

Fostering Lifelong Learning for the Society

Manav Rachna University (MRU) believes that access to education and learning should extend beyond classrooms and enrolled students. As a learner-centered institution, MRU has built several open and inclusive platforms that serve not just its own students, but also educators, professionals, and the general public. These initiatives promote lifelong learning, sustainability, and community development, well in alignment with UN SDG 4 (Quality Education).

The university's contribution to public learning and knowledge dissemination is reflected through three major areas:

- (A) Free Courses Leading to Certification,
- (B) Free Access to Campus Facilities and Equipment, And
- (C) Free Online Learning Resources.

Each of these represents MRU's ongoing commitment to transform education into a shared social resource for lifelong enrichment.

A. Free Courses Leading to Certification

MRU's faculty across Schools of Science, Education, Humanities, Law, and Management have collaborated with global mentors under the Open Education for a Better World (OE4BW) program, a venture under UNESCO to design open-access courses that anyone can join. These courses are free of cost, self-paced or hybrid in mode, and provide certificates upon completion. They not only create awareness of sustainability issues but also build professional skills among youth, educators, and lifelong learners.

1. **Entrepreneurial Development** designed by **Dr. Yogita Sharma** from the School of Management and Commerce, this open program develops entrepreneurial thinking and business literacy among young adults and local communities. It includes modules on business incubation, social entrepreneurship, and innovation management using case studies from the MRU Innovation and Incubation Centre.



2. **Skill Development for Sustainable Future** created by Ms. Meenal Rawat, Dr. Eram Aziz, and Dr. Savita Sharma from the School of Education and Humanities, this course promotes vocational awareness and skill development. International mentor Dr. Ruwandika Perera (Open University of Sri Lanka) and Ajita Deshmukh (Hub Education) guide learners in building sustainable skill ecosystems, linking employability with responsible social engagement.



ONLINE COURSE

SKILL DEVELOPMENT FOR SUSTAINABLE DEVELOPMENT

SDGs Covered
 SDG 4- Quality Education
 SDG 8- Decent work and Economic Growth
 SDG 9-Industry, Innovation and Infrastructure

TARGET AUDIENCE
 Anyone interested in developing critical life skills for sustainable future.

1st May-28th May, 2024

Our Team

Ms. Meenal Rawat
 Project Developer
 Asst. Prof, Manav Rachna University

Dr. Eram Aziz
 Co-Developer
 Asst. Prof, Manav Rachna University

Dr. Savita Sharma
 Co-Developer
 Asst. Prof, Manav Rachna University

YOU WILL BE ABLE TO

- Explain the concept of skill development.
- Relates skills, skill gaps and skill development.
- Set out the importance of skill development.
- Elucidate 21st century skills.
- Apply and practice skill development for professional growth.
- Utilize the insights gained through applying skill development in real-world scenarios.

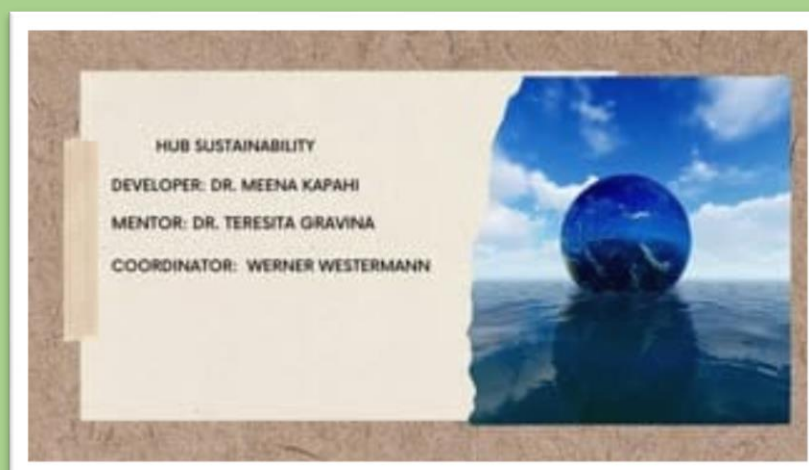
QR Code for enrollment:

Course code:
 TD7D9A
 on Canvas platform

Link to Enroll:
<https://canvas.instructure.com/enroll/TD7D9A>

In case of any query please feel free to contact at: oa4hw2023@gmail.com

3. **Integrating Sustainability into Education for Eco-Conscious Leaders Tomorrow** Developed by **Dr. Meena Kapahi** and **Dr. Vinayak Pathak**, this course helps educators, teacher trainees, and community facilitators integrate sustainability values in school curricula. The course, mentored by **Werner Westermann (Hub Sustainability)**, focuses on practical teaching frameworks and local projects for climate literacy, encouraging participants to build “eco-conscious classrooms.”



HUB SUSTAINABILITY

DEVELOPER: DR. MEENA KAPAH

MENTOR: DR. TERESITA GRAVINA

COORDINATOR: WERNER WESTERMANN

The poster features a background image of a blue globe on a blue surface under a blue sky with clouds.

Each of these courses provides free access to study materials, online interactions with mentors, and certification, ensuring that anyone interested — from schoolteachers to community volunteers — can participate in education for sustainable living.

Certification Course for Skill Development of Underprivileged Students:

Apart from these courses, short term certification course is provided by O. P. Bhalla Foundation in collaboration with Innovation and Incubation Centre, under the venture of Kaushal Karyashala titled ‘**Introduction to MS Windows and Complete Basics**’ for government school students of classes 9th till 12th to make them resourceful for better employment opportunities in the higher paying jobs. The students were taught the basics of Microsoft Office emphasizing on MS Word. The course was conducted by Dr Prashant Bhardwaj and Dr. Jai Prakash Sharma with the guidance of Dr Parneeta Dhaliwal.



B. Free Access to Campus Facilities and Equipment

MRU promotes inclusive access to its learning and research infrastructure for both internal and external learners. These facilities are used by visiting researchers, local educators, and NGOs for community-based learning, innovation, and training.

1. University Instrumentation Centre (UIC)

Established in 2022, the UIC offers advanced instrumentation services to researchers, industries, and academic institutions at nominal or no cost. It houses high-end equipment such as FTIR, GCMS, UV-Visible Spectrophotometer, Solar Simulator, Spin Coater, and X-Ray Diffractometer. The centre conducts free workshops and training programs such as:

- *“One-day Workshop on Advanced Instrumentation and Sustainable Waste Management Techniques”*
- *“Practical Skill Enhancement in Sophisticated Analytical Instruments”* (April 2024, with 59 participants from government colleges)
- *FDP on “Unearthed Dangers: Solid Waste and Disaster Risk”* (in collaboration with the Ministry of Environment, Forest and Climate Change). These programs serve participants from nearby colleges and industries, enabling hands-on exposure to scientific equipment and sustainability practices.



MANAV RACHNA UNIVERSITY
Deemed as State Private University vide Haryana Act 26 of 2014

School of Sciences
University Instrumentation Centre
UIC-MRU

organizes

**ONE DAY TRAINING
ON
X-RAY DIFFRACTION**

Date: 17th January 2024
Venue: University
Instrumentation Center-
MG04

Registration Link:
<https://forms.gle/2TV6FvWTDJnTMpc16>

2. Kaushal Karyashala Venture

The Kaushal Karyashala at Manav Rachna University is a flagship initiative aligned with the Skill India Mission and National Education Policy (NEP) 2020, aimed at promoting vocational education, digital literacy, and practical employability skills among youth and educators. This initiative functions as a bridge between formal higher education and community-based capacity building, making university resources directly accessible to the general public.

Under this venture, MRU opens its computer laboratories and ICT facilities to school students and undergraduate students from neighbouring colleges who aspire to gain job-oriented skills. The university's departments design short-term hands-on workshops and certificate programs that address both academic and non-academic competencies needed for 21st-century workspaces.

The Kaushal Karyashala also acts as a training hub for school students and community facilitators, helping them integrate ICT tools in classrooms, manage e-learning content, and adopt blended teaching approaches. Periodic workshops on *digital communication skills*, *use of AI in education*, *data visualization*, and *scientific report writing* are coordinated by faculty across departments.

Through Kaushal Karyashala, MRU extends the spirit of lifelong learning to the community by ensuring that access to advanced educational tools and digital competencies is not confined to enrolled students alone. The initiative nurtures a self-sustaining ecosystem of learners who continue to upskill, innovate, and contribute to the region's social and economic growth.



3. Innovation and Incubation Centre (IIC)



The Innovation & Incubation Centre at Manav Rachna University stands as a bridge between raw ideas and real-world impact. With a vision “to create successful entrepreneurs through a startup ecosystem based on innovation” and a mission “to develop a culture of innovation and incubation among students and faculty members,” the centre provides infrastructure, mentorship and ecosystem support from ideation to incubation.

In the context of lifelong learning and skill development, this centre plays a pivotal role. It moves beyond traditional classroom boundaries and encourages learners to acquire, apply and evolve skills—such as critical thinking, creativity, collaboration, and adaptability—in a dynamic environment of innovation. By engaging in hands-on projects, start-up journeys and interdisciplinary experimentation, students and professionals don’t just learn for a degree—they learn *for life*.

Within this framework, the Innovation & Incubation Centre becomes a continual learning hub where every challenge is an opportunity to grow, every mentor a guide to the next level, and every prototype a step toward mastery. It aligns perfectly with the idea that learning must be ongoing, responsive, and embedded in meaningful practice.

List of activities conducted under IIC:

Activity / Event	Date	SDG 4 Target Mapped
HackItUp 1.0	16-Feb-24	4.4 – Increase skills for employment & entrepreneurship
Ideathon 1.0	08-Nov-23	4.4, 4.7 – Technical & sustainability skills
Ideathon 2.0	06-Mar-24	4.3, 4.4 – Equal access to technical education & innovation skills
Sociothon 2024	10–11 Feb 2024	4.7 – Education for sustainable development
SAE BAJA 2024	1–5 Mar 2024	4.4 – Skills for industry and innovation

Innovathon 2023	2–3 Nov 2023	4.4 – Innovation & entrepreneurial skills
Innovathon 2023 (Alternate Teams)	2–3 Nov 2023	4.4 – Innovation & creativity
Avishkar	20-Sep-23	4.3 – Access to higher education and research skills
PitchDeck – A Sustainable Idea Competition	09-Jul-23	4.7 – Education for sustainability
Motivational Session by Successful Entrepreneur	09-Sep-23	4.4, 4.7 – Skills for employment and values of lifelong learning
Workshop on 3D Modelling Software	27-Oct-23	4.4 – Technical skills for employment & innovation
IIC Regional Meet at Panjab University, Chandigarh	20-Nov-23	4.3, 4.4 – Access to higher & technical education
Structural and CFD Simulation through ANSYS	2–3 Feb 2024	4.4 – Vocational & engineering skill development
User Awareness on Intellectual Property Rights	24-Jan-24	4.7 – Education for sustainable innovation & ethics
Training Session on Plagiarism Detection Software	08-Feb-24	4.7 – Education for responsible research & lifelong ethics
4-Day Business Simulation Workshop	12–15 Mar 2024	4.4 – Entrepreneurial skills & innovation mindset
Tech Showcase	28-Mar-24	4.4 – Practical STEM learning & employability skills
Innovate with Technology – World IPR Day	1–2 Apr 2024	4.7 – Knowledge of global citizenship & innovation law
Innovate and Elevate 1.0: Mastering Full-Stack Development	22–26 Apr 2024	4.4 – ICT & digital skills for industry readiness
Orientation cum Refreshers’ Session on IIC Objectives & Structure	05-Aug-24	4.3 – Access to innovation learning frameworks
Strengthening IIC Linkages with ATLs and SICs in Schools	31-Jul-24	4.3, 4.7 – Access to education & lifelong learning pathways
Technical Innovation – Biomimicry: It’s Time to Ask Nature	25 Jul–2 Aug 2024	4.7 – Education for sustainability & creativity
Leveraging MOUs for Entrepreneurial and Professional Growth	01-Aug-24	4.3 – Partnerships expanding learning access

Independence Day Celebration at MRU	15-Aug-24	4.7 – Citizenship education & ethics
Applications of Mathematics in Data Sciences	22-Nov-23	4.4 – Advanced STEM & data literacy skills
Industrial Visit: Haier Appliances India Pvt. Ltd	03-Apr-24	4.4 – Faculty professional development
Startup Maha Kumbh – Participation at Pragati Maidan	18–20 Mar 2024	4.4 – Practical employability & entrepreneurship skills

4. Centres of Excellence

Overview:

Manav Rachna University (MRU) has always envisioned education as a lifelong pursuit that nurtures intellectual growth, social consciousness, and sustainable innovation. The university's Centres of Excellence embody this vision by integrating research, practice, and community engagement into the learning ecosystem.

These centres act as living laboratories of lifelong learning, where students, faculty, professionals, and community members collaborate to generate ideas, solve problems, and promote continuous skill development. They foster a mindset that values curiosity, reflection, and adaptability—qualities that define lifelong learners.

Two of MRU's prominent Centres of Excellence—the Manav Rachna Centre for Peace and Sustainability (MRCPS) and the Centre for Advanced Learning (CAL)—serve as shining examples of how academic institutions can sustain learning beyond formal education.

Manav Rachna Centre for Peace and Sustainability (MRCPS): Cultivating Values for Sustainable and Lifelong Learning



[CPS | Manav Rachna Vidyanatariksha](#)

The Manav Rachna Centre for Peace and Sustainability (MRCPS) was established with a vision to promote peace education, sustainability, and responsible citizenship. The centre

focuses on research, advocacy, and experiential programs that encourage learners to think critically about social justice, environmental stewardship, and intercultural harmony.

MRCPS conducts awareness drives, workshops, community partnerships, and research projects aligned with the United Nations Sustainable Development Goals (SDGs). It provides a platform for interdisciplinary dialogue—linking education, ethics, and environmental consciousness.

In the context of lifelong learning, MRCPS plays a transformative role by nurturing values that extend beyond the classroom. Learners are encouraged to see peace and sustainability as lifelong commitments, not one-time academic subjects. Through its initiatives, the centre cultivates empathy, civic responsibility, and global awareness—skills and attitudes that mature over a lifetime.

By embedding sustainability into the educational process, MRCPS empowers students and professionals to act as lifelong learners and changemakers who can continuously apply knowledge for societal and environmental betterment.

Centre for Advanced Learning (CAL): Empowering Continuous Academic and Professional Growth



[CAL | Manav Rachna Vidyanatariksha](#)

The Centre for Advanced Learning (CAL) at MRU focuses on promoting academic excellence, research innovation, and continuous professional development. It serves as a hub for specialized training, certification courses, and capacity-building programs designed to help learners adapt to emerging trends across disciplines.

CAL offers skill enhancement modules, interdisciplinary learning platforms, and short-term programs that bridge the gap between academia and industry. By doing so, it equips students, alumni, and working professionals with tools to remain competitive and relevant in a rapidly changing knowledge economy.

From introducing innovative pedagogies to encouraging cross-disciplinary collaboration, CAL fosters an environment where learning never stops. It embodies MRU's vision of

education as a continuous process—one where individuals return to the university space to update, refine, and expand their expertise throughout life.

In essence, CAL transforms MRU into a lifelong learning ecosystem by making education accessible, modular, and responsive to the learner's evolving needs.

Conclusion: Nurturing Skill Development for Lifelong Learning.....

The Manav Rachna Centre for Peace and Sustainability (MRCPS) and the Centre for Advanced Learning (CAL) reflect MRU's integrated approach to lifelong learning. While MRCPS emphasizes values, ethics, and social responsibility, CAL focuses on skills, innovation, and professional growth. Together, they demonstrate how an educational institution can sustain learning as a continuous, inclusive, and transformative journey.

By promoting both inner development (peace, ethics, sustainability) and external advancement (skills, innovation, technology), these Centres of Excellence exemplify MRU's mission to prepare learners who continue to evolve intellectually, socially, and morally throughout their lives.

5. Dr. O.P. Bhalla Foundation



(Reference: [Dr. O.P. Bhalla Foundation – Following the path of Karmayogi](#))

The Dr. O.P. Bhalla Foundation is the institutional social-responsibility arm of Manav Rachna Educational Institutions, established in 2014 with the vision of its founder, Dr. O.P. Bhalla, to serve society through education, empowerment and inclusive development. As a registered non-profit (Section 12A and 80G certified), the Foundation engages youth, educational institutions and community stakeholders in

social welfare initiatives across key domains: education, capacity-building, environment and sustainability, gender equality, health and geriatric care.

Key Focus Areas

- **Education & Skills Access:** The Foundation works to ensure that children, youth and under-privileged learners do not face financial or structural barriers to learning. It offers scholarships, financial aid, learning materials and outreach support.
- **Environment & Sustainability:** It links education with a sustainability mindset. For example, the “Raddi Recycling Initiative” converted 55,000 kg of waste paper into notebooks for government school children — a project that builds both environmental stewardship and educational access.
- **Healthcare & Wellness:** DOPBF organizes health camps, geriatric welfare drives and general-wellness outreach in the regional community.
- **Gender & Inclusive Growth:** Through campaigns and programs, the Foundation fosters gender-equal and inclusive opportunities for participation in educational, social and economic spheres.

Contribution to Lifelong Learning and SDG 4

By extending educational support beyond enrolled university students to the wider community, the Foundation is a major enabler of lifelong learning. Its work ensures that children from disadvantaged backgrounds can access learning materials, that youth are equipped with skills and that the environment in which learning happens is more just and equitable. The alignment with SDG 4: Quality Education is direct:

- Removing financial, material or structural barriers to education for the community helps achieve **target 4.5** (equal access for vulnerable groups).
- Integrating sustainability-oriented education and civic consciousness (e.g., through recycling-notebook drives) supports **target 4.7** (education for sustainable development).
- Offering skills-oriented support and outreach aligns with **target 4.4** (skills for work, entrepreneurship and innovation).

Institutional Impact

The Foundation’s initiatives bring university resources into the public sphere: scholarships and learning materials distributed to government school students, recycled-material drives, allied health and community wellness camps, and youth-led “Young Karmayogi” councils that act as change-agents. By doing this, DOPBF complements the academic efforts of the university with social outreach. This integration strengthens the university’s mission of making education accessible, relevant and transformative. It also ensures that the campus, its expertise, and its values extend into the community and contribute to sustainable, lifelong learning.

Together towards Lifelong Learning.....

The **University Instrumentation Center**, **Innovation and Incubation Centre**, the **Centers of Excellence**, **Dr. O. P. Bhalla Foundation** and the **Kaushal Karyashala Venture** form the core of MRU's public access ecosystem. They transform the university into an open educational community—a space where knowledge is freely shared, collaboration is encouraged, and every individual is empowered to learn continuously.

These centers demonstrate MRU's dedication to lifelong learning not as a concept, but as a living practice, one that unites research, skill development, innovation, and values into a coherent mission for social good.

6. Faculty Learning without Boundaries: MRU as NITTTR's National Resource Hub



Manav Rachna University serves as a Nodal Centre for the National Institute of Technical Teachers Training and Research (NITTTR), Ministry of Education, Government of India. Through this role, MRU functions as a national-level training hub for faculty development, pedagogical innovation, and professional capacity building, contributing directly to the lifelong learning ecosystem for educators across India.

The NITTTR-led FDPs hosted by MRU are open to participants from all institutions—including government and private colleges, polytechnics, universities, and school education systems. This openness ensures that the university's academic infrastructure and expertise extend beyond its campus to the wider teaching community.

Each program focuses on advancing the quality of teaching and learning in technical and higher education through the integration of emerging technologies, innovative pedagogy, and outcome-based education. Faculty participants gain hands-on experience with tools such as ICT in teaching, digital evaluation systems, blended learning frameworks, educational research design, and sustainable education practices. The sessions are facilitated by resource persons from NITTTR Chandigarh, NITTTR Bhopal, and national experts, ensuring exposure to cutting-edge knowledge and best practices.

These FDPs typically run in hybrid or online-interactive formats, allowing educators from remote and underserved regions to participate without geographical constraints. The programs often include collaborative activities, digital certifications, and follow-up mentoring, strengthening continuous professional development.

By functioning as a NITTTR nodal centre, MRU acts as a national public resource for faculty learning, providing free or subsidized access to structured professional training. The initiative directly supports SDG 4 (Quality Education), particularly:

- Target 4.3 – by ensuring equal access to quality technical and higher education for educators.
- Target 4.4 – by enhancing teachers’ digital, pedagogical, and employability skills.
- Target 4.7 – by integrating sustainability, innovation, and inclusive values into teaching practices.

Over the years, MRU has hosted several NITTTR FDPs on topics such as *Curriculum Design for Outcome-Based Education*, *AI and Machine Learning in Teaching*, *Sustainability and Green Education*, *Research Methodology for Educators*, and *Assessment and Evaluation in Higher Education*. Hundreds of faculty members from across India have benefitted from these programs, gaining exposure to national policy frameworks and modern educational practices.

In its role as a NITTTR nodal centre, MRU not only strengthens its own teaching fraternity but also acts as a lifelong learning hub for the nation’s educators—empowering them to deliver education that is modern, inclusive, and globally aligned.

C. Free Online Learning Resources

To strengthen its lifelong learning outreach, MRU provides multiple *open and digital learning avenues*:

1. **OE4BW and NPTEL Mentorships** – Faculty members serve as mentors for open education ventures, guiding global learners on sustainability projects and MOOCs.
2. **Open Educational Resources (OERs)** – Free course content, e-modules, and resource handbooks from sustainability courses are available for public use.
3. **Recorded Lectures and Vlogs** – The university hosts recorded sessions and STEM videos on its **YouTube channel**, showcasing student-led experiments and innovation projects.
4. **Educational Repository and LMS** – The university’s Learning Management System houses digital repositories, research publications, and community education resources for open access.
5. **Teacher-on-Call Digital Access** – Provides online academic guidance and emotional support for school learners through live sessions.
6. **LinkedIn Learning Licenses** – MRU offers free access to **LinkedIn Learning** for all students and faculty, promoting professional upskilling and lifelong digital learning.

Together, these online initiatives embody MRU’s belief in **open, inclusive, and continuous education**. They empower individuals of all ages to learn at their own pace and contribute to sustainable social progress.

Sub Tab 1: Extending Quality Education through Mentoring

MRU’s commitment to **quality education** extends far beyond formal training. Its faculty members actively mentor learners at both **national and global levels**, embodying the spirit of lifelong learning through personal engagement and guidance.

- At the **national level**, MRU faculty serve as **mentors for SWAYAM**, the national MOOC platform initiated by the Government of India. Through this, they guide learners enrolled in open online courses—offering academic feedback, resolving queries, and fostering deeper conceptual understanding. This mentorship ensures that open education remains human-centered and effectively bridges the gap between digital learning and individual academic growth.

Mentor Name	Mentor EmailId	CourseId	Course Name	Mentee count
Dr. Abhishek Saxena	abhisheksaxena@mru.edu.in	noc24-ee04	Deep Learning	4
Agha Imran Husain	agha@mru.edu.in	noc24-cs31	Information Security - 5 - Secure Systems Engineering	10
Anup singh Kushwaha	anup@mru.edu.in	noc24-cs09	Cloud Computing and Distributed Systems	15
Anu Priya Sharma	anupriya@mru.edu.in	noc24-cs65	Business Intelligence & Analytics	3
chandni magoo	chandnimagoo@mru.edu.in	noc24-hs07	Introduction On Intellectual Property To Engineers And Technologists	4
Dr. Deepti Thakral	deepti171@yahoo.co.in	noc24-cs56	Social Networks	16
Esha Khanna	eshakhanna@mru.edu.in	noc24-cs45	Programming, Data Structures And Algorithms Using Python	18
Gunjan	gunjan@mru.edu.in	noc24-cs22	Data Mining	12
Mamta Arora	imamta.arora@gmail.com	noc24-cs20	Data Analytics with Python	8
Manoj Kumar	manoj@mru.edu.in	noc24-hs60	Patent Law for Engineers and Scientists	9

Manpreet kaur	manpreet@mru.edu.in	noc24-de08	Design, Technology and Innovation	6
Narender	narendergotam@gmail.com	noc24-cs50	User-centric Computing For Human-Computer Interaction	4
NEELU CHAUDHARY	neelu.chy@gmail.com	noc24-cs51	Introduction to Machine Learning	2
Prinima - -	prinima@mru.edu.in	noc24-cs35	Introduction To Internet Of Things	7
Ram Chatterjee	ram@mru.edu.in	noc24-cs04	Privacy and Security in Online Social Media	40
Dr. Ranjna Jain	ranjnajain@mru.edu.in	noc24-cs57	The Joy of Computing using Python	60
Ridhi Khanna	ridhikhanna26@gmail.com	noc24-mg47	Principles of Management	1
Sachin Lakra	sachinlakra@gmail.com	noc24-mg17	Ethics In Engineering Practice	4
Dr. Shalu	singhshalu2609@gmail.com	noc24-lw02	IP Management & Technology Transfer	25
Tamanna	tamanna.cst@mru.edu.in	noc24-cs29	Getting Started with Competitive Programming	8
URMILA	urmila@mru.edu.in	noc24-cs01	Foundations of Cryptography	3

- At the **global level**, MRU contributes through the **Open Education for a Better World (OE4BW)** program, an international mentoring platform under UNESCO and the University of Nova Gorica, Slovenia. Dr. Rashee Singh (Head, School of Education & Humanities) and Dr. Savita Sharma (Associate Professor, SoEH) have served as mentors on this platform, guiding educators and practitioners worldwide in designing open educational resources and sustainability-focused learning modules. Their mentorship has enabled the creation of globally shared educational content that supports **SDG 4.7**—education for sustainable development, global citizenship, and intercultural understanding.

ONLINE COURSE

Nutrition Essentials A Blueprint For Healthy Living

To be offered as part of UNESCO
OE4BW Hub Health

SDG3: Good Health & Well-being

17th APRIL
to
15th MAY
2024

REGISTER NOW

JOIN FOR FREE

SCAN TO JOIN



Target Audience

- Students (Collegiate)
- Educators
- Healthcare Professionals
- Counsellors

Course Outcomes

- Explain the basic concept of Nutrition
- Understand the importance of nutrients in overall well-being
- Identify the importance of a balanced diet for healthy living
- Develop an insight into food habits for nourishing the body

Dr. SAVITA SHARMA
Associate Professor, Dept of Education,
Manav Rachna University, Faridabad



Project Mentor

Dr. GOTHAINAYAGI ARUMUGAM
Lecturer (Food Science & Nutrition)
Vinayaka Mission' College of Nursing,
VMRF (DU), Paducherry



Project Developer

Dr. REKHA CHAVHAN
Associate Professor,
Dept of education, SMT Women's University,
Mumbai



Health Hub Coordinator



Facts to Fantasy: Writing stories for science

Online Course by Dhairya Pandya

Watch [Course Introduction Video](#) here

4 Week Course

20th April to 20th May 2024

Target Audience

- Science Teachers
- Pre-services teacher with science background

This online course covers

- Components of Storytelling
- Combining objectives and storytelling for science
- Writing stories for science
- Presenting your stories

Course Team



• **Dhairya Pandya**
Project Developer
Storyteller, M.Sc. eLearning,
MIT ADT University



• **Dr. Savita Sharma**
Project Mentor
Associate Professor,
Manav Rachna University



• **Dr. Ervin Pfeifer**
Hub Youth Coordinator
OE4BW (UNESCO)



Click here to join the course
or Scan QR code



In case of any query please reach out
@narrative_educator@gmail.com



OE4BW™

OPEN EDUCATION FOR A BETTER WORLD

A Part of UNESCO International Online
Mentoring Programme

Five Week Massive Open Online Course On Sustainable Living - Sustainable Future

Starting from
July 4, 2024

- Free Registration
- Open For All
- Course Duration- 5 Weeks

"We have the power to change the narrative. Let's rewrite the story of our planet and ensure that it's a tale of resilience, sustainability, and hope."

-Jamie Margolin

Hub Coordinator



Dr. Ajita Deshmukh

Mentor



Dr. Rashee Singh

Developer



Dr. Joyti Seharawat

Co-developer



Dr. Manjeet Yadav

Enroll for free:
<https://canvas.instructure.com/enroll/3R9RPH>
Or sign up at <https://canvas.instructure.com/register> and use the join code:
3R9RPH

Faculty of
Rao Lal Singh College of Education
Sidhrwalli, Haryana, India (Affiliated to Gurugram University)

Sub Tab 2: Extending Quality Education Globally through Open Educational Resources (OERs) on the OE4BW Platform

Manav Rachna University (MRU) actively contributes to the global open education movement through the Open Education for a Better World (OE4BW) initiative—an international mentoring and co-creation program supported by UNESCO and coordinated by the University of Nova Gorica, Slovenia.

During the academic year 2023–24, MRU faculty members successfully developed and mentored four Open Educational Resources (OERs) on this platform, advancing the mission of accessible, equitable, and lifelong learning for all.

The OE4BW initiative empowers educators worldwide to design and publish freely available, high-quality learning materials that align with the United Nations Sustainable Development Goals (SDGs). Each OER developed under this collaboration by MRU is freely accessible, globally shareable, and released under a Creative Commons (CC) license, ensuring unrestricted reuse, adaptation, and enrolment.

Through these contributions, MRU stands as a knowledge partner in global education, transforming institutional expertise into open public learning resources that extend quality education beyond borders.

Details of OERs Developed and Mentored by MRU Faculty (2023–24)

1. Skill Development for a Sustainable Future

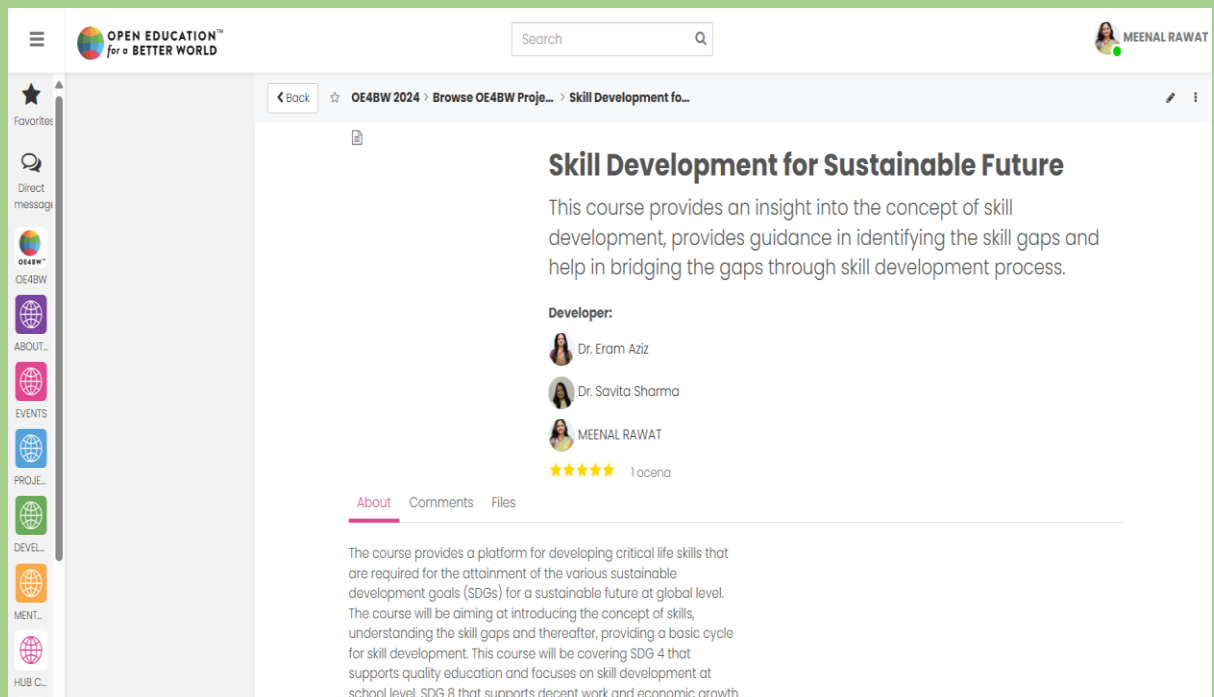
Developer: *Ms. Meenal Rawat, Assistant Professor, SoEH*

Co-Mentors: *Dr. Eram Aziz and Dr. Savita Sharma, SoEH, Manav Rachna University; Dr. Ruwandika Perera, The Open University of Sri Lanka; and Ajita Deshmukh, Hub Education*

Hub: *Education Hub, OE4BW*

Access: [Skill Development for Sustainable Future](#)

This OER focuses on building 21st-century employability and sustainability skills among learners through modules on digital literacy, communication, leadership, innovation, and teamwork. It connects skill development with ethical, environmental, and social awareness. By equipping youth and educators with competencies for meaningful work and lifelong adaptability, it contributes to SDG 4.4, expanding access to job-relevant skills globally.



2. Integrating Sustainability into Education for Eco-Conscious Leaders Tomorrow

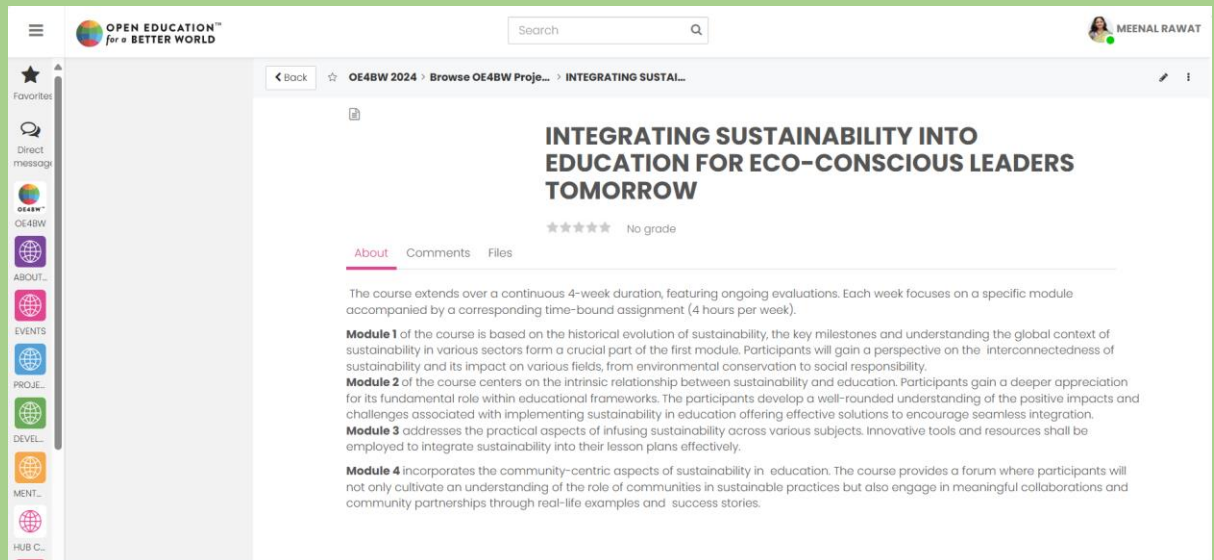
Developers: *Dr. Meena Kapahi, Professor, School of Sciences and Dr. Vinayak Vandan Pathak, Assistant Professor, School of Sciences*

Mentors: *Teresita Gravina and Werner Westermann, Hub Sustainability, OE4BW*

Hub: *Sustainability Hub, OE4BW*

Access: [INTEGRATING SUSTAINABILITY INTO EDUCATION FOR ECO-CONSCIOUS LEADERS TOMORROW](#)

This course empowers educators to embed **sustainability concepts and environmental stewardship** into their curriculum. Through experiential learning, interdisciplinary content, and reflective exercises, it prepares teachers to act as eco-conscious leaders shaping the next generation's attitudes toward the planet. It supports **SDG 4.3** and **SDG 4.7**, promoting access to environmental education and sustainability-driven teaching practices across borders.



3. Entrepreneurial Development: Empowering Minds for Innovation and Change

Developer: *Dr. Yogita Sharma, Professor, School of Management and Commerce (SMC)*

Mentor: *Werner Westermann, Hub Sustainability, OE4BW*

Hub: *Education and Sustainability Hubs, OE4BW*

This OER cultivates **entrepreneurial mindset and innovation skills** among learners from varied academic and cultural backgrounds. It focuses on ideation, problem-solving, start-up culture, and sustainable business models—bridging management education with global developmental goals. The course advances SDG 4.4 by equipping learners with competencies for self-employment, leadership, and innovation aligned with sustainable development principles.



4. Infusing the Concept of Responsible Consumption in Education for Sustainable Development

Developer: Ms. Ajanta Sikdar, PhD Scholar, School of Education & Humanities (SoEH)

Mentors: Prof. (Dr.) Rashee Singh, HOD SoEH, Manav Rachna University and Dr. Jennifer D. Paño, Cebu Normal University, Philippines

Hub: Sustainability Hub, OE4BW

This OER helps educators integrate principles of **responsible consumption and sustainable living** into classroom learning. It includes interactive lesson plans, classroom activities, and reflective assignments designed to foster awareness of ecological balance and ethical consumption. By promoting sustainability education and global citizenship, this course advances **SDG 4.7**, enabling educators worldwide to embed sustainable thinking into their pedagogy.

OE4BW™

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On
Sustainable Living - Sustainable Future

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- Open For All
- Course Duration- 5 Weeks

"We have the power to change the narrative. Let's rewrite the story of our planet and ensure that it's a tale of resilience, sustainability, and hope."

-Jamie Margolin

Hub Coordinator	Mentor	Developer	Co-developer
 Dr. Ajita Deshmukh	 Dr. Rashee Singh	 Dr. Joyti Sehrawat	 Dr. Manjeet Yadav

Enroll for free:
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Or sign up at <https://canvas.instructure.com/register> and use the join code:
3R9RPH

Faculty of Rao Lal Singh College of Education
Sidhrawali, Haryana, India (Affiliated to Gurugram University)

Impact and Global Reach.....

All four OERs are hosted on the OE4BW global repository, where they are freely available for enrolment to educators, students, and professionals worldwide. Each course carries a Creative Commons license, allowing users to reuse, translate, or adapt materials within their own teaching or professional contexts—ensuring long-term accessibility and knowledge sharing.

The mentoring and co-creation process followed in these projects exemplifies MRU's global outreach in quality education. Faculty mentors such as Dr. Rashee Singh and Dr. Savita Sharma have guided international mentees in designing educational content that transcends geographical and disciplinary boundaries. The collaboration promotes cross-cultural dialogue, pedagogical innovation, and capacity-building for teachers in Asia, Africa, and Europe.

These OERs collectively support the global vision of lifelong learning for sustainable societies, contributing to:

- SDG 4.3: Expanding access to affordable and open higher education opportunities.
- SDG 4.4: Strengthening relevant skills for employment, entrepreneurship, and innovation.
- SDG 4.7: Advancing education for sustainable development and global citizenship.

Through its involvement in OE4BW, Manav Rachna University demonstrates how open education and mentoring can extend the impact of quality education far beyond institutional walls. By creating and mentoring freely licensed, globally accessible OERs, MRU has positioned itself as a leader in open knowledge dissemination and sustainable pedagogy.

Each course serves as a living example of MRU's philosophy that *education must be inclusive, accessible, and transformative*. These initiatives not only empower global educators and learners but also reaffirm MRU's contribution to the UN's 2030 Agenda for Sustainable Development, ensuring that learning truly becomes a lifelong, borderless pursuit.

Sub Tab 3: Recorded Lectures, STEM Vlogs, and Student Innovation Showcases

Manav Rachna University extends its commitment to lifelong and inclusive learning through an ever-growing repository of recorded lectures, webinars, and student-created STEM vlogs hosted on its official YouTube channel and other open-access platforms. These digital resources are freely available to learners, educators, and the general public, reinforcing the idea that quality education should transcend physical and institutional boundaries.

The recorded lectures feature faculty-led sessions from diverse disciplines — Education, Sciences, Engineering, Management, and Humanities — providing conceptual clarity, demonstrations of practical experiments, and expert insights on emerging topics. Many of these sessions originate from regular classroom lectures, workshops, and faculty development programs, repurposed for public viewing so that anyone, regardless of location or academic affiliation, can access university-level instruction.

Complementing these academic lectures, MRU's STEM vlogs highlight the creativity and curiosity of its students. The short, engaging videos capture hands-on experiments, model demonstrations, coding tutorials, robotics projects, and innovation challenges carried out in MRU's laboratories and innovation spaces. Each vlog is designed and narrated by students, helping them communicate science and technology concepts in simple, relatable ways. These videos serve a dual purpose — they nurture students' science communication and

digital literacy skills while inspiring younger learners and school students to explore STEM disciplines through real-world applications.

Through these open-access videos, MRU brings its classrooms to the world. The digital repository includes:

- Recorded classroom lectures and webinars on contemporary subjects such as sustainability, data science, and educational technology.
- STEM vlogs and short experiments produced by students in collaboration with faculty mentors.

Links of some vlogs/blogs/video lectures on social media by MRU family:

- Vlog on Classification of Plants by Bhumika Sehra, student, B.Sc. B.Ed. sem 4

<https://youtube.com/shorts/ISV9olKPXO4?si=lv6y2oeKRJQkF5Tp>

- Vlog on National Science Museum by Bhumika Sehra, student, B.Sc. B.Ed. sem 4

https://youtube.com/shorts/Z3Ciu7VNLrs?si=rb3oC1uleEG_N_WT

- Blog on Trilobite by Mahima Messay, student of B.Sc. B.Ed sem 8

[Trilobites](#)

- Blog on Role of Genetics in Predicting Illnesses by Trisha Mishra, student of B.Sc. B.Ed sem 8

[Unraveling the Genetic Puzzles: Understanding the Role of Genetics in Predicting Illnesses](#)

- YouTube Lecture on Skill Development by Ms. Meenal Rawat, Assistant Professor, Manav Rachna University

https://youtu.be/Dum7DMKS_PY?feature=shared

- YouTube Lecture on Introduction to the concept of Skill Development by Dr. Eram Aziz, Assistant Professor, Manav Rachna University

<https://youtu.be/iTASnagFjFA?feature=shared>

- Dr. Shweta Tiwari has delivered a variety of lectures pertaining to the discipline of Teacher Education and Psychology

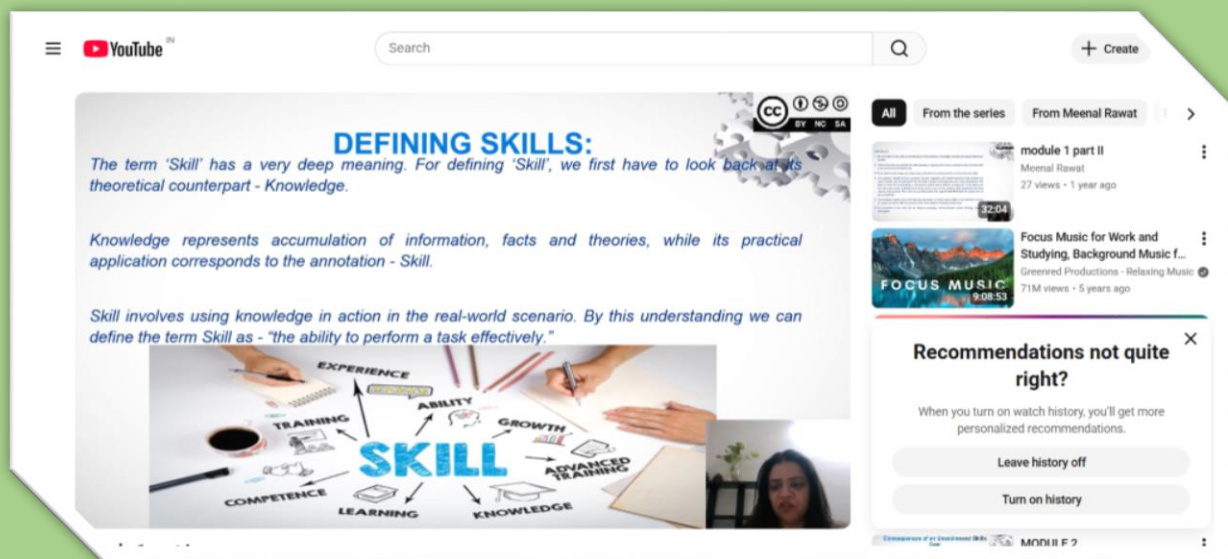
<https://www.youtube.com/channel/UC3JjkFrUIkfprLGL14PugvA>

All content is curated to be freely viewable, promoting open learning beyond the campus gates. This initiative directly contributes to SDG 4 (Quality Education) by:

- Enhancing open access to educational content for continuous learning (Target 4.3).
- Promoting STEM engagement and digital skills among students and youth (Target 4.4).

- Supporting education for sustainability and innovation through community sharing (Target 4.7).

Glimpses of the video lectures/vlogs/blogs:





module 3

Meenal Rawat
16 subscribers

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trishamishra0706 · Mar 31, 2024 · 7 min read

Unraveling the Genetic Puzzles: Understanding the Role of Genetics in Predicting Illnesses

Disclaimer:

The information provided on this blog is for general informational purposes only. All content provided on this blog is for informational purposes only and are personal views of Trisha Mishra, a student pursuing an integrated B.Sc. B.Ed. degree at Manav Rachna University, with a particular fascination with Genetics and Paleontology.



MANAV

Trilobites

SATURDAY, MARCH 30, 2024

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WHO WERE TRILOBITES?

The word 'trilobite' refers to this side-to-side partition. Trilobites rank among the most important early animals. Geologists know that they were marine animals because of the rocks in which they are found and the other types of fossils associated with them.



For support and protection, the soft parts of the animal were covered by an exoskeleton. Usually only the dorsal part of the exoskeleton, covering the animal's back, was fossilized. The ventral (underside) part of the animal may have been covered by a soft membrane or other material that could not be fossilized.

Exoskeleton is divided from anterior (front) to posterior (back) into:

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BLOG ARCHIVE

[March 2024 \(1\)](#)

By offering its digital learning materials openly on platforms such as YouTube, MRU democratizes knowledge and transforms traditional teaching moments into global learning opportunities. The initiative exemplifies the university's vision of education as a public, collaborative, and lifelong endeavour, where learning resources are freely shared to empower minds across boundaries.

Sub Tab 4: Educational Repository and Learning Management System (LMS)

Manav Rachna University's Learning Management System (LMS) serves as a comprehensive digital platform that integrates teaching, research, and community learning into a single, open-access ecosystem. It houses a well-organized educational repository that supports both enrolled students and external learners seeking quality learning materials, research publications, and self-paced educational resources.

The LMS is designed to facilitate continuous and flexible learning, aligning with the principles of lifelong education under SDG 4. Faculty members across disciplines regularly upload lecture notes, recorded classes, reference readings, quizzes, assignments, and digital toolkits to help learners revisit and reinforce concepts at their own pace. Many of these materials are shared as open-access modules, available beyond institutional boundaries for wider academic use.

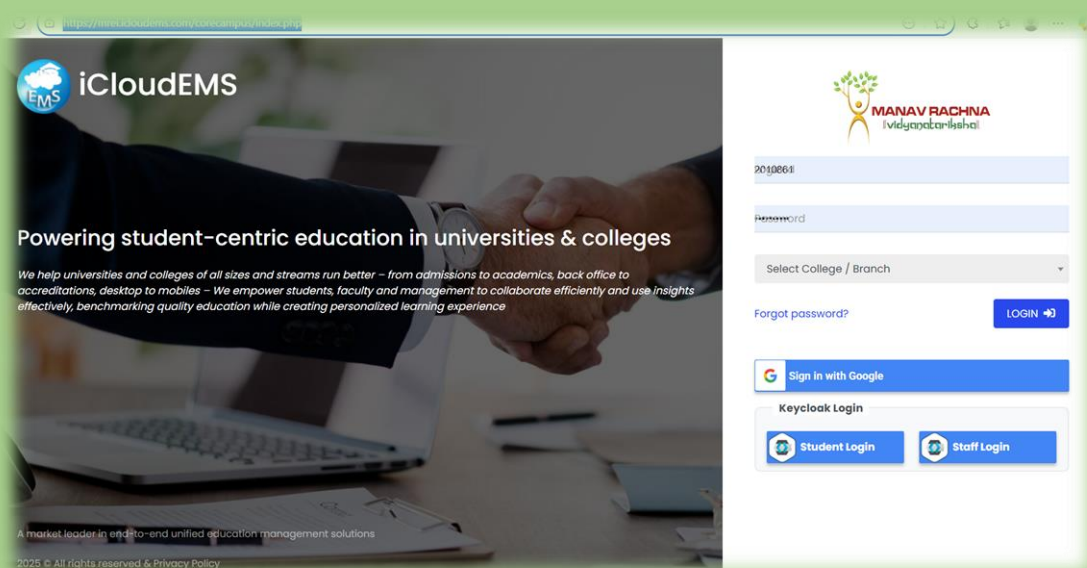
Through this repository, MRU ensures that knowledge generated within the university remains accessible to society, allowing learners, educators, and researchers from other institutions to benefit from its academic outputs. The repository also supports research

transparency and collaboration by linking to national and global databases, including institutional publications and open education platforms.

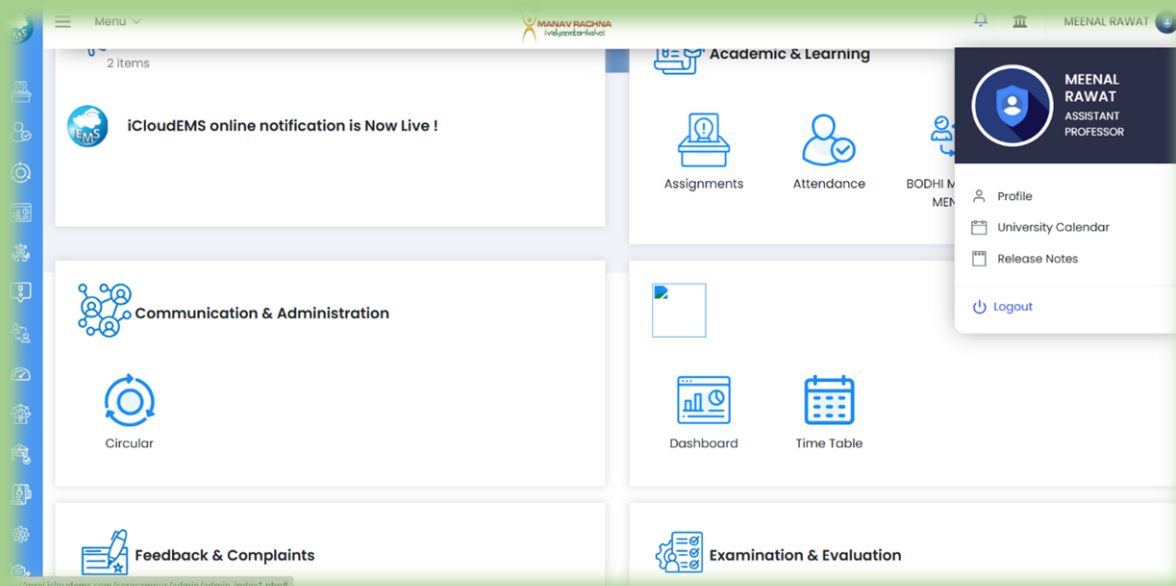
The LMS hosts structured courses and modules that support skill enhancement and teacher education, complementing MRU's other public education ventures like SWAYAM mentoring and OE4BW participation. Its user-friendly interface, 24x7 accessibility, and digital archiving system make it a reliable platform for continuous learning and professional development.

Link for LMS: [A complete web enabled Education Administration Software](#)

Glimpses of LMS:



Sr.No.	Class	Semester	Division	Course Name	Allotment Type	Practical Batch	Goto	Goto	Approval Status	Approval Remarks	Filled Status
1	B.Sc B.Ed	Sem 3	B	ANGIOSPERM ANATOMY AND ECOLOGY - (EDH240C)	PP	EDH240C-B	Topic List	Session Plan	Not Approved		Filled
2	B.Sc B.Ed	Sem 5	B	PLANT PHYSIOLOGY AND METABOLISM - (EDH310B-T)	PP	EDH310B-T-B	Topic List	Session Plan	Not Approved		Filled
3	B.Sc B.Ed	Sem 7	B	GENETICS AND PALENTOLOGY - (EDH411B-T)	PP	EDH411B-T-B	Topic List	Session Plan	Not Approved		Filled
4	B.Sc B.Ed	Sem 3	B	ANGIOSPERM ANATOMY AND ECOLOGY LAB - (EDH241C)	PR	CBZSem3(25)	Topic List	Session Plan	Not Approved		Filled
5	B.Sc B.Ed	Sem 5	B	PLANT PHYSIOLOGY AND METABOLISM LAB - (EDH310B-P)	PR	CBZSem5-25	Topic List	Session Plan	Not Approved		Filled
6	B.Sc B.Ed	Sem 7	B	GENETICS AND	PR	CBZ&SLMSem7(25)	Topic List	Session Plan	Not		Filled



By maintaining and expanding this open digital repository, Manav Rachna University promotes the democratization of education — ensuring that the pursuit of knowledge remains accessible, affordable, and sustainable for all. The initiative contributes directly to:

- **SDG 4.3:** Providing open and equitable access to higher and technical education.
- **SDG 4.4:** Enhancing digital literacy and professional competencies through self-paced resources.
- **SDG 4.7:** Encouraging awareness and education for sustainable development.

In essence, MRU’s LMS and educational repository act as a digital extension of its classrooms and laboratories, ensuring that every lecture, publication, and idea produced within the university continues to educate, inspire, and empower learners — both on campus and across the world.

Sub Tab 5: Teacher-on-Call Digital Access

The Teacher-on-Call initiative at Manav Rachna University (MRU) is a distinctive digital outreach program launched under the Dr. O.P. Bhalla Foundation to provide academic guidance and emotional support to school learners, particularly from underserved communities. It represents MRU’s ongoing mission to make quality education accessible beyond its campus, aligning directly with SDG 4 – Quality Education and the principle of lifelong learning for all.

The initiative connects trained volunteer teachers, MRU faculty, and student-teachers with school learners who can reach out via phone or virtual platforms for personalized learning assistance. The program primarily targets students from government schools and community centres, many of whom face barriers to consistent educational support.

Program Reach and Impact (2023)

During its latest operational cycle, the Teacher-on-Call service recorded a total of 224 calls received in July 2023, reflecting active engagement despite the concurrent first-term examinations in schools.

Analysis of the call logs revealed that:

- English was the most frequently requested subject, followed by Mathematics and Science.
- The majority of calls came from students in Grades 9 and 10, indicating the demand for academic mentoring during the board preparation years.
- Learners from Government Schools in Ankhir and nearby regions were among the most active users.

In addition to responding to incoming academic queries, MRU student volunteers and interns from the University of Petroleum and Energy Studies (UPES), Dehradun, proactively reached out to regular callers to encourage continued participation and offer motivational guidance. This helped maintain student engagement and built a sense of personal connection and accountability between learners and mentors.

The program offered:

- Subject-specific doubt resolution and study planning assistance.
- Guidance for exam preparation and digital learning tools.
- Emotional and motivational support, especially for students experiencing learning anxiety or limited home learning environments.

Integration with Lifelong Learning-

The Teacher-on-Call initiative goes beyond academic tutoring—it cultivates mentorship, empathy, and continuous learning. It allows MRU's education students to practice community-oriented pedagogy, bridging the gap between teacher preparation and social responsibility. The platform also encourages the use of digital and telecommunication tools for inclusive education, reinforcing skills in remote teaching, adaptability, and emotional intelligence.

The initiative contributes significantly to multiple SDG 4 targets:

- Target 4.3: Ensuring equal access to quality educational support for school learners from all backgrounds.
- Target 4.4: Developing mentoring and digital facilitation skills among pre-service teachers.
- Target 4.7: Promoting inclusive, compassionate, and sustainable approaches to education.

The program successfully ran until September 2023, when it concluded its active phase, with all student and call data transferred to the Sahaj Path team for further educational engagement. Its success has laid the foundation for future models of community-linked learning support and teacher-student mentoring networks.

Sub Tab 6: LinkedIn Learning Licenses: Enabling Lifelong Digital and Professional Upskilling

Manav Rachna University (MRU) has taken a forward-looking step in promoting lifelong learning and digital empowerment by offering free LinkedIn Learning licenses to all its students and faculty members. This initiative reflects MRU's commitment to ensuring unrestricted access to global learning opportunities and developing career-ready competencies aligned with Sustainable Development Goal 4 (Quality Education) — particularly Targets 4.3 and 4.4, which emphasize equal access to quality education and skill enhancement for employability.

Through a formal collaboration with LinkedIn, MRU has integrated the LinkedIn Learning platform with its Learning Management System (LMS), allowing every learner and educator to access thousands of certified, industry-aligned online courses at no additional cost. These licenses enable users to pursue certifications in areas that complement academic study and foster professional readiness, including:

- Digital literacy, analytics, and AI tools
- Leadership, teamwork, and communication
- Research and data visualization
- Entrepreneurship and innovation
- Sustainability, emotional intelligence, and career planning

Structured Participation and Assessment

Unlike many optional MOOCs, MRU has embedded LinkedIn Learning courses as an integral part of its curriculum and self-development modules, ensuring that participation is 100% across all programs. Every enrolled student and faculty member is provided with an active license and guided on personalized learning pathways relevant to their discipline.

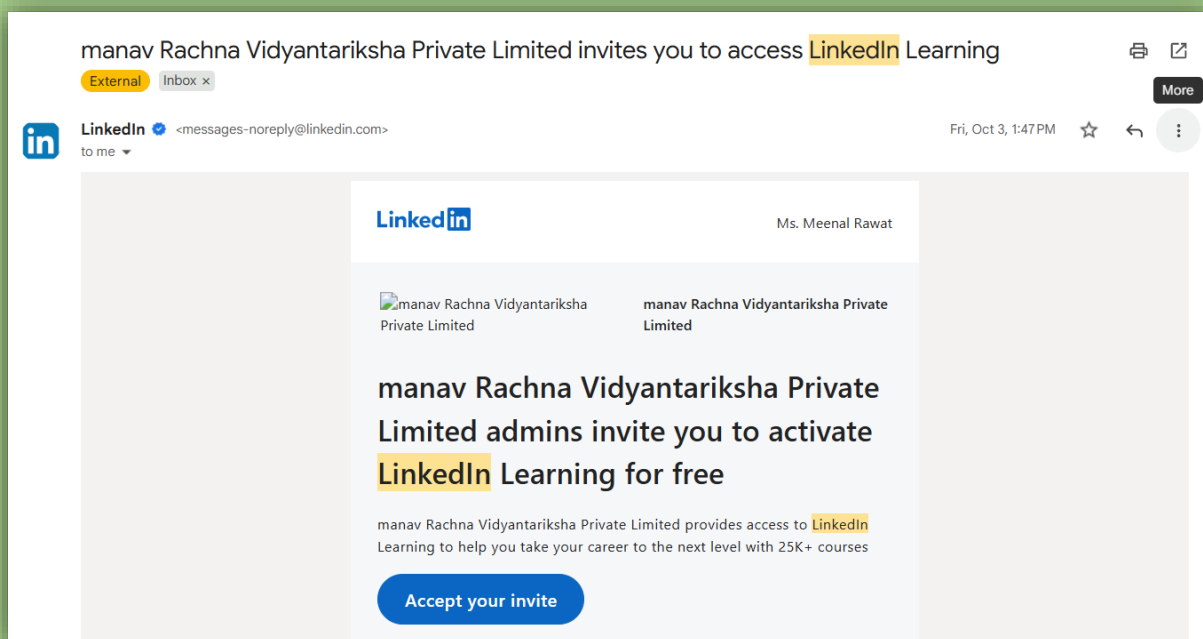
Each course undertaken on the platform follows clearly defined rubrics, shared in advance with students, detailing:

- Learning objectives and expected competencies
- Assessment criteria and reflection components
- Integration with internal evaluation (credits, assignments, or portfolios)
- Certification and evidence submission for record-keeping

The initiative benefits both learners and educators.

- Students gain access to a global pool of knowledge that extends beyond textbooks — strengthening their employability, digital fluency, and entrepreneurial mindset.
- Faculty members use the platform for pedagogical innovation, academic enrichment, and research upskilling. They also create curated learning playlists tailored to course objectives, supporting blended and flipped classroom models.

The platform's analytics further help MRU identify emerging trends in learners' skill interests, allowing departments to adapt academic offerings and strengthen alignment with Industry 4.0 requirements.



Contribution to SDG 4: Quality Education

By offering free, certified, and self-paced learning opportunities under a structured institutional framework, MRU ensures that every learner becomes a lifelong learner. The initiative demonstrates measurable contributions to:

- SDG 4.3: Expanding access to quality technical and higher education without financial barriers.
- SDG 4.4: Equipping youth and adults with relevant digital, entrepreneurial, and professional skills for employment.
- SDG 4.7: Promoting values of global citizenship, sustainability, and innovation through open learning resources.

Summary of the initiative:

Table: LinkedIn Learning License Initiative – Impact Snapshot (AY 2023–24)

Category	Details
Program Title	<i>LinkedIn Learning Licenses for Students and Faculty</i>
Mode of Access	Online, integrated with MRU Learning Management System (LMS)
Beneficiaries	100% of enrolled students and faculty members across all Schools and Departments
Collaboration Partner	LinkedIn Learning, under institutional license collaboration
Access Type	Free institutional access – unlimited courses and certifications for all users
Participation Level	100% participation with structured rubrics and evaluation integrated into coursework

Key Learning Areas	Digital Literacy, AI Tools, Data Analytics, Communication, Leadership, Sustainability, Research Skills, Entrepreneurship
Monitoring & Evaluation	Faculty mentors track completion via LMS dashboard; rubrics ensure outcome-based assessment
Outcomes	- Thousands of certificates earned annually
	- Enhanced employability and global readiness
	- Strengthened digital pedagogy among faculty
SDG 4 Targets Linked	4.3 – Access to affordable higher education
	4.4 – Skills for employment and innovation
	4.7 – Education for sustainable development and global citizenship

Impact and Outcomes

- 100% participation rate among MRU students and faculty.
- Thousands of hours of learning completed annually across diverse disciplines.
- Integration with rubrics and LMS dashboards ensures monitored and meaningful engagement.
- Certificates of completion contribute to academic records, career portfolios, and employability skills.

By bridging university learning with global professional standards, Manav Rachna University has established itself as a model for integrating open-access digital learning with formal education. The LinkedIn Learning license initiative exemplifies MRU’s philosophy of preparing learners not just for degrees, but for lifelong competence, adaptability, and success in a rapidly evolving world.

Setting a Landmark.....

Through its free certification courses, open research facilities, and digital knowledge resources, Manav Rachna University creates a connected ecosystem of lifelong learning. By integrating sustainability education, scientific access, and community engagement, MRU ensures that knowledge remains a public good — accessible, applicable, and transformative. These efforts reflect the university’s unwavering commitment to SDG 4: Quality Education, enabling learning that truly lasts a lifetime.

These initiatives demonstrates that quality education is not limited to classrooms or campuses. It thrives in mentoring relationships, knowledge-sharing networks, and open-access learning spaces. Whether through NITTTR-led FDPs, SWAYAM mentoring, or OE4BW projects, the university continuously contributes to building a global community of empowered educators and lifelong learners.

In doing so, Manav Rachna University stands as a national and international resource hub for faculty learning, mentoring, and open education—fostering innovation, inclusion, and sustainability in line with the principles of SDG 4: Quality Education for All.