

As per the requirements of Quality Mandate of UGC, the initiatives to be taken by an institute as mentioned in points 1 to 10, many are already in practice at Manav Rachna University. The institute formerly known as Manav Rachna College of Engineering had been accredited by NAAC with Grade 'A'.

Since the up gradation of the institute to Manav Rachna University, many processes were updated as per requirements of the university. The status of the initiatives taken by the university as per UGC quality mandate is described below.

### 1. Induction Program for Students

The Institute had been conducting the induction program for students every year. A three weeks induction program for the all the newly admitted students is conducted at the beginning of each academic session. The induction program includes the following activities.

**Mentoring and Universal Human Values:** It gets the students to explore oneself and allows one to experience the joy of learning, stand up to peer pressure, take decisions with courage, be aware of relationships with colleagues and supporting staff in the hostel and department, be sensitive to others, etc. A module in Universal Human Values provides the base for student's character building. A faculty member is allotted to each class, who also acts as a mentor for the students of that class. Students can contact their mentor any time for issues related to academics, exams and attendance, activities etc.

**Familiarization with the University and Departments:** An introductory session is held in the beginning of induction program. In this session the students are introduced to all senior functionaries of the university like Deans, Directors, HODs, Registrar and Administration team. HODs also introduce the faculty members of their respective departments.

**Literary Activities:** Various literary activities include reading, writing, debating, enacting a play etc. are conducted during the induction program.

**Proficiency Modules**: This includes crash courses, so that when the normal courses start after the induction program, the student has overcome the lacunas substantially. These courses may be on English speaking, written and verbal communication etc.

**Workshops and Lectures by eminent people:** This period is utilized to conduct expert talks and lectures by eminent people from industry and academia.

**Familiarization with Departmental Activities:** The students are familiarized with the departmental and inter-departmental facilities available for them. They are also familiarized with the procedure of both academic and administrative conduct at the university. They are also familiarized with the continuous evaluation process and the rules and regulations they have to follow in their tenure at the university.

**Code of Discipline Maintaining:** Discipline is of utmost importance at the university. The students are familiarized with the discipline measures which include, anti ragging measures, women cell, disciplinary committee and their functioning at the university.

**Visits in local area:** Towards the end of the three weeks program, the students are taken to visit nearby villages. The institute has adopted five villages. The students go there to understand people and their problems and are motivated to apply their knowledge in finding an appropriate solution to these problems. A couple of visits to the landmarks of the city, or a hospital or orphanage are also organized.

**Extra-curricular activities:** Various extracurricular activities are conducted for the new students including the ice breaking session, activities related to art, dance, music, debates, games, sports etc. They are introduced to four clans at the university and each student then becomes member of one of these clans, whereby students and faculty work together.

**Feedback and Report of the program:** Each day the reports of different activities are generated simultaneously which are uploaded on the University face book page as well as on the website.

### **2.** Learning Outcome based Curriculum Framework

The institute has always been following an outcome based education system. Curriculum is said to be the overall experience of learners in a formal institution. The curriculum is developed aiming at the outcomes which are in turn oriented towards the mission and vision of university. This curriculum is revised time to time as and when required based on the feedback of students and the faculty.

**Course Plan with course outcome and Blooms Taxonomy level:** Each course plan is designed and revised before the beginning of the relevant semesters. Each unit of a course has a day wise plan which maps it with the defined course outcomes and Blooms Taxonomy level.

The course outcomes are mapped with the program outcomes and its objectives which further maps to the institute's vision and mission. To summarize, the entire curriculum for each department is developed by taking into consideration following points:

- 1. Vision and Mission of the University, i.e. developing of a humane individual is key essential lead.
- 2. Programs objectives are clearly defined.
- 3. Program outcomes are thoughtfully considered.
- 4. Inputs from Industry and academic experts are amalgamated.

The same has been initiated while designing of question papers, assignments and tutorials too. This helps to evaluate the achievement level of the program outcomes at the end of the course.

# 3. Use of ICT based Learning Tools

The institute has been using ICT based learning tools since inception. The university provides the facilities of learning through ICT. Few may be described below:

- a. In teaching learning process: LCD projectors, availability of course material on intranet for ready reference, Wi-Fi enabled campus; Online feedback system, conduct of webinars, usage of Virtual labs (as Nodal centre for Virtual Labs)
- b. In administration: Library, fee payment, admission, biometric employee attendance system, attendance monitoring of students.

The University encourages that the ICT facilities are optimally utilized not only for the university system but also for being active part towards knowledge dissemination at national and international level and also for robust information security management. The institute is currently running a chapter of online courses of NPTEL. It is also moving towards developing course under SWAYAM. The university is encouraging courses run through MOOCs and NPTEL.

The Library subscribes various softwares for accessing e- reading material, books and journals and has its own software for checking plagiarism.

# 4. Soft skills for students

**Summer training program:** Integrated Summer training program for all the Students including technical summer training projects, Infosys Campus Connect Program and Infosys governed soft skills training is being conducted for students of all semester.

**Career Development Centre** There is a Career Development Centre at the campus. This centre works specially towards imparting both soft skills and developing aptitude in the students. This

is specifically taken up in third and fifth semester where students are imparted employability skills like verbal communication, time management, grooming, English speaking etc.

In fourth and sixth semester each student gets a chance of one to one interaction with the CDC team to learn how to introduce themselves to employer and have an effective communication to present both their soft and technical skills.

**Center of Foreign Languages** The institute has its own centre of foreign languages. Each student is required to take at least one foreign language during their entire program.

**Project Building Skills** The students learn team work during project building. In every semester students are encouraged to build up projects of their interest.

**E-waste management** The University has introduced a course on E-waste management. Here the students learn the e-waste hazards to life, environment and society. They are also familiarized with proper management of e-waste through methods of up gradation and recycling. The university runs awareness drives and expert talks regarding the same.

### 5. Social and Industry Interconnect for Students

Adoption of Villages: The University has adopted five villages under Digital 17 x 17 program of MHRD. Under this program, the students visit nearby villages to understand their problems. They try to apply their knowledge in developing or providing solutions to them. Such, Institutional Social Responsibility activities also include strengthening of education system, Protection and Reviving of our heritage, fostering creativity, sustainable development and environmental protection, gender equality, sexual and reproductive justice, healthcare, development and empowerment of sections of society who are vulnerable and with special needs and other related activities which help in the growth of the society. Different departments / clans undertake such activities from time to time with maximum possible involvement of students, faculty and staff. The university has adopted villages like Mohana, Anangpur, Mewla Maharajpur and Ankhir in the vicinity of Faridabad.

**Other Social Connect Initiatives:** The institute conducts "Ek Mutthi Daan" a drive in which rice is being collected and donated to the needful through an NGO adopted by the university. The institute's other social connect activities include organization of blood donation camps, Stem cell donation camps through an NGO "Daatri".

The institute has adopted an NGO "PrakashDeep" which runs a school for under privileged.

**Industry Interconnect:** University has a Dean (Industry-Interaction) who is responsible for interfacing with the Industries for the following:

- 1. External interface with Industry for skill development, guest lectures, visits to the industry, student's trainings and placements.
- 2. Float various extension programs for external faculty/industry personnel.

**Train the trainer:** Under this program, the faculties are sent for training outside the campus, to industry and institutes. These faculties then in turn train our faculty and students at the campus. In house trainings, faculty development programs are also conducted by the departments and IQAC.

**Summer Trainings:** Summer trainings are very crucial to the overall development of the students. In this duration, University organizes various technical internship programs on campus and encourages students to do summer training/internship with a reputed organization. University also helps students to improve their reasoning and aptitude skills so that their overall development can be done.

**Student Placement System:** The University has solid student placement framework composed through an institutional instrument. Appropriate positions/openings are showcased and conveyed to the notice of concerned departments. Tests and Interviews of shortlisted students are conducted by the recruiters in the campus and selected students are informed.

**Placement Portal** The University has a well defined online placement portal

a) The career resource centre CMCRC (career management and career resource centre centre) at the campus has an online placement portal.

b) Potential Recruiters send the Job Description containing all information necessary for a student to decide if he/she is interested.

#### 6. Examination Reforms

#### **Examination Regulations:**

(a) Announcement of Examination Calendar/Schedule: In consonance with the Section 36 of the Haryana Private Universities Act, 2006, at the beginning of each Academic Session and normally not later than 30<sup>th</sup> of August of every calendar year, the University prepares and publishes a semester wise schedule of examinations for each program.

**(b)** Attendance: A student is required to achieve a minimum attendance (75%) in a course to be eligible for appearing in the end-semester examination of that particular course.

(c) Conduct of Examination: Examinations of the University is open to regular students i.e. candidates who have undergone a course of study in the University for a period specified for that program of study.

(d) Test the Concept, Applications and Exit Exams: To test the concepts learnt by a student and their ability to apply, the university conducts test in theory as well as laboratories. All the courses have labs associated with them. The students are supposed to appear for mid semester Tests (T1, T2, PT1 and PT2) and End-Semester Examinations T3 for each course he/she is studying in a semester. All the tests / examinations are conducted by the Controller of Examinations. The test is governed by certain regulations. Some of which are

- (i) The schedule of examinations is notified by the Controller of Examinations.
- (ii) For theory as well as practical examinations and dissertation/ project work/ training, the examiners are appointed by the Controller of Examinations on recommendation of Dean of respective Faculty. The Board of Examiners is approved by the Vice-Chancellor.
- (iii) Lab performance and Lab record marks are awarded for each lab in attendance register regularly.

#### 6.1 CREDIT SYSTEM:

**Grading System:** The University offers program in each semester on the basis of <u>Choice Based</u> <u>Credit System</u>. Based on the performance of the student in a semester, measured by grades and credits earned, the grade point average of a semester is calculated.

**Description of Grades:** At the end of each semester, the student is awarded a letter grade in each course for which he/she had registered. The student earns credits only for the courses in which he/she is awarded grades O-P.

**6.2 Evaluation:** The process of **evaluation of answer sheets** comprises following constituent steps:

- A <u>central spot evaluation center</u> is formed for the evaluation of theory answer scripts. The spot evaluation process for all the Faculties is carried out in this Centre. None of the faculty is allowed to take any answer script out of this centre.
- <u>Dean(Examination)</u> nominates two senior faculty members, as in charge of spot Evaluation Center. The responsibility of safe custody of answer sheets & their evaluation rests solely with the in-charge of Spot Evaluation Centre.

- On the basis of recommendations received from Board of Studies, Dean Examination appoints <u>external experts</u> from other universities / colleges for practical / theory component such as evaluation / viva-voce / project evaluation.
- On each day of examination, the written answer sheets are delivered to the spot evaluation Centre by the <u>Centre Superintendent</u> along with a dispatch memo in sealed envelopes.
- 5. The number of answer sheets in each packet received is verified as per dispatch memo by the respective in charge of **Spot Evaluation** centre or his nominee.
- 6. An evaluation committee consisting at least two teachers (one teacher if only one teacher is engaged in teaching a particular subject) in respect of each subject is nominated by Head of the Department with the approval of dean of faculty of the respective department constituted by the in charge of spot evaluation.
- 7. Members of the evaluation committee for each Faculty are invited by the in-charge Spot evaluation to carry out evaluation at the Centre.
- 8. Spot evaluation is ordinarily completed within 7 working days from the day of examination. Before entering marks in award list, two faculty members are appointed by the office of Controller of Examination for the purpose of Scrutiny of answer books. Each evaluator fills the marks awarded by him/her in the award list. Thereafter, marks in respect of all subjects are filled in the Excel Sheet. Both hard copy (filled & signed by the evaluators) and the Excel sheet are transmitted by the respective Dean of each Faculty to the COE.
- 9. After the spot evaluation, evaluated answer books are sent to the Examination Cell in sealed covers.

# 7. Tracking Students Progress at the End of Course

The student's progress is tracked by carrying out the result analysis for each semester. In future the university aims at analyzing the result of each student on the basis of course outcomes and Blooms Taxonomy level achieved by them. This has already been initiated for implementation.

The progress of student in a course is also evident by the level of project developed at the end of reach course. The university also has a system in which a student needs to clear the perquisites of a particular course before registering for it.

# 8. Induction Program for Faculty

The institute has been conducting a short two days induction program for the newly appointed faculties. All the Deans, Directors, Registrar and other senior officials address the faculties.

Deans and Directors brief the faculty members about the activities of their office and how they can use the facilities of their office for their betterment.

The faculties are made aware about academic, administrative system including examination system. The methodology from the developing course plans, to implementing then in labs, developing question papers in relevance to course outcomes etc is being explained. Examination rules, feedback system etc are all defined and the faculties are familiarized with them during induction. The institute under IQAC regularly conducts faculty development programs to enhance technical knowledge and pedagogical skills for all faculties.

The university runs a "Developing Leadership Skills" program which is a series of lectures / workshops. These expert talks aim at developing moral responsibility, workplace ethics, values and leadership qualities in the faculties.

In future the Institute aims at implementing an induction program for newly joined faculties which would provide them a change to work with senior people and learn pedagogy techniques and learn the relevant qualities.

# 9. Promoting Quality Research

The institute has always been promoting quality research both among faculty and students. The Institute started its PhD program in January 2016. The students of Manav Rachna University are encouraged to take research work as a part of their curriculum.

University promotes research to ensure knowledge generation, innovation by faculty members and also participation of students in various competitions. Research is further encouraged by various university activities such as:

- a) Promoting research in domain areas (with focus on publications in Scopus, Web of Science, Science Citations Index (SCI) Expanded, EBSCO Scopus/SCIE Journals/conferences)
- b) Advanced training to faculty
- c) Training and mentoring students for national and international competitions through innovations
- d) Conversion of innovation into Patents
- e) Conducting workshops, seminars and conferences

#### 9.1 Research integrated program

Starting from the 3<sup>rd</sup> semester from the undergraduate level itself we introduce research as a component in the curriculum at all the levels, with assigned credit which is evaluated and

graded over four semesters. Young innovators are provided guidance by the mentors from respective departments and also by experts from outside agency, specially hired for the purpose. Under this partnership students undergo mandatory training in research field which is spread over a period of 4 semesters with total credits of eight.

#### 9.2 Manav Rachna Innovation and Incubation Centre

**Research at MRU is further supported by MRIIC,** a seminal initiative of Manav Rachna Educational Institutions to encourage research, innovation and entrepreneurship. It helps the faculty as well as students to develop professional entrepreneurial ability and mindset to set up their own enterprises. MRIIC is able to support research activities at MRU through:

- **a.** Research and Innovation Clusters (RICs): These clusters are formed as close research groups active in research fields of common interest.
- **b.** Centre of Excellence: Under the aegis of MRIIC, eight Centers of Excellence (CEs), which are advanced laboratories, have been established in collaboration with reputed industries for supporting and enhancing the training & research skills of students.

#### 9.3 Doctoral Program

The first batch of PhD program at MRU started in the year 2016 with more than 45 research scholars and currently we have more than 70 scholars in various disciplines.

- a. Best Practices This program follows complete governance system. All the Guidelines are as per UGC Minimum Standards and Procedures for Awards of M. Phil / Ph.D. Degree Regulations, 2016. Our Ph.D. course work classes are being delivered by Experts in Research Methodology and Quantitative Techniques. As per the guidelines of UGC dated 5th May 2016 we have signed MoU with Shodhganga: a reservoir of Indian Thesis and started uploading Synopsis of scholars dully approved by DRCs on Shod Gangotri.
- b. Additional Facilities: Being an active partner in Research, Innovation & Development, MRU provides library & information services to support scholarly information as per the needs of the researchers and academic community. Various e-journals and antiplagiarism software are available in our Library. The University also provides for online live lecture system with the help of Impartus Solutions. Research scholars can attend guest lectures and expert talks through ICT.

# **10.** Mentoring of non- Accredited Institutions

Many senior functionaries from the university visit and conduct workshops/ expert talks at other institutes to guide them for achieving accreditation and its importance.