics or Biology and<br>ii). One subject out of Chemistry, Computer Science, Biotechnology, Mathematics or Biology and<br>iii). One subject with the highest score out of the remaining subjects | Merit preparation / short listing of candidates shall be on the basis of score in JEE Mains 2020/ SAT/ Uni Gauge E 2020 / MRNAT 2020 /XII Qualifying Examination  |  |
| Bachelor of Science                         |  |          |          |   |  |   |  |
| 10.   | B.Sc. (Hons) - Geology                           | 3 Yrs    | 05       | 1,26,000  | US \$ 3300   | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as a compulsory subject along with 4 subjects with the highest score out of the remaining subjects.   | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020 / Marks in Qualifying Examination                                 |
| Sub Total                                   |  |          | 605      |   |  |   |  |

| FACULTY OF ENGINEERING AND TECHNOLOGY (FET) |   |          |        |   |  |   |   |
|---|---|----------|--------|---|--|---|---|
| S. No.                                      | Name of the Programme                   | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection  |
| Bachelor of Technology (Lateral Entry)      |   |          |        |   |  |   |   |
| 1.  | Aeronautical Engineering                | 3 Yrs    | 3*     | 1,81,500  |  | 50% marks in 3-year Diploma in Engineering in any branch/ discipline from State Board of Technical Education or Equivalent Examination or B.Sc. Degree from a recognized University as Defined by UGC, with at least 50 % marks and passed XII standard with Mathematics as a subject | Merit preparation/ short listing of candidates shall be on the basis of score in MRNAT 2020 / Marks in Qualifying Examination |
| 2.  | Automobile Engineering                  |          | 3*     | 1,81,500  |  |   |   |
| 3.  | Biotechnology                           |          | 3*     | 1,81,500  |  |   |   |
| 4.  | Civil Engineering                       |          | 3*     | 1,81,500  |  |   |   |
| 5.  | Computer Science and Engineering        |          | 24*    | 1,81,500  |  |   |   |
| 6.  | Electronics & Communication Engineering |          | 6*     | 1,81,500  |  |   |   |
| 7.  | Electrical & Electronics Engineering    |          | 3*     | 1,81,500  |  |   |   |
| 8.  | Mechanical Engineering                  |          | 9*     | 1,81,500  |  |   |   |
| Sub Total                                   |   |          | 54*    |   |  |   |   |

\*In addition to above seats of the sanctioned intake admissions in B.Tech. Lateral Entry shall also be made against the seats remaining vacant in 1st year of AY 2019-20

| FACULTY OF ENGINEERING AND TECHNOLOGY (FET) |   |          |        |   |  |  |   |
|---|---|----------|--------|---|--|--|---|
| S. No.                                      | Name of the Programme                             | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria   | Criteria for Selection  |
| Master of Technology and Master of Science  |   |          |        |   |  |  |   |
| 1.  | M.Tech. Biotechnology                             | 2 Yrs    | 06     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech. Biotechnology/Microbiology/ Botany/ Zoology or M.Sc. Bio Sciences  | Merit preparation/ short listing of candidates shall be on the basis of Valid GATE score/ Marks in Qualifying Examination |
| 2.  | M.Tech. Mechanical Engineering                    |          | 06     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech. in any discipline  |   |
| 3.  | M.Tech. Electronics and Communication Engineering |          | 06     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech - Electronics & Communication Engg./ Telecommunication Engg./ Computer Science & Engg./ Information Technology/ Electronics & Instrumentation Engg./ Instrumentation & Control Engg./ Electrical & Electronics Engg./ Electrical Engg./ Biomedical Engg./ Power Electronics or MSc Electronics/ Physics with Electronics as one of the subjects |   |

| FACULTY OF ENGINEERING AND TECHNOLOGY (FET) |  |          |        |   |  |   |  |
|---|--|----------|--------|---|--|---|--|
| S. No.                                      | Name of the Programme  | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection   |
| Master of Technology and Master of Science  |  |          |        |   |  |   |  |
| 4.  | M.Tech. Computer Engineering & Networking  | 2 Yrs    | 06     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech.- Electronics & Communication Engg./ Telecommunication Engg./ Computer Science & Engg./ Information Technology/ Electronics & Instrumentation Engg./ Instrumentation & Control Engg./ Electrical & Electronics Engg./ Electrical Engg./ Power Electronics or MCA or MSc-Computer Science/ Information Technology/ Electronics/ Physics/ Mathematics as one of the subjects | Merit preparation/ short listing of candidates shall be on the basis of Valid GATE score/ Marks in Qualifying Examination      |
| 5.  | M. Tech. - Automation and Robotics* (in association with Mitsubishi)-(See Note: 4) |          | 06     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech.- Electronics & Instrumentation Engg. / Computer Engg./Instrumentation & Control Engg./Electrical & Electronics Engg./ Electrical Engg./Power Electronics or Electronics/ Mechanical Engg. or equivalent as one of the subjects  |  |
| 6.  | M. Tech. Civil Engineering   |          | 30     | 1,16,000  | US \$ 3300                                     | Minimum 50% Marks or equivalent CGPA in B.Tech.-Civil Engg.   |  |
| 7.  | M.Sc. Biotechnology  | 3 Yrs    | 12     | 1,16,000  | US \$ 3300                                     | Minimum 50% marks in B.Sc. with any subject related to Life Sciences  | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020 / Marks in Qualifying Examination |
| 8.  | M.Sc.- Applied Geology   |          | 03     | 1,26,000  | US \$ 3300                                     | 50% marks in aggregate in graduation from a recognized University, Bachelor's Degree in Geology/ Applied Geology  |  |
| Sub Total                                   |  |          | 75     |   |  |   |  |

\*Subject to approval by AICTE

#### NOTES:

- FET also offers B.Tech.-Computer Science & Engineering In association with IBM with specializations in Cloud Computing, Business Analytics & Optimization. Cyber Security & Forensics and Graphics & Gaming Technology. IBM, which is a well known multinational conglomerate having a turnover of more than US\$ 100 billion and worldwide business in computer hardware/software, IT services and consulting shall deliver specialized modules in the above mentioned and other domain areas in consultation with IT industry to enhance employable skills of Engineering/ Management Graduates, which consist of Learning Management System, Student Project, Expert lectures from Corporates, visits to software development and testing centers. FET students enrolled in these programmes shall be extensively exposed to professional environment and industrial experience under the mentorship of academic and IT Industry experts. Those students who excel in the specified domain skills shall definitely be preferred by the reputed IT employers through campus drive. IBM shall also issue certificates for various modules after their successful completion in addition to MRIIRS degree.
- B.Tech - Electronics & Communication Engg. (with specialization in IoT and Artificial Intelligence) is offered in association with INTEL. This programme provides an opportunity to the students to learn the insights to the most important technologies driving the modern world namely Artificial Intelligence and Internet of Things. Students will be given 360 degree exposure to various INTEL Hardware and Software platforms that are used in Industry for AI and IoT development. Curriculum designing in consultation with INTEL Experts will provide an opportunity to the students to acquire the latest skills in these cutting edge technologies using Intel Intelligent Systems Lab through INTEL experts. Students will get an opportunity to work on INTEL Xeon Processors, INTEL Parallel Studio Software, Intel System Studio Software, INTEL AI development Tools, INTEL AI Software Libraries, INTEL Frame Work Optimization, Movidius Neural Compute Stick and INTEL FPGA Boards. In the IoT Space, the students will get to learn about INTEL Galileo, INTEL Edison Boards along with other popular boards like Raspberry Pi and Arduino for designing IoT Systems. Students will get certified on successful completion of the course which caters to the need of Industry 4.0, theory and lab Courses related to Artificial Intelligence, Machine Learning, Internet of Things and detailed coverage of Electronics hardware that is driving these technologies.

This programme opens up Job opportunities for the Students in various Electronics and IT Industry and various sectors like Health Care, Core Electronics, driverless cars and various other areas where AI and IoT are playing an important role

3. B.Tech- Mechanical Engg.is offered jointly with JBM Group of Industries in which academic delivery shall also be made by Industry Experts in 3rd and 4th year in specified focused areas of Computer Aided design, Robotics, Automation, Digital Manufacturing, Industry 4.0 etc.. Programme includes 6 months structured industrial training in selected industries and assured placement with Letter of intent being given at the time of admission with fulfillment of certain academic and training criterion.
4. M.Tech-Automation and Robotics is offered in association with Mitsubishi Electric India Ltd.: Mitsubishi Electric India has set-up an Advanced Factory Automation Lab and its Centre of Excellence. The center has world class infrastructure with latest iQR set up including: Q series Programmable logic Controller (PLC), Servo, Variable Frequency Drive (VFD), Graphical Operational Terminal (GOT) 2000, X-Y Plotter, FX Kits, Robot Simulator setup with with six axis joint & 240 degree in either direction which is the First Robotics Lab set up by MEI in the north India and SCADA Software for monitoring and analysis. An M.Tech specialization with Industrial Automation & Robotics will enable students to serve the Industry requirement for implementation of new and smart technologies covering methods of synthesis, analysis & optimization of newer robots and mechanisms. The initial job functions in the field include- Robotics Engineer, Robotics Welding, Mobile Robotics, 3D Robotics, and Robotics Engineer at E-commerce Giants amongst others. Immediate & long term employment opportunities exist in the fields like industrial automation, manufacturing, agriculture, mining, aerospace, healthcare and defense. This field also finds applications in the regular streams like mechanical systems/design engineering, electronics systems engineering and control systems engineering.

The programme includes: Hands-on Experience on Robotics and Automation by Theory & Practice, Development of analytical skills, modeling and simulation skills to identify and analyze problems, propose and execute solutions in well equipped labs and Training on latest lab equipments, CNC machining, 3-D printers and CAD design software.

The programmes namely B.Tech - Computer Science and Engineering, Electronics & Communication Engineering, Mechanical Engineering and Biotechnology are accredited by National Board of Accreditation (NBA) under Tier-I Category.

| FACULTY OF ALLIED HEALTH SCIENCES (FAHS) |  |   |        |   |  |   |  |
|--|--|---|--------|---|--|---|--|
| S. No.                                   | Name of the Programme  | Duration  | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection   |
| 1.                                       | Bachelor of Physiotherapy (BPT)  | 4½ Yrs (including 6 month Compulsory internship)        | 30     | 1,71,000  | US \$ 3300                                     | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English, Physics, Chemistry & Biology and One subject with the highest score out of the remaining subjects.   | Merit preparation/ short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 2.                                       | Master of Physiotherapy (MPT) with specialization in Musculoskeletal, Cardiopulmonary, Sports, Neurology | 2 Yrs   | 35     | 1,36,000  | US \$ 3300                                     | 50% marks in aggregate in Bachelor of Physiotherapy from a recognized University  |  |
| 3.                                       | B.Sc. - Nutrition & Dietetics  | 3 Yrs (including 2 month clinical/ industrial training) | 20     | 1,36,000  | US \$ 3300                                     | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as a compulsory subject along with 4 subjects with the highest score out of the remaining subjects.   |  |
| 4.                                       | B.Sc. Hons.- Food Science & Technology   | 3 Yrs   | 05     | 1,41,000  | US \$ 3300                                     | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English, Chemistry and Biology as a compulsory subject along with 4 subjects with the highest score out of the remaining subjects.  |  |
| 5.                                       | M.Sc. - Nutrition & Dietetics  | 2 Yrs   | 45     | 1,36,000  | US \$ 3300                                     | 50% marks in aggregate in graduation from a recognized University, Bachelor's degree in Nutrition, Home Science, Nursing Food Technology, Medical Lab Technology, Biochemistry, Microbiology, Physiology, Zoology, Physiotherapy, Medicine, Dental Science, Life Sciences, Sports Science or equivalent examination |  |
| Sub Total                                |  |   | 135    |   |  |   |  |

| FACULTY OF COMMERCE AND BUSINESS STUDIES (FCBS) |   |          |        |  |  |  |  |
|---|---|----------|--------|--|--|--|--|
| S. No.  | Name of the Programme   | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees  | FEES (per annum) in US \$ for PIO/NRI Students   | Minimum Eligibility Criteria   | Criteria for Selection   |
| 1.  | Bachelor of Business Administration (BBA) General   | 3 Yrs    | 90     | 1,61,000   | US \$ 3300   | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects.  | Merit preparation/ short listing of candidates shall be on the basis of score in SAT/MRNAT 2020/ Marks in Qualifying Examination |
| 2.  | Bachelor of Business Administration (Banking & Financial Markets) (See Notes 5)   |          | 20     | 1,64,500   | US \$ 3300   | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects.  |  |
| 3.  | Bachelor of Business Administration (Global) - International Business (in association with AIS, New Zealand) (See Notes 6 ) |          | 20     | 1,51,000 + NZS 800 each for First two years and NZS 700 in Third year as foreign fee component | US \$ 3300 + NZS 800 each for First two years and NZS 700 in Third year as foreign fee component | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects plus (a) having studied in English Medium from 8th to 12th class or (b) IELTS composite score at 6.0 with individual score not less than 5.5 |  |
| 4.  | Bachelor of Commerce (Hons.)  |          | 40     | 1,36,000   | US \$ 3300   | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  |  |
| 5.  | M.Com   | 2 Yrs    | 10     | 1,36,000   | US \$ 3300   | 50% marks in aggregate in B.Com, BBA (any stream) or BA Economics from a recognized university   | Merit preparation/ short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination     |
| Sub Total                                       |   |          | 180    |  |  |  |  |

Note 5: BBA (Banking and Financial Markets) is conducted in association with ICICI Direct Centre for Financial Learning (ICFL). One course in every semester is delivered by ICFL experts.

Note 6: BBA-(Global) International Business is being offered in collaboration with Auckland Institute of Studies (AIS), Auckland, New Zealand, a unique tertiary institution providing NZQA Accredited UG and PG level programmes. AIS has partnered with MRIIRS to provide curriculum and accreditation support for BBA-(Global) International Business. The students admitted in BBA (Global)-International Business programme shall undergo 4-week study abroad programme/ internship at AIS Auckland, New Zealand as a part of their programme.

Note 7: BBA-Global (IBM) in association with University of New Castle, Australia Under this programme, the eligible students shall have a provision/ possibility to proceed to University of New Castle (UoNC), Australia in 2nd year directly with transfer of credits of all courses/subjects studied at MRIIRS and completes the rest of their programme of Bachelor of Business of UoNC with award of their degree of Bachelors of Business.

UoNC Australia shall be providing academic support in terms of course details and delivery during the first year of this programme at MRIIRS through the faculty members of UoNC Australia. The eligible students who shall be moving to UoNC, Australia in their 2nd year of this programme with the transfer of credits (provided they do earn all the offered credits during first year) and completes their 2nd and 3rd year shall be required to pay the fee and other charges as per UoNC Australia during that period and shall be awarded the degree of Bachelor of Business of the respective University - New Castle (UoNC), Australia only and those who shall complete their 2nd and 3rd year from MRIIRS shall be awarded BBA- Global (IBM) at MRIIRS.

| FACULTY OF COMPUTER APPLICATIONS (FCA) |   |          |        |  |  |  |  |
|--|---|----------|--------|--|--|--|--|
| S. No.                                 | Name of the Programme                                     | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees  | FEES (per annum) in US \$ for PIO/NRI Students   | Minimum Eligibility Criteria   | Criteria for Selection   |
| 1.                                     | Bachelor of Computer Applications (BCA)                   | 3 Yrs    | 80     | 1,36,000   | US \$ 3300   | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  | Merit preparation/ short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 2.                                     | Bachelor of Science - Information Technology (See Note-8) |          | 10     | 1,39,500 + NZ\$ 900 each for First two years & NZ\$ 800 in Third year as foreign fee component | US \$ 3300 + NZ\$ 900 each for First two years and NZ\$ 800 in Third year as foreign fee component | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects plus (a) having studied in English Medium from 8th to 12th class or (b) IELTS composite score at 6.0 with individual score not less than 5.5 |  |
| 3.                                     | Master of Computer Applications (MCA)                     |          | 60     | 1,36,000   | US \$ 3300   | 50% marks in any discipline in Graduation from a recognized university with Mathematics either at 10+2 Level/Graduation Level  |  |
| Sub Total                              |   |          | 150    |  |  |  |  |

\*In addition, seats remaining vacant in previous year's MCA intake may be filled up.

Note 8: B.Sc- Information Technology is being offered in collaboration with Auckland Institute of Studies (AIS), Auckland, New Zealand, a unique tertiary institution providing NZQA Accredited UG and PG level programmes. AIS has partnered with MRIIRS to provide curriculum and accreditation support for B.Sc (IT). The students admitted in B.Sc- Information Technology programme shall undergo 4-week study abroad programme/ internship at AIS Auckland, New Zealand as a part of their programme.

| FACULTY OF MEDIA STUDIES & HUMANITIES (FMeH) |                                    |          |        |   |  |   |   |
|--|------------------------------------|----------|--------|---|--|---|---|
| S. No.                                       | Name of the Programme              | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection  |
| 1.   | BA-Journalism & Mass Communication | 3 Yrs    | 40     | 1,41,000  | US \$ 3300                                     | Pass in 10+2 Examination /Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 2.   | MA-Journalism & Mass Communication | 2 Yrs    | 06     | 1,41,000  | US \$ 3300                                     | 50% marks in any stream at Graduation level from a recognized university with pass in English in 10+2   |   |
| 3.   | BA (Hons) -English                 | 3 Yrs    | 30     | 1,26,000  | US \$ 3300                                     | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects |   |
| 4.   | MA- English                        | 2 Yrs    | 12     | 1,16,000  | US \$ 3300                                     | 50% marks in any stream at Graduation level from a recognized university with pass in English in 10+2   |   |
| Sub Total                                    |                                    |          | 88     |   |  |   |   |

Note 9: B.A. Journalism and Mass Communication (International) in association with Western Sydney University, Australia : The eligible students shall have a provision/possibility to proceed to Western Sydney University (WSU), Australia in 2nd year directly with transfer of credits of all courses/subjects studied at MRIIRS and completes the programme of Bachelor of Communication of WSU with award of their degree of Bachelors of Communication.

WSU, Australia shall be providing academic support in terms of course details and delivery during the first year of this programme at MRIIRS through the faculty members of WSU Australia. The eligible students who shall be moving to WSU, Australia in their 2nd year of this programme with the transfer of credits (provided they do earn all the offered credits during first year) and completes their 2nd and 3rd year shall be required to pay the fee and other charges as per WSU Australia during that period and shall be awarded the degree of Bachelor of Communication of the WSU, Australia only and those who shall complete their 2nd and 3rd year from MRIIRS shall be awarded B.A. Journalism and Mass Communication (International) at MRIIRS.



| FACULTY OF MANAGEMENT STUDIES (FMS) |  |          |        |   |  |  |  |
|-------------------------------------|--|----------|--------|---|--|--|--|
| S. No.                              | Name of the Programme                                    | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria   | Criteria for Selection   |
| 1.                                  | Master of Business Administration (MBA)<br>(See Note 10) | 2 Yrs    | 120    | 2,98,500  | US \$ 5500                                     | Graduation/ Post Graduation or have passed the final examination conducted by the institute of Chartered Accountants of India/Institute of Cost & Works Accountants of India/ Institute of Company Secretaries of India/ any other course which is Government recognized course with minimum 50% marks | Merit preparation/ short listing of candidates shall be on the basis of score in All India Entrance Tests (CAT/ MAT/ XAT/ any other equivalent test) & GD/PI The Combined Merit List shall be based upon the following weight ages: Marks in Class X-10% Marks in Class XII-10% Marks in Graduation-10% Behavior Skill Test-10% Marks in Entrance Test 25% GD/Essay-10% Personal interview - 20% Work Experience/ Extra Curricular Activities - 5% |
| 2.                                  | Bachelor of Science - Hospitality & Hotel Administration | 3 Yrs    | 20     | 1,41,000  | US \$ 3300                                     | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  | Merit preparation/ short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination   |
| Sub Total                           |  |          | 140    |   |  |  |  |

Note: 10

- MBA Admissions shall be based on All India Entrance Tests (CAT/MAT/XAT/any other equivalent test) and GD/PI.
- Candidates can apply on the prescribed form on the basis of valid score of above tests.

| FACULTY OF ARCHITECTURE AND DESIGN (FAD) |  |          |                        |   |  |   |  |
|--|--|----------|------------------------|---|--|---|--|
| S. No.                                   | Name of the Programme                            | Duration | Intake                 | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection   |
| 1.                                       | Bachelor of Architecture (B.Arch.) (See Note 11) | 5 yrs    | 30<br>(General NRI-06) | 2,15,500  | US \$ 5500                                     | 10+2 or equivalent from a recognized Board/University with Mathematics as subject of examination and also obtained at least 50% aggregate marks in 10+2 level examination.<br>Or<br>Candidates with 10+3 Diploma (any stream) recognized by central / State Governments with Mathematics as compulsory subject and obtained 50 % in aggregate marks.<br>Or<br>Or international Baccalaureate Diploma, after 10 years of Schooling, with not less than 50% marks in aggregate and with Mathematics as a compulsory subject of examination. | Marks in qualifying Examination i.e. 10+2 or Equivalent & Aptitude Test (NATA of CoA) OR JEE of CBSE in the ratio of 50:50.<br>Note: All admissions to architecture degree course shall be subject to passing of National aptitude Test in Architecture (NATA) conducted by the council of Architecture (CoA) OR JEE of CBSE |
| 2.                                       | Bachelor of Design (B.Design)                    | 4yrs     | 30                     | 2,15,500  | US\$ 5500                                      | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination  |

| FACULTY OF ARCHITECTURE AND DESIGN (FAD) |                       |          |        |   |  |   |   |
|--|-----------------------|----------|--------|---|--|---|---|
| S. No.                                   | Name of the Programme | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection  |
| 3.                                       | B.Sc. Interior Design | 3 Yrs    | 15     | 1,61,500  | US\$ 3300                                      | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 4.                                       | M.Sc. Interior Design | 2 Yrs    | 10     | 1,61,500  | US\$ 3300                                      | Min. 50% marks in B.Sc.-Interior Design or equivalent   |   |
| Sub Total                                |                       |          | 85     |   |  |   |   |

\* Subject to the approval by AICTE

Note 11: All admissions to architecture degree course shall be subject to passing of National Aptitude Test in Architecture (NATA) conducted by the Council of Architecture & JEE of CBSE.

The course shall be of 5 academic years, inclusive of six months of practical training after the first stage (3 years) in a professional's office.

The 5 years Bachelor's degree in Architecture course is conducted in two stages.

First Stage: The first stage shall be of three years (six semesters) of institutional academic studies. Maximum permissible period for the successful completion of first stage shall be five years from the date of admission.

Second Stage: The second stage shall be of two academic years (four semesters) including six months of practical training. The maximum permissible period for completing the Bachelor's Degree program in Architecture for which the prescribed program duration is 5(=n) years, shall be n+ 5= 10 years.

Each year comprises of two semesters of 18 working weeks each.

| FACULTY OF BEHAVIORAL & SOCIAL SCIENCES (FBSS) |  |          |        |   |  |  |   |
|--|--|----------|--------|---|--|--|---|
| S. No.   | Name of the Programme  | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria   | Criteria for Selection  |
| 1.   | BA (Hons.) - Applied Psychology with specializations in Clinical Psychology, Counseling Psychology, Industrial and Organizational Psychology, Educational Psychology, Consumer Psychology, Health Psychology, Sports Psychology, Testing and Assessment, Personality and Social Psychology, Developmental Psychology | 3 yrs    | 40     | 1,26,000  | US\$3300                                       | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subject along with 4 subjects with the highest score out of the remaining subjects  | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 2.   | B.A (Hons)-Economics   | 3 yrs    | 10     | 1,26,000  | US \$ 3300                                     | Pass in 10+2 Examination / Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subjects along with 4 subjects with the highest score out of the remaining subjects |   |
| 3.   | B.A - Liberal Arts   | 3 Yrs    | 03     | 1,26,000  | US \$ 3300                                     | Pass in 10+2 Examination/ Equivalent Examination with at least 50% marks in aggregate in 5 subjects including English as compulsory subjects along with 4 subjects with the highest score out of the remaining subjects  |   |

| FACULTY OF BEHAVIORAL & SOCIAL SCIENCES (FBSS) |  |          |        |   |  |  |   |
|--|--|----------|--------|---|--|--|---|
| S. No.   | Name of the Programme  | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria   | Criteria for Selection  |
| 4.   | MA - Applied Psychology (with specializations in following areas: Clinical, Counseling, Industrial and Organizational, Educational, Health, Sports, Psychological Assessment and Psychometric Testing, Personality Assessment, Social, Cognitive & Perceptual, Community, Consumer, Developmental, Engineering, Environmental, Evolutionary, Experimental, Forensic & Criminal, Neuropsychology, Rehabilitation & School Psychology) | 2 yrs    | 10     | 1,16,000  | US\$ 3300                                      | 50% marks in Bachelor Degree in any discipline from a recognized University. | Merit preparation / short listing of candidates shall be on the basis of score in MRNAT 2020/ Marks in Qualifying Examination |
| 5.   | M.A - Economics  | 2 yrs    | 06     | 1,16,000  | US\$ 3300                                      |  |   |
| Sub Total                                      |  |          | 69     |   |  |  |   |

Note: The eligibility criteria for the candidates qualified from IB Board or Cambridge International Examinations (IGCSE) shall be considered as specified below:

- For IB Board: Student should have secured a minimum of 26 points/credits with minimum of three subjects passed at Higher Level (HL) and three at Standard Level (SL).
- For Cambridge International Examinations (IGCSE): Minimum % shall be same as that for CBSE candidates. Candidate must be passed in minimum 5 subjects at 'O' level and minimum 2 subjects at 'A' level. These are mandatory to obtain equivalence certificate from AIU.

| FACULTY OF DENTAL SCIENCES (FDS) |   |   |                                    |   |  |  |  |
|----------------------------------|---|---|------------------------------------|---|--|--|--|
| S. No.                           | Name of the Programme   | Duration  | Intake                             | FEES (per annum) for Indian Nationals in Rupees   | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria   | Criteria for Selection   |
| 1.                               | Bachelor of Dental Surgery (BDS)  | 4 yrs plus one year rotating internship in MRDC | 100 (All India Quota: 85; NRI: 15) | First year 476500 (including security amount of Rs. 50000 to be adjusted against fee for final year. Detailed fee structure for 4 year prog. is given at page no. 92    | US \$11000                                     | He/ She will attain the age of 17 years or more on 31-12- 2020. Must have passed Senior School Certificate Examination (10+ 2) of Board of School Education Haryana or an examination recognized as equivalent thereto with at least 50% marks in Physics, Chemistry and Biology taken together and must have passed in the subjects of Physics, Chemistry, Biology and English individually in qualifying examination. (i) He/She should be NEET 2020 qualified. In case of candidates belonging to SC/ST/OBC the marks obtained be read as 40% instead of 50%. | As per the directions of the Government of India, the Dental Council of India, Admission shall be made on the basis of merit of the NEET 2020. For complete details please visit <a href="http://www.mcc.nic.in">www.mcc.nic.in</a> (UG Counselling & Deemed University section) |
| 2.                               | Master of Dental Surgery (MDS) - Prosthodontics and crown & Bridge      | 3 Yrs   | 3                                  | First year 10,00,000 (including security amount of Rs. 50000 to be adjusted against fee for final year. Detailed fee structure for 3 year prog. is given at page no. 92 | US \$25000                                     | Candidate should have passed BDS examination and completed satisfactorily one year compulsory rotating internship by 31.03.2020 from colleges recognized by Dental Council of India. - He/ She should be NEET 2020 qualified. - He/She should have been registered permanently with the State Dental Council/ DCI at the time of admission, & Possess a certificate of good conduct from the Head of Institution last attended.  | As per the directions of the Government of India, the Dental Council of India, Admission shall be made on the basis of merit of the NEET 2020. For complete details please visit <a href="http://www.mcc.nic.in">www.mcc.nic.in</a> (PG Counselling & Deemed University section) |
| 3.                               | Master of Dental Surgery (MDS) - Orthodontics & Dentofacial Orthopedics | 3 Yrs   | 3                                  |   | US \$25000                                     |  |  |
| 4.                               | Master of Dental Surgery (MDS) - Conservative Dentistry & Endodontic    | 3 Yrs   | 3                                  |   | US \$25000                                     |  |  |

**FACULTY OF DENTAL SCIENCES (FDS)**

| S. No.    | Name of the Programme   | Duration | Intake | FEES (per annum) for Indian Nationals in Rupees  | FEES (per annum) in US \$ for PIO/NRI Students | Minimum Eligibility Criteria  | Criteria for Selection   |
|-----------|---|----------|--------|--|--|---|--|
| 5.        | Master of Dental Surgery (MDS) - Pediatric and Preventive Dentistry | 3 Yrs    | 3      | First year 8,00,000 (including security amount of  | US \$25000                                     | - Candidate should have passed BDS examination and completed satisfactorily one year compulsory rotating internship by 31.03.2020 from colleges recognized by Dental Council of India.<br>- He/ She should be NEET 2020 qualified.<br>- He/She should have been registered permanently with the State Dental Council/ DCI at the time of admission, & Possess a certificate of good conduct from the Head of Institution last attended. | As per the directions of the Government of India, the Dental Council of India, Admission shall be made on the basis of merit of the NEET 2020. For complete details please visit <a href="http://www.mcc.nic.in">www.mcc.nic.in</a> (PG Counselling & Deemed University section) |
| 6.        | Master of Dental Surgery (MDS) - Periodontology                     | 3 Yrs    | 3      | Rs. 50000 to be adjusted against fee for final year. Detailed fee structure for 3 year prog. is given at page no. 92 | US \$25000                                     |   |  |
| 7.        | Certificate Course in Oral Implantology                             | 1 Yr     | 10     | 3.5 lakhs total fees   |  |   |  |
| 8.        | Certificate Course in Aesthetic Laser Dentistry                     | 1 Yr     | 10     | 2 lakhs total fees   |  |   |  |
| 9.        | Certificate Programme on Dental Aligners                            | 1 Yr     | 5      | 3 lakhs total fees   |  |   |  |
| Sub Total |   |          | 140    |  |  |   |  |

**NOTE:**

- Candidates belonging to SC/ST category shall be eligible for relaxation of 5% in the eligibility criteria for Admission to all UG, PG and Ph.D programmes.
- Candidates belonging to OBC category & differently abled candidates shall be eligible for relaxation of 3% in the eligibility criteria for Admission to all UG & PG programmes
- Candidates belonging to category of Girl Child, Sports, Wards of Defense Personnel and Paramilitary forces shall be considered for relaxation up to 5% in the eligibility criteria for Admission to all UG & PG programmes on case to case basis.

**MRIIRS ADMISSIONS CALENDAR AY 2020-21**

| DESCRIPTION  | NAME OF THE PROGRAMME   |   |  |  |                     |                     |
|--|---|---|--|--|---------------------|---------------------|
|  | MBA   | B.Tech Programme  | All UG Programmes Except B.ARCH, B.Tech, B.Tech-Lateral Entry  | B.Tech- Lateral Entry & all PG Programmes other than MBA | B.ARCH              | BDS/MDS             |
| Sale of Application forms & filling on-line application form     | 10-11-2019  |   |  |  |                     |                     |
| Conduct of MRNAT-2020 and GD/PI                                  | 25-04-2020 and 26-04-2020 (Except M.Tech, MBA, B.Arch, BDS & MDS)   |   |  |  |                     |                     |
| Date of conduct/Declaration of Result of NATA for B.Arch         |   |   |  |  | As notified by CoA  |                     |
| Short listing/ Selection of Candidates and Offer of Admission    | 01.12.2019 onwards  | (A) For applicants seeking admission through MRNAT 2020, the selected candidates shall be sent offer of Admission within 3-days of conduct of their MRNAT<br><br>(B) For applicants with JEE Main 2020 Score, the selected candidates shall be sent offer of Admission, 22.02.2020 onwards<br><br>(C) For applicants with SAT score, the selected candidates shall be sent offer of admission 25.11.2019 onwards. | (A) For applicants seeking admission through MRNAT 2020, the selected candidates shall be sent offer of Admission within 3-days of conduct of their MRNAT<br><br>(C) For applicants with SAT score, the selected candidates shall be sent offer of Admission, 15.11.2019 onwards | 02.06.2020 onwards                                       | As notified by MCC  |                     |
| Confirmation of acceptance of Offer of Admission and Fee Payment | Within 7 days of communication of Offer of Admission by University Authority  |   |  |  |                     |                     |
| Physical Document Verification/ Enrollment Process               | Within 7 days of communication of Offer of Admission by University Authority (As per slot communicated by University Authority) |   |  |  |                     |                     |
| Classes Commence   | 13.07.2020 (Monday)   | 06.07.2020 (Monday)   | 08.07.2020 (Wednesday)   | 13.07.2020 (Monday)                                      | 13.07.2020 (Monday) | 17.08.2020 (Monday) |

**MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES  
FEE STRUCTURE FOR AY 2020-21**

| Programme | 1st Installment  |                 |                 |                      |                      |                          | 2nd Installment |                 |                      |                          |           |                  |
|-----------|--|-----------------|-----------------|----------------------|----------------------|--------------------------|-----------------|-----------------|----------------------|--------------------------|-----------|------------------|
|           | Tuition Fee  | Development Fee | University Fee* | Student Resource Fee | Training Partner Fee | Total of 1st Installment | Tuition Fee     | Development Fee | Training Partner Fee | Total of 2nd Installment | Total Fee |                  |
| FET       | B.Tech [AE, AU, Civil, BT, ECE, EEE, ME]   | 55000           | 18000           | 12000                | 24500                | 0                        | 109500          | 55000           | 17000                |                          | 72000     | 181500           |
|           | B.Tech-CSE   | 60000           | 18000           | 12000                | 24500                | 0                        | 114500          | 60000           | 17000                |                          | 77000     | 191500           |
|           | B.Tech- Computer Science and Engineering with various specializations in association with IBM                  | 60000           | 18000           | 12000                | 24500                | 30000                    | 144500          | 60000           | 17000                |                          | 77000     | 221500           |
|           | B.Tech - Lateral (AE, AU, Civil, BT, ECE (IOT) EEE, ME)  | 55000           | 18000           | 12000                | 24500                | 0                        | 109500          | 55000           | 17000                |                          | 72000     | 181500           |
|           | B.Tech- Mech Engg. in association with JBM (Lateral Entry)   | 55000           | 18000           | 12000                | 15500                | 74000                    | 174500          | 55000           | 17000                |                          | 72000     | 246500           |
|           | B.Tech - Computer Science and Engineering (Lateral Entry) with various specializations in association with IBM | 55000           | 18000           | 12000                | 24500                | 30000                    | 139500          | 55000           | 17000                |                          | 72000     | 211500           |
|           | B.Sc. (Hons)- Geology  | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000           |
|           | M.Sc. - Applied Geology  | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000           |
|           | M.Tech   | 32500           | 13000           | 12000                | 14000                | 0                        | 71500           | 32500           | 12000                |                          | 44500     | 116000           |
|           | M.Sc. - Biotechnology  | 32500           | 13000           | 12000                | 14000                | 0                        | 71500           | 32500           | 12000                |                          | 44500     | 116000           |
| FCA       | BCA  | 35000           | 18000           | 12000                | 19000                | 0                        | 84000           | 35000           | 17000                |                          | 52000     | 136000           |
|           | B.Sc.-IT   | 30000           | 13000           | 12000                | 17500                | 25000+ NZ\$900           | 97500+ NZ\$900  | 30000           | 12000                |                          | 42000     | 139500 + NZ\$900 |
|           | M.Sc.-IT   | 30000           | 18000           | 12000                | 19000                | 0                        | 79000           | 30000           | 17000                |                          | 47000     | 126000           |
| FAD       | MCA  | 35000           | 18000           | 12000                | 19000                | 0                        | 84000           | 35000           | 17000                |                          | 52000     | 136000           |
|           | MCA- Lateral   | 35000           | 18000           | 12000                | 19000                | 0                        | 84000           | 35000           | 17000                |                          | 52000     | 136000           |
|           | B.Arch   | 70000           | 18000           | 12000                | 28500                | 0                        | 128500          | 70000           | 17000                |                          | 87000     | 215500           |
|           | B.Design   | 70000           | 18000           | 12000                | 28500                | 0                        | 128500          | 70000           | 17000                |                          | 87000     | 215500           |
|           | B.Sc.-ID   | 45000           | 18000           | 12000                | 24500                | 0                        | 99500           | 45000           | 17000                |                          | 62000     | 161500           |
| FAS       | M.Sc.-Interior Design  | 45000           | 18000           | 12000                | 24500                | 0                        | 99500           | 45000           | 17000                |                          | 62000     | 161500           |
|           | BPT  | 55000           | 18000           | 12000                | 14000                | 0                        | 99000           | 55000           | 17000                |                          | 72000     | 171000           |
|           | MPT  | 37500           | 18000           | 12000                | 14000                | 0                        | 81500           | 37500           | 17000                |                          | 54500     | 136000           |
|           | B.Sc- N&D  | 37500           | 18000           | 12000                | 14000                | 0                        | 81500           | 37500           | 17000                |                          | 54500     | 136000           |
|           | M.Sc.- N&D   | 37500           | 18000           | 12000                | 14000                | 0                        | 81500           | 37500           | 17000                |                          | 54500     | 136000           |
| FCBS      | B.Sc. Hons. - Food Science and Technology  | 40000           | 18000           | 12000                | 14000                | 0                        | 84000           | 40000           | 17000                |                          | 57000     | 141000           |
|           | BBA  | 55000           | 13000           | 12000                | 14000                | 0                        | 94000           | 55000           | 12000                |                          | 67000     | 161000           |
|           | BBA- Banking & Financial Markets   | 50000           | 13000           | 12000                | 14000                | 13500                    | 102500          | 50000           | 12000                |                          | 62000     | 164500           |
|           | BBA- Global - IB (in association with AIS, New Zealand)  | 37500           | 13000           | 12000                | 14000                | 25000+ NZ\$800           | 101500+ NZ\$800 | 37500           | 12000                |                          | 49500     | 151000 + NZ\$800 |
|           | B.Com- Hons.   | 37500           | 18000           | 12000                | 14000                | 0                        | 81500           | 37500           | 17000                |                          | 54500     | 136000           |
| M.Com     | 37500  | 18000           | 12000           | 14000                | 0                    | 81500                    | 37500           | 17000           |                      | 54500                    | 136000    |                  |

**MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH AND STUDIES  
FEE STRUCTURE FOR AY 2020-21**

| Programme | 1st Installment                              |                 |                 |                      |                      |                          | 2nd Installment |                 |                      |                          |           |        |
|-----------|--|-----------------|-----------------|----------------------|----------------------|--------------------------|-----------------|-----------------|----------------------|--------------------------|-----------|--------|
|           | Tuition Fee                                  | Development Fee | University Fee* | Student Resource Fee | Training Partner Fee | Total of 1st Installment | Tuition Fee     | Development Fee | Training Partner Fee | Total of 2nd Installment | Total Fee |        |
| FMeH      | B.A - Journalism and Mass Communication      | 40000           | 18000           | 12000                | 14000                | 0                        | 84000           | 40000           | 17000                |                          | 57000     | 141000 |
|           | M.A - Journalism and Mass Communication      | 40000           | 18000           | 12000                | 14000                | 0                        | 84000           | 40000           | 17000                |                          | 57000     | 141000 |
|           | BA- Hons. - English                          | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000 |
|           | MA - English                                 | 32500           | 13000           | 12000                | 14000                | 0                        | 71500           | 32500           | 12000                |                          | 44500     | 116000 |
| FMS       | MBA  | 95000           | 18000           | 12000                | 37500                | 24000                    | 186500          | 95000           | 17000                |                          | 112000    | 298500 |
|           | B.Sc. - Hospitality and Hotel Administration | 45000           | 13000           | 12000                | 14000                | 0                        | 84000           | 45000           | 12000                |                          | 57000     | 141000 |
| FBSS      | BA (Hons.)- Applied Psychology               | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000 |
|           | BA (Hons.)- Economics                        | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000 |
|           | B.A - Liberal Arts                           | 37500           | 13000           | 12000                | 14000                | 0                        | 76500           | 37500           | 12000                |                          | 49500     | 126000 |
|           | M.A - Economics                              | 32500           | 13000           | 12000                | 14000                | 0                        | 71500           | 32500           | 12000                |                          | 44500     | 116000 |
|           | MA - Applied Psychology                      | 32500           | 13000           | 12000                | 14000                | 0                        | 71500           | 32500           | 12000                |                          | 44500     | 116000 |

\* It includes Life Time Alumni Membership Fee of Rs. 3000/- (One Time at the time of Admission)

**BDS FEE STRUCTURE - 2020-21 (BATCH)**

| Academic Year     | Tuition Fee | Development Fee | University Fee | Student Resource Fee | College Security (Adjustable with Last Year Fee) | College Security Refund | Total  |
|-------------------|-------------|-----------------|----------------|----------------------|--|-------------------------|--------|
| 2020-21 1st YEAR  | 270000      | 84000           | 30000          | 42500                | 50000  |                         | 476500 |
| 2021-22* 2nd YEAR | 283500      | 88200           | 25000          | 34500                | 0  |                         | 431200 |
| 2022-23* 3rd YEAR | 297675      | 92610           | 25000          | 34500                | 0  |                         | 449785 |
| 2023-24* 4th YEAR | 312559      | 97241           | 25000          | 34500                | 0  | 50000                   | 419300 |

**MDS- FEE STRUCTURE 2020-21  
(for specialization in Conservative, Orthodontics and Prosthodontics)**

| Academic Year | Tuition Fee | Development Fee | University Fee | Student Resource Fee | College Security (Adjustable with Last Year Fee) | College Security Refund | Total   |
|---------------|-------------|-----------------|----------------|----------------------|--|-------------------------|---------|
| 1st YEAR 2020 | 650000      | 150000          | 30000          | 120000               | 50000  |                         | 1000000 |
| 2nd YEAR 2021 | 650000      | 150000          | 30000          | 120000               |  |                         | 950000  |
| 3rd YEAR 2022 | 650000      | 150000          | 30000          | 120000               |  | 50000                   | 900000  |

**MDS- FEE STRUCTURE 2020-21  
(for specialization in Pedodontics & Periodontology)**

| Academic Year | Tuition Fee | Development Fee | University Fee | Student Resource Fee | College Security (Adjustable with Last Year Fee) | College Security Refund | Total  |
|---------------|-------------|-----------------|----------------|----------------------|--|-------------------------|--------|
| 1st YEAR 2020 | 500000      | 120000          | 30000          | 100000               | 50000  |                         | 800000 |
| 2nd YEAR 2021 | 500000      | 120000          | 30000          | 100000               |  |                         | 750000 |
| 3rd YEAR 2022 | 500000      | 120000          | 30000          | 100000               |  | 50000                   | 700000 |



# MANAV RACHNA RESEARCH INNOVATION & INCUBATION CENTRE (MRIIC)



Dr. M.K. Soni  
Pro Vice-chancellor



Dr. B.S. Gill  
Advisor MRIIC



Dr. Umesh Dutta  
Director-MRIIC



Dr. Sarita Sachdeva  
Dean Research

MRIIRS IS COMMITTED TO RESEARCH AND INNOVATION AS A CENTRAL PART OF ITS MISSION. THIS STEMS FROM FIRM BELIEF IN CREATIVE THINKING AND CREATING BETTER HUMAN BEINGS. AS A PRACTICE, RESEARCH & INNOVATION CLUSTERS (RICS), RESEARCH INCUBATOR (RI), BUSINESS INCUBATOR (BI), INTELLECTUAL PROPERTY RIGHTS (IPR) CELL AND CENTRES OF EXCELLENCE (CES) WHICH HAVE BEEN ESTABLISHED TO BRIDGE THE GAP BETWEEN THEORY AND PRACTICE. THIS ENABLES THE STUDENTS TO IMPROVE THEIR SKILLS AND DO QUALITY RESEARCH EVEN AT UNDERGRADUATE LEVEL IN COLLABORATION WITH ACADEMIC PARTNERS AND INDUSTRIES FOR THE BENEFIT OF SOCIETY.

All these correlated activities are undertaken at MRIIRS under the aegis of Manav Rachna Research Innovation & Incubation Centre (MRIIC) comprising of following units:

Manav Rachna Research, Innovation & Incubation Centre

Research & Innovation Clusters (RICs)

- Mechanical, Automobile & Aerospace Cluster
- Electronics & Electrical Cluster
- Molecular Biosciences Cluster
- Health Sciences & Nutrition Cluster
- Civil, Architecture & Design Cluster

### Centres of Excellence (CEs)

- Mitsubishi Electric Centre
- Automotive Training & Research Centre (Honda Motors)
- Sport Science Centre
- Advanced Water Technology & Management Centre
- IBM Centre
- Research Incubator (RI)
- Business Incubator (BI)
- IPR Cell

MRIIC is a seminal initiative of and is dedicated to Founder Visionary Dr. O.P. Bhalla whose dream was to encourage research, innovation and entrepreneurship to help the students to develop professional entrepreneurial ability and mindset to set up their own enterprises. MRIIC has been established to cater the needs of students and faculty members who are inclined towards research, innovation, have novel ideas and are buzzing with out-of-box thinking.

Since inception, MRIIRS has been striving to develop into an institution of excellence in education and research in consonance with the contemporary and future needs of India through meaningful education, quality research and technological innovations. In addition to offering formal Undergraduate and Post-graduate Programs, the MRIIRS actively encourage its faculty and students to undertake in-house and sponsored research and consultancy projects in order to strengthen the research and innovation profile of the Institution. Presently, institution is actively engaged in research in several areas of Engineering, Basic and Applied Sciences, Management, Literature, Physiotherapy, Nutrition & Dietetics, Health, Energy and Environment, Manufacturing, Sports Rehabilitation etc.



MRIIC through its various activities encourages both engineering and non-engineering students across various departments to develop innovative and creative business ideas which in the subsequent stages are incubated to convert into successful enterprises. The Centre is instrumental in coordinating entrepreneurial education so that students develop necessary background to take up viable and feasible start-up ventures. Centre regularly organizes business plan competitions through which meritorious projects are identified and selected for direct support. Research & Innovation Clusters, IPR cell & Business Incubator are setup in the campus to provide a platform for all kind of assistance to the teams in terms of design reviews, expert comments, provision of raw materials, manufacturing facilities, testing arrangements. Centres of Excellence are established in collaboration with industry partners to train the students and faculty in advance areas in order to enhance employability of students.

MRIIRS has well and truly carved its indomitable position as a research-driven institution and was conferred with the National Education Excellence Award 2018 for being the "Best Knowledge Creation and Innovation University", and "Best University in Innovation & Research" at the 2nd National Education Summit & Awards 2017. Prior to that MRIIRS was felicitated with 'ASSOCHAM - National Education Excellence Award 2016 for the 'Best University for promoting Industry-Academia Interface', National Education Excellence Award 2015 for the 'Best University serving Social Cause' and National Education Excellence Awards 2014 for the "Best Private University Promoting Research & Innovation"



### Research and Innovation Clusters (RICs)

Research plays a significant role in the process of conceptual thinking, learning and innovation. With the path-breaking innovations in both its curriculum & research, the Institution is rapidly gaining a legendary reputation globally. These Clusters provide technology and innovation support whereas Incubation helps the students to develop practical business models as startups or spin offs to become student entrepreneurs for working towards Government of India policy of "Make in India". With establishment of innovation labs in the area of Mechanical and Electronics and preparing policies, strategizing the systematic approach to research innovation, and testing a pilot run, the Centre was officially inaugurated on January 01, 2014.

We live in a knowledge-driven economy, where Research and Development has become the key to sustainable economic growth, creating in the process, a competitive edge. Across its 20-year journey with many milestones to its credit, MRIIRS has taken on the challenge of yielding applicable knowledge and dedicating itself towards several path breaking Research and Development initiatives. More recently, the Institution has created a 'Research and Innovation' culture at the Undergraduate level through Innovation & Incubation at MRIIC. Also to ignite youngminds towards Research Innovation Catalyst (RIC) has been introduced at UG Level as a course with two credits.

The Institutions have thirty academic departments, one Research Incubator (RI), eight Research & Innovation Clusters (RICs), one Business Incubator (BI), one dedicated IPR Cell and five Centres of Excellence (CEs), The Institutions have to their credit, over 4800+ research publications in International Journals, National Journals, International Conferences and National Conferences. This includes more than 800 papers listed in the Scopus database; Web







of Science, Science Citation Index Expanded (SCIE), PubMed, EBSCO database and other high impact quality journals and more than 1700 are listed in Google scholar database. 389 patents/ trademark/ copyrights have been filed/ granted to faculty and students. More than 140 books have been authored by faculty members. Grant worth over Rs. 7 Crores from EDII, Ahmadabad through DST, Govt. of India has been received, for setting-up of NewGen Innovation and Entrepreneurship Development Centre (IEDC). Several grants have been received from Ministry of HRD, Govt. of India, from Ministry of Skill Development and Entrepreneurship, Indian Oil Corporation Limited, Faridabad and Cairns Oil & Gas Pvt.Ltd.

Recently, Aarkaya Solar Solutions Pvt. Ltd. received top-up startup grant of Rs. 10 Lac from NIDHI-DST Scheme under the aegis of National Science & Technology Entrepreneurship Development Board (NSTEDB), DST. MRIIRS has submitted research and developmental projects worth Rs 100 Crores to Atal Incubation Centre (AIC), Central Pollution Control Board (CPCB) and Department of Science and Technology (DST). The Institutions have tie-ups with more than 63 Global collaborations, with more than 500 MNCs and Indian Corporates who are patronizing us in one way or other. Some other prominent collaborations are IOCL Faridabad, THSTI, Faridabad, CSIR-III, Dehradun and NII, New Delhi.

Presently, the Centre is actively engaged in research projects by adopting interdisciplinary approach in addition to

other activities like Competitions & Projects, Publishing, Sponsored R&D projects, Training in Advanced Areas or future technologies, Product Development, Collaboration & Consultancy & Patents & IPR. Some of the notable innovative projects developed by students at Research & Innovation Clusters of MRIIC are given below:

1. PULSE: This Project is the combination of Electro-cardiography, heart rate monitoring and activity tracker that works together to analyze the heart parameters so as to find out any abnormality related to the Heart. This unique gadget utilizes Machine Learning and artificial intelligence services to analyze heart data & detect the possible future complications in the patients.

2. TITCHY: This project is a non-invasive technique for the detection of Tuberculosis using Image Processing. It is portable gadget and is designed along with an application and makes use of Microsoft Azure Cloud Services for storing the image samples collected from the patients.

3. TECH\_KINS: They have designed a unique device which can be a life saver of the people working in the Electrical Industry. It aims at minimizing the chances of being electrocuted. This device automatically cuts the main supply and locks the panel and the same time informs the officials. Once the panel gets locked it can't be unlocked unless there is permission from the senior most person in the Department. The gadget locks the panel automatically during an electric short circuit which can only be unlocked using a password till the repair work is completed by the Technician.

4. SMART HEALERS: Pressure ulcers, also known as pressure sores, bedsores and ulcers, are localized damage to the skin and/or underlying tissue that usually occur over a bony prominence as a result of pressure, or pressure in combination with shear and/or friction. Here we have developed an App. The patient selects those areas where he or she is affected. Then when the person lies down, the patient body is mapped on the sides and the back. The machine learning module determines the most suitable posture for the patient. After this, the bed inflates and deflates itself and the person is relieved.

5. HELIX: This project is a digital notebook that replaces your stack of stationary and overcomes those limitations of traditional paper. It is specially designed to make reading, writing and sharing of work a wonderful experience. It is a perfect tool for students, artists, professionals, journalists, writers and everyone whose life revolves around paper.

6. E 2.0: BIVIDA is a block chain and AI powered Open Data Platform for tenders that open up public contracting through disclosure, data and engagement providing transparency, accountability and improved efficiency in the process of tendering and procurement.

7. App. Development: Students have developed Digital Web Development Media and alongside Android App for Umeed NGO, New Delhi with support of Umeed Organization and Swachh Green App. under the mentorship of FIA.



Besides, these prototype projects the students have also developed a large number of projects including Swastika, IRRI-BOT, www.queryjunction.com, the smart pollution sensor, Plant-O-Bot, Driving Simulator, RFID Entry System, Biometric Bus Attendance Machine, EnvirO, Project Shwaas, Dental Posture Correction System, Project' GRIWADIT, Solar Driven Car: Award Winning Project, Smart Extension Board, Schedulable Extension Board, Universal Remote (Android App Based), IOT Based Home Automation System, Smart Dust Bin, Real Time Weather Monitoring System, Electric Wheel Chair, Biometric Secured Access System, Black Box for Vehicles and many more.

Year on Year, students have been sweeping away the top honors' at some of the most prestigious innovation challenges. Following league, our students have bagged the "#Jury Choice Award" of the #Accenture Innovation Challenge 2018 held at Bengaluru. Sixteen teams were selected from all over the country for this grand event from among 13,000 projects. The competition was tough and standard set were very high. Despite phenomenal competition from the best brains across the nations; our project VET (#Virtual Exposure Therapy) which is a Therapy to treat patients of Phobia, Depression and Mental Trauma won the hearts and the award. The team comprising Ishlok Vashisht, Dipesh Narwat, Akash Bhadana and Himanshu Aggarwal were awarded with prizes worth Rs. 15,000 each and an Apple iPad (128GB), for every Team member.

Virtual reality exposure therapy (VRET): This is psychological therapy in many countries, even the developed ones, is not affordable and requires trained personnel to assist each patient for long periods, the solution can provide an alternative treatment that is more efficient (faster results) and does not require the help of a psychologist. Making this treatment accessible in many health centers or hospitals can allow faster access to treatment to improve the mental health of patients. The main target is to make this platform available to home and improve the VR platform to recreate different stressful scenarios. Making available to larger audiences a treatment that allows the patient to immerse into the stressful scenario is a unique way to face the fear stimuli and build resistance to the PTSD effects. Completing sessions of treatment in VR environments will require less frequent consultation with a psychologist and can be moderated by regular medical personnel. This allows a greater number of patients to have frequent therapy sessions that guarantee therapeutic results and it is a more affordable option due to its digital nature.

Living Talent Master Piece 2017: Students at MRIIC took part in Living Talent Master Piece 2017 event, which was held in Dubai from 15th-16th Dec 2017. This event is the world's first multi genre talent festival conducted by Living Talent organization which is a first of its kind. This Talent Hunt Company formed with the sole intention of bringing gifted and talented individuals together on a global platform. The event had participation from all over the world in the following categories: Performance, Art & Craft and Innovation. Four teams from MRIIC who have made it to the semifinals took part in this event under the Innovation category. The Digital Paper, LOTO Device, Smart Solution for Air Pollution Mitigation and Sound Fidelity projects were selected for the semifinals which took place on 15th Dec. Finally top 15 teams were selected which included 3 teams from MRIIC (Project LOTO, Sound Fidelity and Smart Solution for Air Pollution Mitigation). Final round of the event was held on 16th December and project sound Fidelity from MRIIRS was able to make it to the top 3 best teams of this prestigious event in the Innovation category. First position was bagged by Argentina while Indian teams were able to win the 2nd and 3rd position. Students were appreciated by the jury members for their wonderful work.

MITSUBISHI ELECTRIC CUP 2019: Project OTR MARK developed by the students of MRIIRS has made it to top 35 projects selected for the national finals of Mitsubishi Electric Cup. OTR Mark is a one-of-a-kind, cloud-based authentication engine that uses state-of-the-art Artificial Intelligence & decentralized block chain database to detect and reject fake goods. The invented solution has already been accepted for provisional patent application (Inventors: AakashBhadana, VasuKaushik, Bharat Sundal, Devdutt, Rahul Gupta, Mr. Umesh Dutta). The OTR code is duplicity proof unlike other identification number such as bar codes which are copied by counterfeiters easily to make their fake goods valid, but in case of OTR Mark their can only be one unique item corresponding to one unique QR code in market, copying it will make the item with duplicate OTR mark invalid by the online verification system. The process consists of two step verification process, first scan the QR Code underneath the scratch layer, second if QR Code is valid then you will be asked to scan the AI generated pattern which is copy proof. This simple process of just adding a concealed one-time-response code on items will give buyers the ultimate power to check for genuine and counterfeit goods by secure online verification system that holds the record of every genuine product present in market.





**AICTE-CHHATRA  
VISHWAKARMA AWARDS 2018:  
RENASAS GR LYCHEE DESIGN  
CONTEST 2018:  
IESA MAKEATHON-  
VISIONSUMMIT 2018**

Students took part in the recently concluded India Electronics & Semiconductor Association Vision Summit 2018. The event was held from 27th-28th Feb 2018 at Hotel Leela Palace, Bengaluru. The theme of the event was “Resurgent India: Electronics, Entrepreneurship and Economy”. Student team-“TECH KINS” from MRIIC selected for the Makeathon event where students have to convert the idea into a prototype in 24 hour time span. In total around 100 teams from various prestigious institutions of the country had applied for this event and finally 29 teams were selected for the final rounds of IESA-Makeathon 2018. Team TECH KINS from MRIIC have made us proud by obtaining first position in this tough fought Makeathon event. Team TECH KINS comprising of four students-Devdutt, Ishlok, Dhruv and Shubhi developed an intelligent system that aimed at minimizing the chances of workers being electrocuted at industries. After winning the competition team TECH KINS said that it was thrilling to convert a raw idea into a prototype in just 24 hours as it tests your abilities and without team work this would not have been possible. Students were awarded with US\$ 500 worth of Amazon Web Services coupon + US\$ 500 worth of Digital Ocean credits.

**Microsoft Imagine Cup 2018**

The National Finals of Microsoft Imagine Cup 2018 was held from 19th -20th April, 2018. After the tough selection process 6 teams PULSE, TITCHY, TECKINS, SMART HEALERS, HELIX, E 2.0 qualified for the National Final.

Annual Techno-Management Festival” at IIT GUWAHATI 2018: Student Team has participated in Competition entitled “Techniche- This team “ROSS” from MRIIC has bagged topmost position with members as Devdutt, Dhruv Rohatgi, Sujeeet Soni and Nilanshu Khurana and were awarded with Gold medals, trophies and a cheque of Rs.30,000/-.

3rd Mitsubishi Electric Cup 2018: National Level Project Competition”3rd Mitsubishi Electric Cup” Organized by Mitsubishi Electric India Limited in NIRMA University, Ahmadabad from 15th - 17th February 2018.The student team EEE, with the project “Smart Solution to Assemble Structure”participated in this competition. The project won 1s prize in project competition “SRIJAN” .

Fraternity Formula student 2017-18: Fraternity Formula competition conducted by FMEA at Coimbatore. In this competition students manufactured and designed a formula concept single seat race car.

Team Reverberuns of MRU participated in this competition for the very first time. The aim was to build a light weight car. Students performed really well and were also able to get sponsorship from UM motors.

Formula student Bharat: Formula Bharat is an engineering design competition in which students from colleges and universities all over the country, compete with a life-size Formula-style vehicle in

areas of engineering design, overall cost, marketability and dynamic performance. The series replicates the global student Formula series hosted in around 11 countries per year. Our Team cool running had participated in this event after clearing virtual round. This vehicle, equipped with the parts designed and manufactured in-house. This SAE INDIA organized competition at Coimbatore.

German Energiewende and Exhibition on Energy Transition in Germany: The Indo-German Energy Forum - Support Office (IGEF-SO) brought the Touring Exhibition “Deutschland’s Energiewende” on Energy Transition in Germany to the Manav Rachna International Institute of Research and Studies, Faridabad. The exhibition was organized by the Mechanical Engineering, FET, MRIIRS, Faridabad in collaboration with Indo-German Energy Forum (IGEF) and German Embassy, New Delhi from 22nd January to 3rd February, 2018 for the students in local schools/ technical institutes/ engineering colleges, research scholars, faculty members of MREIs & adjacent institutions, entrepreneurs and industry heads using systems operating or to be operating with Solar Energy and Wind Energy.

**SAE E-BAJA**

Society of Automobile Engineering (SAE) conducts various competitions where students have to design and manufacture a running vehicle. E-BAJA is one of the events conducted by SAE, team of students are involved in designing an All-terrain vehicle (ATV)/ Off-road vehicle whose source of power will be Motor and Battery. The event took place in Indore in January 2019. Team cool Runnings has participated in this event, which includes students of Mechanical and Electronics.

## CONSULTANCY

In recent past, MRIIRS has provided consultancy services to numerous organizations and some of the areas of consultancy rendered are GST Regime & implementation, engineering solutions to Orient Electric, design and development of Prototype BMI Machine, Smart Bar Machine - Adelantos Technologies Pvt. Ltd., Cultivation of Safed Musli for sustainable land use, Revival of Badkhal Lake, Faridabad, Rainwater Harvesting for managing water logging prone areas in Faridabad, Decision Support System for adoption to climate change for Budia catchment area, State Action Plan on Climate Change of Haryana, Establishment of WASH Innovative Lab under tri-partite agreement amongst MRIIRS erstwhile (MRIU), MCF and National Institute of Urban Affairs, Creation of Green Barrier under the Delhi Metro Rail Corporation (DMRC) metro tracks etc. During last one year, the institutions have received / have been sanctioned grant of more than Rs 25.0 lacs.

## RESEARCH INCUBATOR

As an integral part of student's growth in research and development, MRIIRS is proudly carrying out student driven research programme at B.Tech level from past few years. Since its launch at 2016, Research Incubator programme remains thoroughly focused and dedicated towards yielding several path breaking research and innovation activities. More than 280 research papers are already published/communicated in Scopus, WOS, SCI, SCIE databases and presented in conferences, out of which 92 papers got published / acceptance and 123 papers are communicated in the national and international journals such as Journal of Digital and Information Management, Pacific Business Review International, International Journal of Control Theory and Applications, International Journal of

Engineering Technology Science and Research, Journal of Dietary Supplements, Journal of Clinical and Diagnostic Research, Asian Journal of Pharmaceutical and Clinical Research to name a few; all indexed in SCI, SCIE, Scopus, Web of Science and PubMed in last few years only from this initiative apart from several faculty and research cluster driven work going on in the campus.

The framed objective has been achieved through a series of process and curriculum building over the foundation of current trends of research where students have been nourished through impregnating courses like Introduction to Research followed by Technical Seminars in third semester onward in the curriculum which is guiding them for developing research and technology driven projects during their final year. This is a unique accomplishment rarely heard from UG level students even in the premier institutions which has been successfully flourished in the direction of Excellence in Research and Innovation.

## BUSINESS INCUBATOR

Manav Rachna Business Incubator (MRBI) is nurturing and overseeing innovation and entrepreneurship at Manav Rachna Campus. With a rich tradition of incubation through bodies such as the NewGen Innovation and Entrepreneurship Development Centre has also pioneered innovation with groups such as the E-cell, MRBI will leverage these experiences and give entrepreneurship a stronger push as well as serve to coordinate and promote innovation-driven activities at the institute.

MRIIRS has been granted financial support of Rs. 2.87 Crores from DST-NESTEDB, Govt. of India for setting up of a Manav Rachna New Generation Innovation and Entrepreneurship Development Centre (MRNewGen-IEDC) in the campus to nurture student- entrepreneurial ventures. Its physical working space is more than

5000 sq. feet area with latest amenities including internet, Wi-Fi, conference rooms, multimedia projector, pantry, and recreational area. Each startup will receive funding of Rs. 2.5 Lakhs for the developmental work alongwith recurring grant. Total 85 startups will be incubated in next five years times. 16 startups are incubated / being incubated, out of which 04 Startups- TechnoPlanet Lab Pvt. Ltd, HyFn Games Pvt. Ltd., Tricho Agronica Pvt. Ltd. and Parimukh Innovations Pvt. Ltd. are already incubated in support of Manav Rachna & IOCL, Faridabad and 12 startups under NewGen IEDC-DST sponsored projects are in progress. More than 76 alumni started their ventures out of 23 are successfully running their ventures.

Some of the notable incubated startups of Manav Rachna students under the banner of MRBI, MRIIC are given below:

### 1. Techno Planet Lab Pvt. Ltd.

This is a company working in education space to develop new age tools, technologies and programs to create engaging K-12 learning experiences with an ultimate objective to revolutionizing education. In 21st century, technological advancements are rapidly disrupting industries with new trends evolving like self-driving cars; digital shopping; virtual worlds; life on mars. Envisioning how these disruptions will play out in our children's lives opens up a whole lot of new questions, and necessitates paradigm shifts in how we are thinking about education today. Our offering for Atal Tinkering Lab is based on creating an environment that promotes the participants to dream, the equipment allows them to tinker, the curriculum enables them to structure their thinking and the Innovation League allows them to challenge themselves. They offer equipments and solutions to setup the Atal Tinkering Labs as envisioned by NITI Aayog. [www.http://technoplanetlab.com](http://technoplanetlab.com).





## 2. HyFn Games Pvt. Ltd.

The mission of HyFn games is to create games of science fiction genre. Besides the obvious entertainment that games provide, they also create the base for young people to learn. This learning happens automatically while playing the game. Their flagship product "SpaceTrap-3D" was launched on PlayStore in 2017. Besides game development, HyFn Games has also ventured into the field of Virtual Reality bagging projects like Campus Walk-throughs for various companies. They plan to work in the field of Artificial Intelligence and Augment Reality in upcoming future. Team: RakeshSethi, YugankRastogi, Mudra Rastogi, VishangJad, Adhiraj Mathur, Shaurya Singh. Stage: The Company is running smoothly having a good number of projects in hand.

## 3. Tricho Agronica Pvt. Ltd.

Tricho Agronica Pvt Ltd, the Start-Up has received a grant of Rs 172 lacs under Indian Oil Startup Scheme (IOSUS), a "Start-up India" initiative announced by Prime Minister Shri Narendra Modi. The vision of the company is to provide Lab to Land- an eco-friendly approach. It aims to promote, develop and provide eco friendly products and technologies in safer, cost effective and sustainable manner. Keeping these perspectives in view the company has designed its first bio formulation product 'Bio elixir' which is a remedy for bull's eye pathogen at low cost. The synergistic effect of the bio elixir constituents has the capability to increase systemic resistance in plants. It is the

bio fertilizer and a bio fungicide formulation. It is a non-chemical based formulation to reduce disease of tomato plant combining with features for enhancing soil structure and fertility, maintaining soil biological activities and promoting plant growth & biomass.

## 4. Parimukh Innovations Pvt. Ltd.

Team of engineers from various background and expertise took the problem of Air Pollution and other environmental problem to be tackled with engineering products. Our environment is in continuous havoc like situation and if we don't give our attention to this our future generation will be suffered, it's the time when technology has to be created and implemented to protect our city lives. Team Parimukh is catering this, with their knowledge and experience from different sector they have already developed and offering PARIYAYANTRA Air filtration system and working on different technologies as well.

## Startups @ NewGen IEDC

1. Aarkaya Solar Solutions Private Limited  
At Aarkaya, we design, innovate and upgrade the existing solar solutions to suit domestic, corporate and commercial needs. We have indigenously developed Smart Self-sustainable Solar Products that caters the need of Smart and Secure India. We have a unique development approach with research and innovative proprietary processes that enable us to deliver leading edge performance and innovations for the nation and its development. The Team

members are: Mr. Shivendra Singh Chauhan, Mr. Akshay Sharma, Mr. Shivang Gupta with Prof B M Bahal

With the total revenue generation of 16Lacs+, they have successfully completed 12+ installation projects and they are now ready with their prototype of solar product Their concept of smart solar products is highly appreciated and endorsed by the Scientist Dr. BN Sarkar (DSIR) and PCS officer and Chief Project officer UPNEDA Mr. Alok Kumar.

Aarkaya Solar Solutions Pvt. Ltd. received top-up startup grant of Rs.10 Lac from NIDHI-DST Scheme under the aegis of National Science & Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology, Govt. of India. Startup team will do the further development work in the centre on Micro Grid Installation, Agro-Photo Voltaic Systems, Smart Solar Charging Kiosk at Manav Rachna Campus.

## UNDER INCUBATION

Tackyon Motor Sports Private Limited

The aim is to redesign electric vehicles so they stand out from the crowd of the huge two wheelers available in the market and to never neglect their performance abilities.

- Team: Mr. Ayush Mohan, Mr. Kartik Rampal
- Mentor: Dr. Abhishek Chauhan
- Stage: The team has an electric scooter custom made from scratch, which is well tested in all weather conditions. Also, surveys have been conducted in well established markets related to their products.



#### Nature's Drop

The idea of the startup is to create 100% natural range of health drinks with no added preservatives initially focusing on the youth of nation by introducing it in schools and colleges. These are immunity boosters, antioxidant rich, high energy nutritional drinks with a completely different taste and combination of ingredients.

- Team: Ms. Anshu Jha, Mr. Pranaw Jha, Mr. Mohit Dhariwal
- Mentor: Dr. Mahak Sharma
- Stage: The startup has successfully developed 2 drinks and is currently into certification and testing phase for both the drinks. Several kiosks have been setup for market response.

#### Greenity

The startup's product 'Smart Chair' is an innovative step towards generation of electricity from non-polluting sources rather than from conventional sources of energy.

- Team: Ms. Shraddha Bhatia, Mr. Shivam Mahajan
- Mentor: Prof Hanu Bharadwaj
- Stage: Product Development

#### Campus Dock

Our product is highly dynamic, can grow and change as the organization changes. Our product follows the industry standards for design and technical guidelines. Our target market is untapped and with new steps towards digitalization creates emergence of such services. Dynamic nature allows us to easily scale and extend our product to various sectors.

- Team: Mr. Vivek Kumar, Mr. Meetesh Kaplesh Mehta.
- Mentor: Prof V K Mahna
- Stage: Product Development

#### Vagabond Brains

It offers a solution to companies to stand out of the crowd through digital marketing services. Digital marketing in marketing using digital techniques that offers you a comprehensive platform bringing indigent services such as SEO, SEM, content management. We at Vagabond brains, incorporate all these techniques to help your company experience the tactics of your online business in terms of more visibility on the net and footfall.

- Team: Mr. Saurabh Singh, Mr. Chaitanya Singh Rana
- Mentor: Mrs. Shailja Naqwi
- Stage: Product Development

#### GeAr (Smart Watch)

The idea revolutionizes the communications world by redefining how people communicate. It provides complete physical freedom to the user when the user is on a call by using a smartwatch integrated with a novel technology which allows users to communicate with their hands. In the era of approximately 2-5 billion smartphone users it has huge potential to give privacy aimed physical freedom to the world.

- Team: Mohammad Sadi Raza
- Mentor: Prof Ashish Saxena
- Stage: Product Development

#### ThapKrida

The idea is to create simple, addictive games for casual games on iOS and android platform.

- Team: Mr. Mukul Phogat, Mr. Sahil Tanwar
- Mentor: Prof. Sunil Kumar
- Stage: Product Development

#### Naturoplasts

It is an initiative to inculcate an idea of biodegradable plastics from underutilized natural resources. The news papers and TV channels are flooded with the harms and problems the environment is facing. And one of the cause is pollution due to plastics usage. Nanowrap is one such product made from banana flour. It is cheap, biodegradable and soluble.

- Team: Mr. Mandeep Gulati, Ms. Divya Yadav
- Mentor: Dr. Lakhvinder Kaur
- Stage: Product Development

#### TFT Innovations

This is a new, highly dynamic, scalable and innovative product that caters to both industrial and residential market. It works as a surface protector to walls, floors, glasses, worktop surfaces etc both inside and outside your home, offices or for any industrial use undergoing renovation, new construction or any other modifications. It is an affordable product which requires less effort, saves time, easy to use and dispose, beneficial during rainy season and during paint. It is stain and dust resistant.

- Team: Mr. Aman Nischal, Ms. Sonam Pandey
- Mentor: Dr. Pragati Chauhan
- Stage: Product Development

#### Med Life Care

It is a service based startup. The service is basically for patients and healthcare professionals. It targets to improve relations between patients and healthcare providers through data sharing. The medical data management in hospitals would be improved through digitalizing. Hence we are supporting digital India mission and Right to Information.

- Team: Sunash Malik, YashKaushik, Vaibhav Dagar
- Mentor: Dr. Ankur Sharma
- Stage: Product Development

#### Night Labs (Hel-tech)

Night lab aims to develop products and services using advanced technologies in order to ensure good quality of life and safer surroundings for mankind. We focus on making machine smart and intelligent so that one can increase their efficiency and productivity. Hel-tech is an advanced form of our traditional helmets, which is not only loaded with high tech features but also it will ensure that you are having a comfortable and secure journey.

- Team: Mahesh Dutt Tripathi
- Mentor: Mr. Ashish Saxena
- Stage: Product Development





### Intellectual Property Rights (IPR) Cell

In an Institution, Intellectual Property (IP) can be considered as the outcome of research projects, collaborations, consultancies and other activities. It is imperative that an IPR cell must be established for any self-sufficient university to meet the needs of the academic fraternity. Presently, Manav Rachna has applied 389 patent applications, 09 complete patent applications are under examination and 40 patents granted/ published in the credit of faculty members of Manav Rachna. After its establishment in February 2017, many workshops were organized for creating IPR awareness program. IPR Cell also organized patent drafting training for the inventors. The IPR cell can be contacted at [info.iprcell@mriic.in](mailto:info.iprcell@mriic.in) for any support on IPR. Workshop on Intellectual Property Rights Awareness organized by IPR Cell, MRIIC and Department of Biotechnology, FET, MRIIRS on March 20, 2018 in support of Haryana State Council for Science & Technology, Govt. of Haryana. IPR Cell celebrated the World Intellectual Property Day on 26th April 2018 under the banner of Manav Rachna Research Innovation and Incubation Centre. This year's World Intellectual Property Day campaign celebrated the brilliance, ingenuity, curiosity and courage of the women who are driving change in our world and shaping our common future. Two women scientists/ achievers Dr. Subhra Chakraborty (Staff Scientist VII, National Institute of Plant Genome Research) and Ms. Chhaya Bhanti

(Founder of Vertiver and Co-founder of Iora Ecological Solutions) were invited who have achieved excellence in their areas of work. IPR Cell of MRIIC was conferred with Questel Orbit - INDIAN IP Awards 2018.

### Centres of Excellence (CEs)

Under the aegis of MRIIC, the following Centres of Excellence (CEs) are established in collaboration with reputed industries for enhancing the training & research skills of MR students:

#### 1. Mitsubishi Centre of Excellence

In its efforts to provide high quality trained manpower to the industry, Manav Rachna has always believed in imparting education that is customized to suit industry's demands. In pursuance of this aim Mitsubishi Electric India (MEI) and MRIIRS have joined hands to establish Mitsubishi Factory Automation Lab. The Mitsubishi Factory Automation Lab, is a new addition in EEE department of FET and has been set up to provide training/ seminars/ demonstration to students/ faculty of FET, MRIIRS with a view to develop their skills in automation technology.

Mitsubishi Electric India Pvt Ltd, a company incorporated under Companies Act, 1956, Head Office at DLF Cybercity, Gurgaon has signed MOU with MRIIRS under its Corporate Social Responsibility (CSR) initiative for spreading awareness about automation amongst young Indian engineers & contribute to the Indian market through its products & technologies.

The Mitsubishi Factory Automation Lab comprises of IQR training setup (2 nos) and Fx PLC Kit. IQR training set up is a

comprehensive unit including PLC CPU, GOT, Series inverter, servo amplifier, servo-motor and XY plotter. Recently the lab facilities have been upgraded by inclusion of SCADA software sponsored by Mitsubishi. This set up is based on latest technology currently utilized by leading giants like Honda & Suzuki. In near future many more companies are likely to adopt the same technology. As our students will be undergoing training on these kits, it will enhance their employability prospects. The launch of the Lab marks a new chapter in Manav Rachna's endeavour to provide a natural synergy between academia and industry and provide a more practical orientation to the engineering education being imparted at the University. Mitsubishi Cup-2019 has been hoisted by Mitsubishi Centre of Excellence of Manav Rachna International Institute of Research and Studies, Faridabad.

#### 2. Automotive Training & Research Centre (Honda Motors)

The Department of Automobile Engineering in association with Honda Motorcycle and Scooter India Private Limited (HMSI) has opened a centre for Automotive Training & Research. In this association HMSI has provided technology support for setting up training and research infrastructure for students. This association provided a platform to students of Mechanical/ Automobile/ Electronics & Electrical branches to take up research projects in emerging areas in association with HMSI. This Automotive Training & Research will also offer short-term courses for two-wheeler technicians and high-end courses

for executives of HMSI. The offered courses will provide hands on training on servicing of two wheelers with their fault diagnosis and rectification. This will also update the frequently changing technological advancement in the auto sector of senior executives of HMSI and their associates. Research areas will be focused on improving efficiency of engines, alternative sources of energy with improved design features of vehicle & its components.

This centre is offering short-term courses for two-wheeler technicians and high-end courses for executives. The offered courses provides hands on training on servicing of two wheelers with their fault diagnosis and rectification. Till date 15 such programmes are conducted for different groups where in 250 students were imparted training. Research areas focuses on improving efficiency of engines, alternative sources of energy with improved design features of vehicle and its components. The centre of excellence will not only enhance employability prospects of the students but will also impart skills for self-employment.

### 3. Sports Science Centre (MR-SSC)

The vision of centre is to establish a flagship centre of excellence in India that will provide Sports Science and Rehabilitation facilities to support elite level athletes, in professional sport, at the international level, and grass root youth elite level with the primary goal of enhancing India's sporting performance and yield of medals at the Commonwealth and Olympic level, the International World games and the Asian Games.

MRSSC has a variety of expert health professionals and academicians. The team consisting of academics and applied sports rehabilitators, physiotherapists, sports physiologists, sports nutritionists and allied health professionals aims to provide a wide variety of in-depth support and services to both high performance athletes as well as aspiring athletes who wish to improve their performance. We also

provide lifestyle management, fitness training and health and well-being support for all individuals.

This Centre is equipped with top class facilities in terms of state-the-art equipment and it provides services related to Sports physiotherapy and rehabilitation, Sports psychology, Physiology, Sports nutrition, Sports performance analysis, biomechanical analysis, Personalized Training, Pilates, Zumba etc.

Olympians including Ronjon Sodhi, Gagan Narang to name a few are associated with CSSR. They work directly with ISSR team to ensure that our strategic plan is perfect for supporting both Olympic standard athletes & junior athletes as they develop from the grass root level.

To mention about few athletes who brought laurels and were trained by MRSSC:

- Naveen Dagar (Athletic): Qualified for Asian Games 2018 to be held in Jakarta by winning Gold in the men's 3000m steeplechase during the 58th National Inter-State Athletics Championships.
- Annu Raj Singh (Shooter): Along with Heena Sidhu won the gold medal in women's Pairs 10 metre air pistol at the 2010 Commonwealth Games. She also won Bronze medal in 10 m Air Pistol Individual event in 2017 Commonwealth Shooting Championship in Brisbane.
- Sarthak Gandhi (Table Tennis): Won Silver Medal in the men's singles event at the 2017 International Table Tennis Federation (ITTF) Challenge Seamaster Nigeria Open in Lagos.
- Kush Chugh (Badminton): Won Bronze in U-17 Doubles Badminton in Khelo India
- Annie Jain (Swimmer): Won Gold in Khelo India in 50m Breast Stroke; 100m Freestyle, 4x100m Medley Relay.
- Rudra Krishna Singh: Won Gold in 50 m sub junior category of Archery at 3rd National Inter State Sports Championships 2018-19.

### 4. Advanced Water Technology & Management Centre of Excellence

Currently, around half of all urban dwellers live in cities and almost 10 percent of urban dwellers live in megacities. As cities around the world experience this exploding growth, the need to ensure they can expand sustainably, operate efficiently and maintain a high quality of life for residents, becomes even greater than it is today. This is where smart cities come into the picture.

The term "smart cities" is trending amongst governments, urban planners and even the private sector to address the projected demands of cities in the future. Making cities smarter to support growth is emerging as a key area of focus for governments and the private sector alike. Smart cities are about to make huge investments to uplift the infrastructure, economy, energy efficiency, and nevertheless environment. Smart cities encompass six important sectors that need to work in unison to achieve a common goal of making a city more livable, sustainable and efficient for its residents. These sectors are smart energy, smart integration, smart public services, smart mobility, smart buildings, and smart water.

One of the most critical factors for the growth and sustenance of a smart city is its water system. The term "smart water" points to water and wastewater infrastructure that ensures this precious resource - and the energy used to transport it - is managed effectively. It is equally impertinent that we make our Earth and Water resources burden less and persistent. The report submitted on Badkhal revival to Honorable CM Haryana is being implemented for revival of the lake by Smart City Pvt.Ltd, Faridabad.

With this background, Centre for Advanced Water Technology & Management (CAWTM) has been setup at MR Campus which comprises scientists, technocrats, professionals, academicians, members of RWAs, etc as Manav Rachna consortium.







This would focus on all the problems associated with water and its issues and would bring about awareness and solutions in this area.

- The Centre has been bestowed with the prestigious 'Aqua Excellence Award 2017' under the category of 'Excellence in Resource Management -Institutional Sector'.
- The Centre was awarded for its exemplary work in the revival of the Badhkal Lake in Faridabad and for its commitment to promote awareness, and trigger action on critical water issues at all levels, including the highest decision-making level, to facilitate the efficient conservation, protection, development, planning, management and use of water in all its dimensions on an environmentally sustainable basis for the benefit of all life on earth.
- The Centre has been allocated Wash Innovative Lab (WIL) supported by USAID involving a funding of Rs.20 Lacs to undertake various activities pertaining to Water, Sanitation and Hygiene Sector. For this tri-party agreement has been implemented with Municipal Corporation Faridabad (MCF) and National Institute of Urban Affairs (NIUA) and MRIIRS.
- Cairn, Oil & Gas is the largest private crude oil producer in India. It is vertical of Vedanta Limited, which has contributed ~ 27 percent to India's domestic crude oil production in FY 2017-18. It has engaged Centre for Advance Water Technology & Management, MRIIRS for consultancy services, as the centre has expertise and

also has knowledge of CGWA compliances. This was through limited tendering process and the whole project is entitled as "Hydro Geological Survey for Aquifer Monitoring in Barmer Area, Rajasthan" with contract value of INR, 1,67,80,023/- (One Crore Sixty Seven Lakh Eight Thousand and Twenty three only inclusive of taxes).

- The Centre has received another important consultancy from Maruti Suzuki Foundation, Gurgaon for improving water management prospects as knowledge partners for the 10 villages adopted by Maruti Suzuki India Limited in an round Manesar to start with village KHOH has been taken into consideration amongst the 10 villages adopted. The financial outlay for KHOH village is Rs. 6.40 lacs out of total project outlay of Rs.15 Crore.
- Indian Chapter of International Association of Hydro-geologists (INC-IAH) and Centre for Advanced Water Technology and Management (CAWTM), MRIIRS jointly organized a National Conference Water: Technological Innovations and Solutions at Manav Rachna campus on 26 March 2018. The conference focused on the innovations made in the water sector and the possible solutions to tide over the burgeoning issues confronting the water sector in the present context. More than 150 participants including planners, academia, groundwater professionals and experts, RWA representatives, stakeholders and students from various parts of country attended the conference. More than 20

papers were presented in three technical sessions. Sh. K.C. Naik, Chairman, CGWB and Ms. Satya Bhalla, Chief Patron, MREI were the honourable guests on the occasion. Also present were Dr D K Chadha, President, INC-IAH; Dr D. Saha, Secretary, INC-IAH; Dr V.M. Tiwari, Director, NGRI; Dr N.C. Wadhwa, VC, MRIIRS; Dr Sanjay Srivastava, MD, MREI; Dr Dinesh Pande, Former Director, ONGC; Dr Sanjay Bajpai, Head, DST & Dr M.M. Kathuria, Trustee, MREI.

##### 5. IBM Centre of Excellence

IBM Centre of Excellence is being created in the campus in collaboration with IBM which is a well-known multinational conglomerate. It has worldwide business in Computer Hardware/ Software, IT Services and IT Consulting. IBM has tied up with MRIIRS to jointly offer B.Tech.-Computer Science & Engg. programs with specialization in Cloud Computing, Business Analytics & Optimization, IT Infrastructure Management and Cyber Security & Forensics. IBM shall provide LMS, Train the Teacher Programme, Student Projects, Expert Lectures, Industry connectivity for students and teachers to enable them to experience the live IT Environment. The arrangement shall help students to acquire domain skills in the most advanced areas of IT and preferential placements by IT companies. Students enrolled in this programme shall have access to an online Eco-system Platform namely Innovation Center for Open Standards enabling them to access course material, discussion forums, student projects, industry mentors and news-clips.

IBM students enrolled in these programs shall undertake live projects developed by IBM/ other IT majors under the mentorship of industry experts and go for industry visits in software development and testing centers. They may also attend one week extensive training program at Bangalore in IBM facilities at their cost in which hands on training shall be provided by IBM and other IT company experts. IBM shall also issue certificates for various modules after successful completion in addition to the MRIIRS degree. The Programs in association with IBM lead to big increase in job opportunities and industry readiness for the students. This centre will help in extending ongoing effort to expand and strengthen student skills and understanding of big data and analytics in order to meet the growing demand for highly skilled analytics workers.

Other research related milestones are:  
Air Quality Monitoring Lab:

This Lab supported by DST, GoI established at MRIIRS. The deteriorating air quality in an around Delhi-NCR is a matter of grave concern with contaminants in the atmosphere affecting people's health. To compare the air quality of indoor and outdoor air environment and to provide a good learning research environment to students, the 'Air Quality Monitoring Lab' has been set up at Manav Rachna Campus by Department of Civil Engineering, Faculty of Engineering and Technology (FET), Manav Rachna International Institute of Research and Studies (MRIIRS) to understand the aerosol chemistry in Delhi-NCR region.

MRIIC -Annual Technical Events

Celebrating the spirit of innovation and research amongst the future leaders of tomorrow, INNOSKILL offered a platform to the young tech-geeks to showcase their creativity and ingenuity in a bevy of riveting games and challenges. Venturing out-of-the-box and competing head to head in a bid to unfurl their passion and interests in aero-modeling, engineering, Lego race championships and more.



Association of Indian Universities (AIU) Sponsored Anveshan-2018 (North Zone) MRIIRS hosted "Anveshan 2017-18 North Zone Student Research Convention" from February 26 & 27, 2018 at its campus. Anveshan is among the most coveted research conventions organized by the Association of Indian Universities every year. The Convention was inaugurated today by Dr. Dinakar Kanjilal, Director, Inter-University Accelerator Centre and Dr. Amarendra Pani, Director, AIU in the presence of Dr. N C Wadhwa, VC, MRIIRS; Dr. Sanjay Srivastava, VC, MRU; Mr. Shiva kumar Natarajan, CEO, Accendere Knowledge Management; Mr. Rishi Dwivedi, GM, SIDBI Faridabad and Heads of various Manav Rachna Educational Institutions. Dr. Pradeep K. Varshney is the Convener for the North Zone Convention. In his address Dr. Amarendra Pani said: "Envisaged as a zonal and national level competition, Anveshan acts as a platform for emerging researchers to express their ideas that can lead to innovative research initiatives. It also presents the research and innovation happening in the universities". While giving advice to all the young researchers at the Convention, Dr. Dinakar Kanjilal said: "Sustaining oneself on the path of excellence is a necessity in today's times. A student may be able to come first, but to be able to sustain it in the longer run and keep up with the pace is far more important".

Students from various Universities across North India have put by their projects in the exhibition around six key themes: Agriculture; Basic Sciences; Engineering & Technology; Health Sciences and Allied Subjects; Social Sciences, Humanities, Commerce and Law. Around 70 projects are on display at the exhibition. The research projects of the students will be judged on the basis of their display and their oral presentation. The winners of the North Zone will be declared during the valedictory session on February 27. The top three winning projects in each category participated in National level



Anveshan-2018 held in March 2018. Dr. N C Wadhwa, VC, MRIIRS talked about the research and innovation eco-system at Manav Rachna.

Very recently, ASSOCHAM has bestowed MRIIRS with the title: 'Best Knowledge Creation & Innovation University' \_ a testimony to the research culture at the University. The first day of Anveshan-2018 culminated with a grand cultural evening 'Rubaroo' organised specially for the delegates and participants by the students of Manav Rachna. The program started with a beautiful dance depiction of the Ganesh Vandana. This was followed by a melodious tour of the world through the song- "We are the world, we are the children..." by Mridang, Manav Rachna Music Society. Nostalgia prevailed when Manvi Singh from Jamia Hamdard sang harmonious retro songs. Amidst all these, Mridaksh-the Western Dance Society of Manav Rachna presented beautifully choreographed free-style Bhangra, and traditional dance performances that set the euphoria high.

The stage was set on fire with the high Qawwali notes of Mridang. The Qawwali stole everyone's heart and received great appreciation and cheer from the audience. The evening reached its zenith when Dr. Amarendra Pani showcased the Jagannath Yatra through an Oriya recital that was beautifully supported by the taal of Dholak and Tabla. Second day of Anveshan 2018 North Zone Student Research Convention started at 9 am with oral/ podium presentations by the student participants from different universities. Five different zones were marked for different categories. Each team was given 10 minutes for presentation followed by 5 minutes for Q&A session. On successful completion of the oral/ podium presentations, the valedictory session was hosted in the main auditorium.

Valedictory session was graced by the presence of Vice Chancellor Dr. N.C Wadhwa, Prof. Amarendra Pani and Dr. Usha Rai of AIU, Dr. M.K Soni (Pro Vice Chancellor), Mr. Anupam Anand (Assistant Manager - SIDBI), Dr. Poulomi Ganguly (Director - Research, CL Educate), Dr. Pradeep K. Varshney (Director - MR Research Innovation and Incubation Centre and AIU Coordinator - Anveshan 2018 N-Zone) among other dignitaries. Winners from all 5 categories were announced during the event and were felicitated with certificates and mementos. National winners of Anveshan 2017 were also invited on stage to share their experiences post winning Anveshan and felicitate this year's winning teams along with other senior dignitaries. All 15 winning teams would now be competing in their respective categories at the National finals of Anveshan 2018 at Chitkara University, Chandigarh. Anveshan 2018 (N-Zone) ended with a vote of thanks by Dr. Pradeep Varshney and Prof. Amarendra Pani.



## INNOSKILL 2019

Award Winning Projects of MRIIC Research & Innovation Clusters:

Manav Rachna students have won many prizes at different platforms but some of their achievements are highlighted below:

- Molecular Bioscience Cluster team won 2nd prize for their project entitled “Sunlight in spotlight,”
- Molecular Bioscience Cluster team won 1st prize for the project entitled-“Detection and estimation of Vitamin D using Yeast Based Sensor” in Innoskill-2018.
- Molecular Bioscience Cluster team bagged the first position and second position in an online competition wherein essay cum proposals were invited from students on the topic “Solution for Pollution-Focus NCR region”.
- Health Science & Nutrition Cluster team received Women Scientist Award 2017 at Nanyang Technological University, Singapore on 19-23rd June 2017 for the paper entitled “Synbiotic functional beverages with health promoting benefits”.
- Health Science & Nutrition Cluster team awarded Best paper award at ICAAAS 2018 at Jawaharlal Lal Nehru University, New Delhi on 28-29 April 2018.
- Health Science & Nutrition Cluster team received “National Health Award-2017 for Social Welfare” at 4th Annual National Health Award- 2017 India International Centre, Max Muller Marg, New Delhi on 27th December 2017.
- Give your wings to the Pink bins OVERALL WINNER (STUDENT & RESEARCH CATEGORIES) Global Science, Technology & Innovation Conference (G-STIC) 2017, Belgium
- Atmospheric and Environmental Cluster team member Akansha Ahuja (CSE) was also awarded six months scholarship for conducting research at CERN, Sweden. She was one of the semi-finalist MIT Climate CoLab in 2017
- Materials Science Cluster has filed one US patent and published two International papers jointly in collaboration with University of Wisconsin, Oshkosh, USA.
- Project developed by Mechanical, Automobile and Aerospace Cluster on “Prototype setup of Electrochemical Spark Machining Process” got 3rd Prize in Best Engineering Project Scheme-Award organized by Faridabad Industrial Association, Faridabad on 5th May 2018.
- Computing Cluster team members were contributors in Foldable Smart solution entry to US Department of Commerce (Innocentive skills)
- Computing Cluster team members were able to enter Sign of literacy as a software package supporting linguistic skills for those with listening impairments. The entry was accepted till semi-final round of Innocentive Skills.
- Intel Higher Education challenge 2017- Team of MRIIRS won 2nd position in Intel Higher Education challenge 2017
- Imagine Cup 2017 - Project “SWASTIKA” Selected for National Finals of Microsoft Imagine Cup 2017.
- Team of MRIIRS with its Mobile Controlled Escalade Robot won the 2nd Prize in IIT Guwahati Techniche 2017.
- Albatross a startup company by students of MRIIRS participated in the 22nd edition of the “World Electronics Forum 2017” held in Angers, France
- The project “LOTO” developed by students of MRIIRS selected for Rapid Proto typing camp for which the final competition to be held at IISC Bangalore.
- ‘Spiro Studio’ bagged Infosys prestigious First Infosys Makers Awards, India under the health category & won a cash prize of Rs. 5 lac.

Apart from these, young innovators and affiliates of MRIIC units achieved success in the following areas:

- 150 Students & 25 Faculty members successfully trained & certified under SAP Centre of Excellence.
- 15 short-term courses for two-wheeler technicians and high-end courses for executives were conducted by Automotive Training and Research Centre in support of Honda Motor Cycles and Scooters India Pvt. Ltd., wherein 250 students were given training which would have enhanced their employability and also impart skills for moving towards self-employment.
- More than 20 research proposals submitted to Govt. Funding agencies by Research and Innovation clusters worth Rs.30.0 Cr.



# INTERNAL QUALITY ASSURANCE CELL



Prof. (Dr.) Dipali Bansal  
Director IQAC

In pursuance of its Action Plan for performance evaluation, assessment & accreditation and quality up-gradation of institutions of higher education, the National Assessment and Accreditation Council (NAAC), puts an emphasis that every accredited institution should establish an Internal Quality Assurance Cell (IQAC). Since quality enhancement is a continuous process, the IQAC at Manav Rachna Educational Institutions is a part of the institution's system and work towards realisation of the goals of quality initiatives and sustenance for all its academic units viz. MRIIRS and MRDC. The prime task of the Cell is to develop a system for conscious, consistent and catalytic improvement in the overall performance by channelizing its efforts and taking measures towards promoting the holistic academic and administrative excellence

of the units. Vision of IQAC is to ensure quality culture at the Institutions by institutionalizing and internalizing all the initiatives taken with internal and external support.

IQAC at Manav Rachna Educational Institutions is constituted under the Chairmanship of the Vice Chancellor with heads of important academic and administrative units and a few distinguished educationists and representatives of local management and prime stakeholders. It includes Faculty members to represent all levels, one nominee each from local society, Students and Alumni, one nominee each from Employers & Industry and one senior Faculty as the Director of the IQAC.

Strategies are evolved by IQAC for:

- Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks;
- Relevant and quality academic/ research programmes;
- Equitable access to and affordability of academic programmes for various sections of society;
- Optimization and integration of modern methods of teaching and learning;
- The credibility of assessment and evaluation process;
- Ensuring the adequacy, maintenance and proper allocation of support structure and services;
- Sharing of research findings and networking with other institutions in India and abroad.

Functions of the IQAC are:

- Development and application of quality benchmark parameters for various academic and administrative activities of the institution;
- Facilitating the creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process;
- Assistance in Curriculum enrichment as per latest technological advancements;
- Providing support to participate in national & international rankings & accreditations viz. NBA, NIRE, QS, ABET, ISO certification etc.
- Collection and analysis of feedback from all stakeholders on quality-related institutional processes;
- Organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles;
- Documentation of the various programmes/activities leading to quality improvement;
- Acting as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices;
- Development and maintenance of institutional database through MIS for the purpose of maintaining /enhancing the institutional quality;
- Periodical conduct of Academic and Administrative Audit and its follow-up
- Preparation and submission of the Annual Quality Assurance Report (AQAR) as per guidelines and parameters of NAAC.



Manav Rachna Academic Staff College

The Academic Staff College's main philosophy is to keep in mind that the teacher is the pivot of the educational system. With this focus in mind, Manav Rachna Academic Staff College (MRASC) has been set up to develop inbuilt mechanisms to provide opportunities for teachers within the framework of knowledge society. At MRASC we believe that a teacher must not be confined only to transmitting information; she/he must also orient students to meet the challenges of life, to not merely become a trained professional, but also a better citizen.

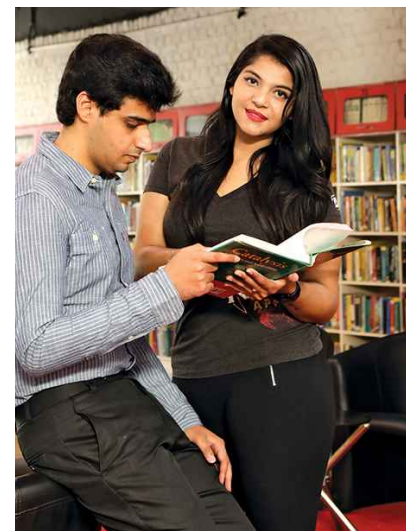
Objectives of the Academic Staff College:

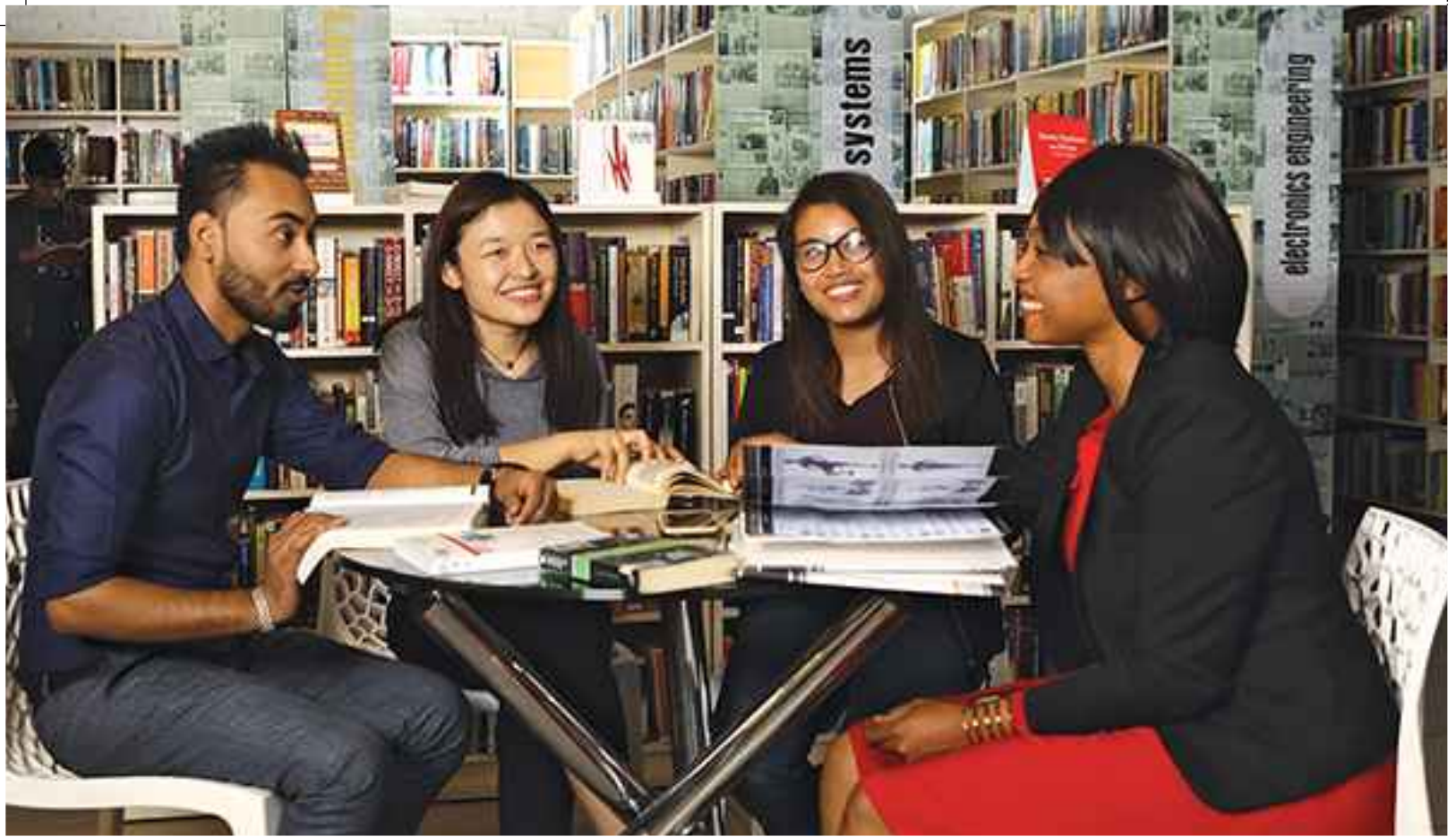
- Understand the significance of higher education, in the global and Indian contexts.
- Understand the linkages between education and economics and socio-economic and cultural development, with particular reference to the Indian polity where democracy, secularism and social equity are the basic tenets of society.
- Acquire and improve basic skills of teaching at the university level to achieve goals of higher education.
- Keep abreast with the latest developments in their specific subjects.
- Understand the organization and management of a university and to perceive the role of teachers in the total system.
- Utilize opportunities for development of personality, initiative and creativity and
- Promote computer literacy as well as internet knowledge.



Functions of Manav Rachna Academic Staff College:

- Plan, organize, implement and monitor FDPs and Short Term Courses for teaching & non-teaching staff.
- Identify resource persons in various fields of specialization for running these events.
- Arrange specially designed material required for effective implementation of the courses.
- Create a culture of learning and self-improvement among teachers so that it becomes an integral part of the educational system at tertiary level.
- Organise programmes for heads of department, deans and other decision-makers to facilitate reform in higher education through appropriate modification of the management systems at various levels.
- Provide opportunities for teachers in service to exchange experience with their peers and to mutually learn from each other.
- Provide a forum for serving teachers to keep themselves abreast of the latest advances in various subjects.
- Provide opportunities to further widen their knowledge and to pursue research studies.
- Provide an introduction to new research methods and innovation in higher education so that the participants can in turn develop their own innovative methods of instruction.





# Dr. O.P. BHALLA CENTRAL LIBRARY



Dr. Vikram Kumar Sharma  
University Librarian

Qualifications: Ph.D. in Library & Information Science, B.Sc. (H) Zoology, UGC-NET

Experience: 25 Years

Areas of Interest: Reference & Research Services, Application of ICT

Awards: Recipient of U.S. Department of State, Foreign Service National Exchange Program and U.S. Department of State Meritorious Honor Service Award

“A university is usually described as a community where scholars and teachers are the head, students are the body and the library its heart.”

A well-equipped Library is an icon of quality education in its supreme form. This philosophy truly reflects @ Dr. O.P. Bhalla Central Library. Manav Rachna offers a network of libraries & information centers for academics, learning & research pursuits.

Dr. O.P. Bhalla Central Library offers a platform for research, innovation and development. It has a collection of more than 3,50,000 documents in print and digital format.

## Key features of the Library Network Include

- Fully web-based operations and services
- My Account, Ask a Librarian Service
- Access to over 1,65,000 print books
- e-Readers Kindles
- e-Books package comprising of over 2,25,000 books
- TurnItIn - Anti-plagiarism Software
- Over 32,000 E-Journals from leading publishers and societies like IEEE, ASME, ASCE, ASTM Digital Library, J-Gate, Ebcoso - Business Source Elite, Ebsco - Art and Architecture, Dental Science.

Institutional membership of Developing Library Network offering access to over 5000 libraries across South Asia

- UGC Digital Library Constorium e-ShodhSindhu
- Swayam and MOOCs platforms
- National Digital Library
- NPTEL
- Open Access Resources
- Institutional Membership of the American Library and
- Theses, Project Reports & Dissertations

In addition to above, the central library deploys:

- OPAC - Libsys Web 7.0 System OPAC address: <http://libopac.mrei.ac.in> in which offers user interactive services.
- Remote access of library resources through Ezproxy
- Single point of access for Content Management System for e-Learning through Library Portal [library.mriirs.edu.in](http://library.mriirs.edu.in)
- Insta Alert Service that enables users to know immediately any transaction done to their account.
- Current Awareness Service like Book Alert Service, Article Alert Service and Book Review Service

Smart Card enabled, RFID and Wi-Fi enabled library is offering the latest state-of-the-art technological applications including e-books, audio-books, e-journals, kindles to maximize the use and ease of library resources.

Single Window Search solution offers researchers paradise by making all library resources available at a single click. 24X7 availability of library resources beyond campus through remote access provides unhindered access to resources.

To students at Manav Rachna, it offers a perfect platform for research, innovation & development and a tranquil ambience to explore the world of books. The fact that it was set up in the memory of Founder Visionary who always ensured world class infrastructure for the students, speaks volumes about its facilities & far reaching impact.

The collection offers a range of text books, reference books and general reading material for enrichment and development.

The library remains open 8:00 A.M.- 8:00 P.M. Monday to Saturday and 9:00 A.M.-2:00 P.M. on Sundays to cater to academic and research demands of its academic community. The Central Library is the heart of the campus. With dedicated sections like Discussion Rooms, Audio Visual Rooms, Digital Library and a separate enclosure for Research and Reference, the Central Library indeed is the most happening place on the campus

As a New Age library, it provides unlimited access to information in many formats and from many sources. It offers best of both the worlds i.e. Print and Digital. The Library with its state-of-the-art infrastructure, plush and spacious settings, aesthetically done up interiors and huge collection of documents is bibliophile's dream come true.

The Library was runner up the Best Technology Enabled Award 2019 at Library Technology Conclave 2019 at Cochin University of Science and Technology.

## DEPARTMENT OF STUDENTS WELFARE

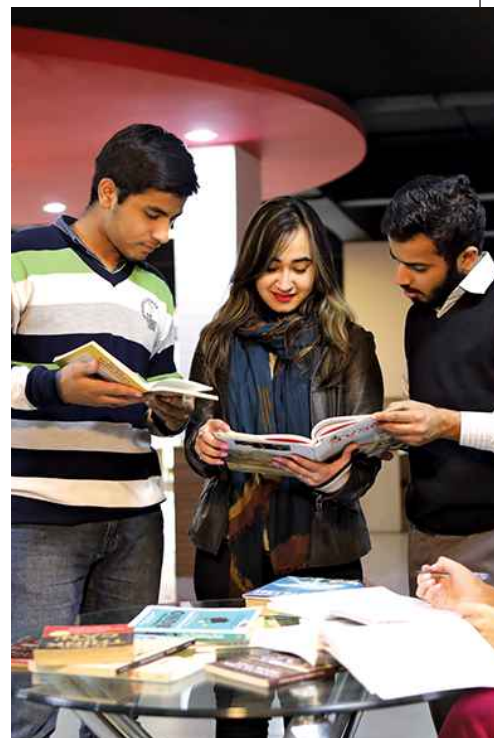
Manav Rachna Educational Institutions lay special emphasis on students' welfare, and each Manav Rachna Academic Institutions, therefore, has a full-fledged Department of Student Welfare for this purpose. Department of Student Welfare (DSW) is a student care and supervision center that serves as a liaison between students and administration. DSW closely works with students across all years to provide leadership, social, extracurricular and academic counseling programmes. The Department also seeks to challenge students to become responsible and productive citizens of society and to support the University's educational and administrative goals to enhance or address aspects of the entire

student experience. The Department of Student Welfare has professionally trained professional to help students through the unanticipated problems that sometimes come in their way and contribute towards the development of an academic environment, abolishing the stressing and challenging situations that promote productive learning with academic success.

The Department endeavors to develop the personality of the student in all spheres of life which it undertakes through various student-oriented programmes. It believes that given an opportunity, it will bring out the hidden talent of the students. The Department aims at promoting extra-curricular and developmental activities among students by identifying talented and interested students in the areas of Music, Dance, Literature, Fashion, Arts, Social Responsibility, Theatre, Photography, Health etc. and thereafter, nurturing their individual talent and giving them a supportive environment to plan and execute various activities in the said areas, thus making a major contribution towards their holistic development.

The Department also shares the responsibility of educational tours organized by various teaching departments. A large number of workshops and courses like, Youth Leadership Training Camps, Value-based Spiritual Course, Personality Development Camp, Youth Parliament, Students Talent Hunt, Documentary, Literary, Photography, Festivals celebration, Treasure Hunt, Talent Competitions for Faculty and Staff, Film and Book reviews, Debates and Declamations, Folk Dance competitions, etc. are organized. Annual Cultural Fest RESURRECTION consisting of many events of Music, Dance, Theatre, Literary, Fine Arts and Fashion is also organized during an academic session. Social Responsibility drives, Anti ragging seminars, Road Safety week, Street Plays, photography competitions, workshops and National Festivals like Independence Day, Republic Day are celebrated with patriotic fervor, year after year. A Techno- Management Fest, especially designed for the students of Engineering, Management and other technical Institutions, is also organized in association with various faculties of the University.

Department of Students Welfare welcomes all the aspiring candidates to participate in various competitions with an aim to provide them suitable opportunities to identify and nurture their talent in the years to come.





## VARIOUS SOCIETIES / GROUPS

At Manav Rachna, students are spoiled for choice as there are as many as 9 Extra Curricular Groups that cater to varying interests. "Each of these groups provides students a platform to showcase their talents and channelize their energies. They also foster a sense of fellowship among students of different streams and give them a great sense of cohesiveness and belonging." Each of the groups provides students a conducive environment to plan and execute various activities, thus contributing to their holistic development and staying connected with members of similar interests. Here, we give you a look into their form & character:

**Music Group "MRIDANG"**- This group covers activities like solo, duet and group singing, jugalbandi, battle of bands, folk music, sufi, classical, Western music, instrumentals, parody etc. Students can also look forward to jamming sessions and music festivals.

**Dance Group "MRIDAKSH"**- This group has woven in solo and duet dance performances, group dance, Western dance (salsa, jazz, street etc.), traditional and folk dance competitions/ festivals in its repertoire.

**Literary Forum**- This forum involves activities like debate and declamation, MUN, youth parliament, quiz and GK, poetry, article writing, book reviews, film reviews, literary festivals, TV anchoring and news reporting, panel discussions, storytelling competitions. There is enough to keep members busy.

**Fine Arts Group "AAREKH"**- This group brings out the artist in every student encouraging them to indulge in sketching, painting, clay modeling, pottery, cartoon and caricature making, tattooing, sculpture and rangoli. The Club plays an active role in the festival of arts, origami, etc.

**Manav Rachna NSS Team**- This team nurtures the activist in every student whereby they can take up causes like anti ragging awareness, environment, health and hygiene, sustainable development, education for all, computers for all, language enhancement for housewives etc.

**Theatrical Group "PAIGAM"** - This group covers activities like nukkad nataks, drama, skits, standup comedy, mono acting, mimicry etc.

**Fashionistas "AAIRA"**- As the name signifies, this group is all about glamour and beauty, focusing its activities on hairstyling, beauty contests, ramp walks, best dress, crazy caps, fashion shows, display/ tableau competitions, fancy dress, character display (based on an era, writings), etc.

**Photography Group "BROWNIE"**- This cluster pampers students' passion for photography, film making, video-graphy and photo walks. Workshops by canon, theme based photography and exhibitions are also a regular feature.

**Manav Rachna Health Club**- Those who treat their body as a temple and are health conscious can join this Club and actively participate in health camps, yoga shivirs and meditation sessions. They can promote gym and healthy eating habits along with overall wellness and awareness on balanced nutrition.

**MANAV RACHNA RESURRECTION FEST** once every year which is the biggest cultural event of the campus.





# CLANS AT MANAV RACHNA

To initiate and propagate the spirit of camaraderie and to provide a rich nurturing ground for honing the life skills of our students, Manav Rachna has introduced the concept of a close knitted family, that of a CLAN, striving for common goal at MRIIRS, students are assigned to each Clan, irrespective of their belonging to their department or their infrastructural habitation in the university. There are 4 Clans, each represented by an environmental element and a mascot - The Air Falcons, The Water Sharks, The Forest Rhinos and The Wild Cats.

There are five categories of activities to be looked after under every clan.

1. Sports- SIndoor & Outdoor games, sports etc.
2. Media- Photography, Documentary, Creating, Content for Print & Digital etc.
3. Literary- Debate, Poetry, Declamation & Quizzes etc.
4. Cultural- Music, Dance, Theatre, Fashion & Fine arts etc.
5. ISR- Community Services

## THE ROLE OF THE CLANS

At the core, the Clan's role is to create more fervent connections at Manav Rachna, as well as to:

1. Facilitate an environment for students which promote academic excellence and improve personal development keeping the fun factor alive.
2. To promote friendship & respect amongst pupils.
3. To empower students and educator groups wherein they can collaborate in aiding the development of real life skills.
4. To create a sense of responsibility, loyalty and tolerance towards seniors, peers and the parent institution.
5. To be able to harness the talent; the ability to arrive at consensus of views and the ideas coming from a larger number of students.
6. And finally, to create healthy competition.

Manav Rachna has created a strong organizational structure for implementation of Manav Rachna Life Skills Programme (MRLSP) to ensure that this initiative is seriously conceptualized, driven and effectively executed across the university.





# CORPORATE RELATIONS & Career Development Centre

Corporate Resource Centre at MREI engages with Corporates and enables students in fulfilling their dream to get a job offer through campus placements. The centre offers excellent infrastructure supports at every stage of the placement processes in arranging pre-placement talks, written test, group discussion, interviews etc.

CRC manages ongoing relationships with leading Corporates to provide guidance on latest trends, and employment & training opportunities through Industrial visits, Industrial training & corporate lectures etc.



Inderpreet Singh  
CSE



Rs. 16.00 LPA



T Amarentheran  
CSE



Rs. 15.15 LPA



Prashant Tanwar  
ECE



Rs. 13.67 LPA



Naveen Kumar Gupta  
ECE



Rs. 12.73 LPA



Avnish Khatri  
CSE



Rs. 12.00 LPA



Chaitanya Singh Rana  
CSE



Rs. 12.00 LPA



Aditya Bhushan Sharma  
CSE



Rs. 12.00 LPA



Puneet Gupta  
MBA



Rs. 12.00 LPA



Mahak Lamba  
CSE



Rs. 10.20 LPA



Bhavesh  
CSE



Rs. 10.18 LPA



Ankur Vashist  
CSE



Rs. 10.00 LPA



Awaishuddin  
Auto



Rs. 10.00 LPA



Archit Singhal  
CSE



Rs. 10.00 LPA



Kartik Arora  
CSE



Rs. 10.00 LPA



Vansh Tara  
ECE



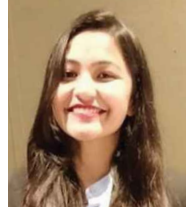
Rs. 10.00 LPA



Aashna Mahajan  
BCE



Rs. 10.00 LPA



Priyanka Aggarwal  
Bio Tech



Rs. 9.83 LPA



Megha Garg  
CSE



Rs. 9.65 LPA



Sourabh Mehta  
CSE



Rs. 9.52 LPA



Prateek Kejriwal  
CSE



Rs. 9.52 LPA



Piyush Bajpai  
CSE



Rs. 9.15 LPA



Arpit Miglani  
ECE



Rs. 9.00 LPA



Aanchal  
MSc. Chemistry



Rs. 8.65 LPA



Robin Raj Swamy  
MCA



Rs. 8.00 LPA



Varnita Jain  
CSE



Rs. 8.00 LPA



Ankit Goel  
ECE



Rs. 8.00 LPA



Rohit Goyal  
MECH



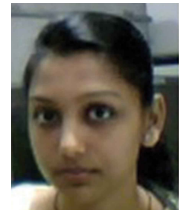
Rs. 7.60 LPA



Shivanshi Vaid  
Bio Tech



Rs. 7.51 LPA



Shreya Khandelwal  
CSE



Rs. 7.50 LPA



R Kritika Kaveri  
CSE



Rs. 7.50 LPA

## OUR RECRUITERS





# ALUMNI SPEAK



**Gagan Narang, MBA,**  
International record holder (Shooting)  
'I am proud to be associated with Manav Rachna. It not only provides holistic education but also inculcates sports culture in the students.'



**Shristi Rana, BA-Journalism & Mass Comm.,**  
Miss Asia Pacific.  
'Thank you Manav Rachna for shaping and developing both my personality and communication skills that helped me to retain myself in the competitive world. Feel proud to be alumni of this Institution.'



**Mahima Bakshi, BPT, Miss India Worldwide,**  
Indian model, author, fitness expert  
'Alumnus Mahima remains an inspiration for many of our students. We are proud of her sterling achievements in the glamour world.'



**Lokesh Rajput,**  
B.Sc and M.Sc.-N&D,  
Fitness model, Mr. Universe/ India/ Delhi  
'I'm indebted to my faculty members for their guidance and support, they are like my family.'



**Nikita Arora, CEO - Webnel**  
'I am grateful to MRIIRS for instilling in me confidence and grooming me. The message that I have for my colleagues and my juniors is - "Believe in yourself, have a milestone to achieve.'



**Kannu Mittal, B.Tech.-CSE,**  
Founder of Coding Ninjas.  
alma mater will always be in my heart. I've learnt not just engineering but the way of life, made friends for a lifetime'.



**Abhimanyu Bishnoi, B.Tech.-CSE, Software Release Engineer- Google, San Jose, California, formerly at Apple and Qualcomm as a Build Release Engineer.**  
'Manav Rachna has helped build a strong technical foundation and overall development to meet global standards, it has not only helped in career development but also friends for a lifetime.'



**Ayush Sharma, B.Tech.-CSE, Executive League Operations- NODWIN Gaming and ESL India.**  
'I would like to whole heartedly thank all my faculty members, who left no stone unturned in providing me the right resources and environment which eventually led to me getting placed in my dream company.'



**Ankit Pruthi, B.Tech.-CSE,**  
Senior Executive- Deloitte.  
'The friendly teachers have constantly guided me to reach my goals with the experience and exposure I got here. My skills to work in such a competitive corporate environment have been enhanced.'



**Sunakshi Mehta, B.Tech.-CSE,**  
Director- Website Sketchers Pvt. Ltd.  
'We had our share of enjoyment and excitement at MRCE, be it academics, technical or cultural activities. Hats off to all the Professors, who went out of the way to teach us. "I Will Forever Be Grateful'.



**Sourabh Mehta, B.Tech.-CSE,**  
Associate Technical Consultant- Adobe.  
'Manav Rachna gives platform in form of a wide variety of Clubs, to choose your passion wherein you can develop your personality as well as your technical strengths.'



**Sahil Verma, B.Tech. -CSE,**  
Senior Software Developer-Accenture,  
Awarded with the Apex Award-Accenture.  
'The major credit for such an achievement goes to my project team, MRU and the Faculty members who laid such a strong foundation that it helped us to imbibe leadership and ownership qualities to top in life.'



**Paras Dhawan, B.Tech.-CSE,**  
Consultant Programmer- International Civil Aviation Organization-(UN), Montreal, Canada.  
'Manav Rachna laid the foundation of my career as a software developer. I still carry all the values and principles given to me by Professors who helped me a lot in setting my goals and working toward them overseas.'



Ankur Juneja, B.Tech.-CSE,  
Software Engineer- LabKey, San Diego, California.  
'It was a great experience being at Manav Rachna. The Faculty is very supportive and highly qualified. Assignments given by the faculty in various courses were very helpful.'



Tarush Jain, B.Tech.-CSE,  
Computer Science Engineer- WAPCOS.  
'Manav Rachna not only gave me the technical knowhow of my field of study but also gave me ample opportunities and freedom to work on my own startup while I was in College.'



Esha Kaushal, B.Tech.-IT,  
Senior FRS Analyst- Target.  
'Manav Rachna helped me to shape my personality, infused self-confidence and made me ready to face the professional world. I truly respect and admire all which the institute has provided me.'



Aditya Kushwaha, B.Tech.-CSE,  
Lead Android Engineer- Stylight, Munich Germany.  
'The freedom in the final year project selection and execution allowed to pick up industry technologies and create a project that not only helped me with my college grades but helped me fetch my current job.'



Varun Arora, B.Tech.-IT, Co-founder-  
Cafe de Rock & The House of Artisans, Gurgaon.  
'The overall atmosphere has instilled a deep sense of confidence in me which helps me in everything I do. Brilliant guidance & a culture based on encouraging ideas & creating ownership exists here!'



Kriti Dhall, B.Tech.-CSE, Senior Consultant-  
DXC Technology, Copenhagen, Denmark.  
'MRCE has helped me learn about myself in many ways and finding the right balance between work and fun. Nowhere else will the faculty go to such lengths to help, educate, nurture and inspire their students.'



Nidhi Puliani, B.Tech.-CSE,  
Senior Business Analyst- Encore Capital Group.  
'MRCE gave me enough exposure in different areas via varied activities for all round development. This helped me acquire not just necessary technical but other softer skills, essential for success.'



Ikshith Puri, B.Tech.-CSE, Senior Manager Analytics-  
Optum, Schamburg Illinois US.  
'Manav Rachna is my second home; this institution is a perfect blend of imparting knowledge and providing opportunities to be what I am today. I credit Manav Rachna for perfecting me.'



Shailendra Sadh, B.Tech.-CSE,  
Sales Engineer- Splunk.  
'I was part of the first batch of MRCE, so the experience was great! The journey at MRCE was a great one! I have grown.'



Raghav Rastogi, B.Tech.-ECE,  
Design Engineer Trainee- Truechip Solutions Pvt Ltd.  
'Thanks to Manav Rachna University, my faculty and the department, all because of them I was able to imbibe the required knowledge and get the opportunity to work in Truechip Solutions Pvt Ltd.'



Dhruv Sharma, B.Tech.-ECE,  
Intern Application Engineer- Cadence.  
'Manav Rachna University gave me an appropriate platform to enhance my skills via the faculty and other facilities. My Department has helped me accomplish my goals in life and build a successful career.'



Rahul Sharma, B.Tech.-ECE,  
Member Technical Staff- Mentor Graphics.  
'The department of ECE, Manav Rachna University made me realize my interest in the area of Electronics, Chip Design, VLSI, integrated Circuits. I extend my gratitude towards all at the University.'



Tushar Gupta, B.Tech.-ME,  
Mechanical Engineer- Krishna Maruti.  
'Manav Rachna is a small world in its own. Overall, I have bloomed in life and career because of it.'



Shivam Mahajan, B.Tech.-ME, Mechanical  
Engineer- Stryker Corporation.  
'Manav Rachna is a stage that gives you ample opportunities for future. My journey has been phenomenal here. I have fortunate to be placed in Stryker Corporation, US based Fortune 500 Company.'



Shivam Bansal, B.Tech.-ME,  
Mechanical Engineer-TATA Steel, Mechanical Engg.  
B.Tech. (ME) degree at MRU gave me the platform to challenge and improve myself, meet smart people with innovative thinking. Being able to think critically and evaluate id.5as made me invaluable.'



Ayush, B.Sc.(H)-Maths,  
Application Development Associate- Accenture.  
'The hands-on sessions of mathematical & statistical software during lab hours at the Department of Mathematics has helped in carving out new career avenues.'



Drishti Mittal, M.Sc.-Chemistry,  
Officer- Federal Bank.  
'I have experienced & learnt a lot with expert Professors at Manav Rachna who have been very supportive, knowledgeable and have always provided courage and cooperated in all situations.'



Anchal Singh, M.Sc.-Chemistry,  
Sales Account Manager- Agilent Technologies.  
'Manav Rachna provided us industrial exposures through industrial visits and internships. It helps us to learn many analytical techniques and professional lab-work ethics.'



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