

1. Multidisciplinary/interdisciplinary:

M. S. Ramaiah University of Applied Sciences envisions to evolve into a forward-thinking, holistic multidisciplinary institution that empowers individuals to excel by fostering interdisciplinary collaboration, nurturing creativity, and cultivating a comprehensive understanding of various fields while maintaining the commitment towards excellence. The setting up of the NEP taskforce is the initial step to envision and transform this university into holistic multidisciplinary in nature. Representatives across the 13 faculties/schools/institutes are the members of this taskforce and bring in their suggestions to this committee. The members meet periodically, discuss and deliberate steps for the phase wise change and implementation within the course curriculum. The approvals and agreements taken here will be submitted to the BOM and ACM for its implementation across the university. MSRUAAS offers flexible and innovative curricula that includes credit-based courses and projects in the areas of community engagement and services, environmental education, and value-based towards the attainment of a holistic and multidisciplinary education. Curricula highlighting community partnerships, student participation, and lifelong learning is unique. Value based programs to create ethical frameworks, character development, and service towards the community have been included into the curricula. After the deliberations of the NEP taskforce committee, recommendation have been proposed to convert the exiting syllabus into multiple exists at the 3rd and 4th year. It has been able to initiate these changes specifically in the programmes where the respective regulatory body also approves. For example, initiations to change in the faculty of Engineering and Faculty of Life & Allied Health Sciences having exit offered at 3rd year with B. Sc degree and 4th year exit with B.Sc. (Hons) degree has been put to place. This activity is happening in phase-wised manner across other institutions. A number of Faculty Development Programs are conducted to harness and imbibe the multidisciplinary component within the university system NEP Taskforce Committee spearheaded by the Vice Chancellor, NEP working committee led by the senior professor drives and oversees the activities within the university. This NEP committee has representatives across the 13 institutes giving the ground experiences and leading in the ideal formulation of the curriculum/course work. The School of Law offers a mandatory course on the constitution of India to STEM (Science, Technology, Engineering, and Mathematics) and medical streams. This is a 2 hour credit course spanning for a period of 30 hours in a semester, with assessment with it. The institution offers flexible and innovative curricula. Community engagement and service has been the thrust areas in all the programmes catering to the medical and health sciences. A wide range of projects are undertaken from the Engineering and Medical streams which are inter-professional, multidisciplinary in nature with a minimum span of 6 months to ideate and carry out the work within the community. Professor of Practice concept is utilized in School of Management, Faculty of Life & Allied Health Sciences and Faculty of Dental Sciences to harness the value based teaching and integration towards holistic education.

2. Academic bank of credits (ABC):

MSRUAS has taken initial steps to fulfil the requirement of Academic bank of credits as proposed in NEP 2020. It is registered under the ABC to permit its learners to avail themselves of multiple entries and exit during the chosen programme. MoU's with some of the leading international universities such as University of Illinois, Chicago, University of Albany, and University of Manitoba are forged to initiate seamless collaboration for joint degree programs and internationalization. University is encouraging faculties to design their own curricular and pedagogical approaches within an approved framework. Faculties can experiment with new teaching methods, technologies, and content delivery techniques to enhance the learning experience with scopes for continual improvement. BoS happens at regular intervals

to refine the curriculum. University has Dean of Academics to ideate, share and oversee the overall activities pertaining to NEP.

3. Skill development:

The institution has made attempts to strengthen the vocational education and soft skills of students in alignment with the National Skills Qualifications Framework. The department of vocational training is focused on skill training using periodic short term vocational courses across the university. Ability Enhancement Compulsory Courses of 2 credits such as Language and Literature; Environmental Science and Sustainable Development/ Environmental Studies; Constitution of India and Human Rights, Human rights; Project Management have been incorporated in the curriculum. In addition to these Skill Enhancement /Vocational courses such as Digital Fluency; Artificial Intelligence & ML; Cyber Security; Professional Communication of 2 credits each are also incorporated. Open electives courses are offered from the school of social sciences across the university in the subject areas of psychology, economics and sociology. These are the mandatory courses integrated within the course curriculum with assessment attached with it. Students from STEM take up these courses. Community orientation programme of 3-4 weeks is organized by the Faculty of Dental Sciences and Ramaiah Medical College to get a real-time understanding and overview of problems faced by the people. An internship of 2 to 3 months is planned in the curriculum. Value Added Courses such as Health & Wellness/ Social & Emotional Learning; Sports/ Yoga/NSS; Ethics & Self Awareness, constitution of India of 2 credits each are added into the curriculum in order to align with the National Skills Qualifications Framework.

- i. Design a credit structure to ensure that all students take at least one vocational course before graduating. – This is planned with wise phase implementation
- ii. Engaging the services of Industry veterans and Master Crafts persons to provide vocational skills and overcome gaps within trained faculty provisions - Professor of Practice concept is adopted across School of Management and Faculty of Life & Allie Health Sciences to bring in industry exposure to the students and faculties.
- iii. To offer vocational education in ODL/blended/on-campus modular modes to Learners - This is planned with phase-wise implementation
- iv. NSDC association to facilitate all this by creating a unified platform to manage learner enrolment (students and workers), skill mapping, and certification - This is planned with phase-wise implementation
- v. Skilling courses are planned to be offered to students through online and/or distance mode. - This is planned with phase-wise implementation.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Importance towards the Indian Knowledge system to highlight the ancient traditional knowledge, languages, and arts with importance to preserve the essence of local vernacular language has been emphasized in many portions of the curriculum. MSRUEAS through its constituent college Ramaiah Medical College, Ayurveda and Yoga imbining the IKS within its curriculum and offering a number of courses as

part of compulsory training. Dept. of student affairs organizes events pertaining to IKS on a regular basis. In view to promote IKS, MSRUAS had organized one day conference on Indian Knowledge System by inviting the chairperson of AICTE, Prof. Anil Sahasrabudhe and commenced the chapter of IKS in MSRUAS. MSRUAS has been proposed to be one of the centres for IKS in the near future. Research proposals and internships are planned and deliberated in the topics related to IKS due to the multidisciplinary context of MSRUAS.

5. Focus on Outcome based education (OBE):

Outcome Based Programmes along with modern pedagogy is the need of the hour. Curriculum, in line with Outcome Based Education (OBE), helps students to develop critical thinking abilities and imbibe relevant practical skills for a smooth transition from academics to real-life work environments. OBE aligns the graduate attributes to the programme specific outcomes and course outcomes. This is accomplished through top down approach.

In OBE, special emphasis is given on Continuous Evaluation (CE) throughout the course. This method plays a crucial role by providing frequent feedback on attained learning outcomes, both to students and teachers, which in turn, guides the future course of action needed to further improve the performance of the students, either through counselling (mentor-mentee initiative) or through remedial/accelerated programmes.

Expert trainers in teaching learning pedagogy conduct periodic sessions/workshops on OBE implementation.

A number of FDPs to create awareness and reorganize the existing curriculum towards Outcome Based Education have been initiated across various Faculties.

The ratio of Formative (Continuous Evaluation-CE) vs Summative (Semester End Examination/ Year End Examination – SEE/YEE) is in conformity with the recommendations of the Board of Studies for the respective Programmes, which is approved by the Academic Council.

6. Distance education/online education:

Lecture Capturing System (LCS) is available in the University for recording the lecture sessions of the staff members. This has facilitated the e-learning process through uploading of the lecture deliberations through videos on the MOOC platform.

Learning Management System (LMS) of MSRUAS is in operation since 2014, the year of inception of MSRUAS. The University had the practice of sharing the study materials and the assignment questions with the students through LMS at the beginning of the semester/year. MSRUAS also had developed more than 400 lab videos demonstrating the conduct of experiments and students had access to these videos. These practices came very handy during the onset of COVID 19 pandemic, and MSRUAS was relatively less impacted, since it had already shared the study contents to its students. Following are some of the initiatives adopted by MSRUAS to ensure effective academic delivery and timely completion of assessment and evaluation during the COVID pandemic.



Academic Engagement During the COVID-19 Pandemic:

During the even Semester in the Academic Year 2019-2020, about 60% and 20% syllabus was covered before the Coronavirus-mandated lockdown in undergraduate and postgraduate classes, respectively. During the lockdown, overall 20% syllabus was covered in online, synchronous mode and 20% was covered in online asynchronous mode in undergraduate classes. Similarly, overall 60% syllabus was covered in online, synchronous mode and 20% was covered in online asynchronous mode in postgraduate classes. Synchronous engagement was facilitated through the free virtual conference platforms, such as Zoom and Webex in the early days of the lockdown. Later, it was moved to the University's licensed Microsoft Teams platform. Online educational portals, such as NPTEL and Coursera have been used to facilitate online, asynchronous engagement.

About 90% and 50% study material was shared with undergraduate and postgraduate students, respectively, before the classes were suspended. Since many students left the campus in a hurry, all the study material was shared again through the RUAS LMS portal, email and WhatsApp. Assignments, an essential part of Continuous Evaluation (CE), have been collected through the RUAS LMS portal. In the cases where the students could not upload the assignments through the portal, the assignments were collected through emails. Several mock Term-Tests were conducted to ensure the correct functioning of students' hardware, software and Internet connectivity. Term-Test 2 and Term-Test 3 were conducted in online mode through the RUAS LMS portal. Additional opportunities were given to students having low CE scores.

Final course marks were determined using the recommendations of the Government of Karnataka through its notification dated 10-July-2020. Accordingly, 50% weightage was given to the current CE scores, and 50% weightage to the performance in the immediate previous semester-end examinations. Examinations in laboratory, projects, internships, seminars, and allied courses were conducted in online synchronous mode. Viva-Voce sessions were conducted using MS Teams. For the terminal semester classes, semester-end examinations have been conducted in proctored online mode after conducting multiple satisfactory mock rehearsal rounds.