

1.0 Introduction

The previous education system from 1986 focused on everyone getting a **chance to learn**. The new education policy i.e., National Education Policy (**NEP**) -2020 is more fun and lets students **choose what interest them**. Students will still learn important things, but also get chance to do activities and explore. Doing these activities can earn credits that will be recorded on transcript or report card.

Almost all states in India are implementing NEP 2020 [1]. Around 144 autonomous educational institutes (87 general and 57 professional) in Maharashtra have started implementing NEP from academic year 2023-24. The NEP implementation will be 100 percent (around 3500 colleges in the state) in the academic year 2024-25.

To facilitate the implementation of NEP, a task force was established under the leadership of renowned scientist Dr. Raghunath Mashelkar. The task force recommendations, outlining a roadmap for successful NEP integration were adopted by the cabinet in January 2022[2] and Dr. Ravindra Kulkarni committee report in October 2022[3] provided implementation guidelines. Through a comprehensive analysis, the committee identified **five challenges within the education system** and proposed corresponding solutions to address them effectively.

1. The challenge lies in shifting the focus from simply guaranteeing access to education (the “**right to education**”) to ensuring a high quality “**right education**” that is truly “**right education for all**”. The key to unlocking opportunity for all lies in creating a system of high-quality education that is “**affordable and accessible**”, especially for underprivileged community.
2. The goal of institute should be to cultivate an environment that simultaneously nurtures **excellence in teaching** and fosters a thriving **research culture**.
3. Building a **world-class education governance** system requires establishing a framework that prioritizes **continuous improvement**, fosters **collaboration**, and ensures **accountability** for delivering **high-quality education for all**. True institutional autonomy is crucial to become hub of educational design and development. This empowers them to not only adopt existing “**best practices**” in governance but also to pioneer the “**next practices**” that will shape the future education.
4. The future of education hinges on bridging the gap between **innovative practices** and fostering a **culture of innovation** within educational systems. A **paradigm shift** is necessary in the processes of **self-learning, interactive learning, and life-long learning**.
5. Need to have thrust not only “**working at the frontiers of research**” but on “**Creating new frontiers**”. Research will help us to become **leader and not the follower**.

The NEP recognizes the crucial **role of research** in driving positive change. Simply **having powerful ideas** is not enough; the focus must be on the “**power of execution**”. NEP **prioritizes research** that *tackles real-world problems and improves the lives of underprivileged*.

2.0 NEP's Vision for undergraduate (UG) students

NEP policy **reimagines, rethinks, and reinvents** higher education by introducing several groundbreaking initiatives.

1. **Learning beyond textbooks:** A new era of UG education focused on all-round personality development by implementing a holistic and multidisciplinary curriculum. Under NEP, the learning goes beyond rote memorization. It encourages critical thinking, problem solving, creativity, teamwork, and communication.
2. **Choice and Flexibility with Cross-Disciplinary exploration:** Forget rigid schedules! NEP offers a flexible curriculum. Student will have more freedom to choose courses across different disciplines, allowing you to explore interest and personalize learning journey.
3. **Holistic and Multidisciplinary education:** Along with in-depth study in specific discipline, students can explore creative combinations of subjects from different disciplines, fostering a holistic understanding of complex issues. NEP allows students to choose a wider range of courses, tailoring their education to their individual aspirations.
4. **Flexible UG programs:** NEP promotes flexible UG programs with duration of either three or four years. These programs offer Multiple entry and exit options allowing students to tailor their studies and earn certifications.
5. **Building Skillsets:** NEP emphasizes on vocational training and skill development along with traditional academics. This empowers students with practical skills that are valuable in the job market.
6. **Engaged learning for responsible citizen:** NEP proposes incorporating Credit-based courses and projects focused on community engagement and service, environmental education, and value-based education. These experiences become an integral part of curriculum, not just extracurricular activities.
7. **Incorporation of Work experience:** NEP 2020 prioritizes practical learning. It encourages higher education institute to integrate internship and On-the-Job-Training (OJT) to ensure graduates have skills employers need. This benefits graduates by improving job readiness, aligning education with industry and enhancing skills.

3.0 Benefits of NEP for students:

To equip graduates for the future, the new curriculum emphasizes on-

1. **Unrestricted exploration:** Students will have freedom to cross **disciplinary boundaries** and explore courses from various fields, fostering a well-rounded understanding.
2. **Personalized learning journeys:** Student can **choose their own leaning path** by selecting courses across disciplines based on their interests, creating a unique educational experience.
3. **Credential flexibility:** The framework offers **Multiple Entry and Multiple Exit (MEME)** point. Students can earn Undergraduate Certificates, Diplomas, or Degrees based on number of credits they accumulate, allowing them to tailor their education to their goals.

4. **Seamless transfer:** The NEP facilitates **mobility between institutions**, allowing students to pursue multi or interdisciplinary experiences at different colleges or universities.
5. **Learning without limits:** Students can choose their preferred learning mode, with options for **offline, online, open and distance learning (ODL), and hybrid models**, providing maximum flexibility in how they learn.
6. **Academic Bank of Credits (ABC):** It allows students to store information about all the credits earned throughout their higher education.

4.0 Role of National Credit Framework (NCrF):

NCrF is a framework for seamless integration and coordination of broad based, multi-disciplinary and holistic education. The NCrF acts as the backbone for NEP's vision of flexible learning structure through credit accumulation through **academic bank of credits (ABC)** and standardized framework. NCrF assigns credits to courses and learning experiences. This allows students to accumulate credits even through internships, projects or online courses, making learning journey more personalized.

NCrF creates a standardized system for credit transfer across different educational institutions in India. This paves a way for **international equivalence** and **mobility within India**. Students can seamlessly transfer credits between institutions within India, offering greater flexibility in their academic pursuits. Credits earned in India can potentially be recognized by foreign universities, facilitating student exchange programs and international study opportunities.

NCrF allows Indian qualification to be more easily understood and recognized by foreign institutions, making Indian students more competitive for **international opportunities**. This creates a win-win situation for students, universities, and the Indian economy by empowering students, enhancing the reputation of institute, and boosting knowledge economy.

5.0 Structure of 4-year multidisciplinary degree:

The three/four-year bachelor's program offers a flexible approach for a holistic and multi-disciplinary education. Students can explore **beyond their major**, delve into diverse disciplines, and potentially even experience learning in different modes. The three/four-year UG degree program offers a credit system with clear multiple entry and exit points. The table below details the minimum and maximum credit requirements for different program levels.

Credit framework [3]

Level	Qualification Title	Year	Semester	Credit Requirement	
				Minimum	Maximum
4.5	UG Certificate	1	2	40	44
5.0	UG Diploma	2	4	80	88
5.5	Bachelor's Degree	3	6	120	132
6.0	Bachelor's Degree - Honors	4	8	160	176
	Bachelor's Degree - Honors with Research				

Multi Entry and Multi Exit (MEME) system: A flexible learning pathway.

The NEP 2020 introduced the Multi entry and Multi Exit system to transform UG education in India. MEME offers students greater flexibility and control over their learning pathway.

Multi Entry points: Students can enter a program at various stages, not just the traditional first year. This caters to individuals who may start later due to personal circumstances or prior learning experiences.

Multi Exit points: Students can choose to exit the program with a relevant qualification after completing a specific number of credits. This allows them to earn different certifications at every stage as discussed below:

- (a) a **UG certificate** after completing 1 year (2 semesters) of study,
- (b) a **UG Diploma** after 2 years (4 semesters) of study,
- (c) a **bachelor's degree** after 3 year (6 semesters) of study,
- (d) a 4-year **bachelor's degree (honors)** after eight semesters of study
- (e) a 4-year **bachelor's degree (honors with research)** if student completes a rigorous research project.

Credit Accumulation: The system revolves around credits assigned to courses. Students accumulate credits as they progress, allowing them to personalize their learning and potentially transfer credits between institutions.

The main benefit of MEME is that students can tailor their education to their pace, goals and financial situations. It also opens doors for individuals who may not have been able to pursue a full degree program traditionally.

Overall, MEME aims to create a more student-centric and dynamic learning environment. It empowers students to take ownership of their education and pursue academic path that best suit their aspirations.

6.0 Mapping your journey: Credit breakdown for the Four-Year Degree [4]

In general, the four-year bachelor's degree program is divided into six different verticals namely:

	Verticals	Number of Credits
1	Major (core) subject	~ 50 % of total
2	Minor Subject (s)	11 %
3	Generic/ Open Elective (GE/OE) courses	6 %
4	Vocational and Skill Enhancement Courses (VSEC)	9 %
5	Life Skills & Knowledge Integration Courses- like Ability Enhancement Courses (AEC), Indian Knowledge System (IKS) and Value Education Courses (VEC)	8 %
6	Experiential Learning Courses or Real-World Engagement courses – like Field projects / Internship / Apprenticeship, Community engagement and Service, Co-curricular courses, and Research Project.	20 %

(1) **Major** (core) subject

Students must select a “**Major Subject/Discipline**” and one or two “**Minor Subject/Discipline**” from the list of various course combinations and options provided by the institute/college. Choose a subject you love and **go deep** with the major program. For example, one may select B.A. with Philosophy Major or B.Sc. with Chemistry Major.

The major provides a student with the opportunity to deep dive into a specific subject area. The in-depth knowledge equips them with the specialized skills and expertise needed to pursue careers or further studies in that field. The major course goes beyond just acquiring knowledge. It also aims to cultivate critical thinking, problem solving, analytical, and research skills. Students learn to analyze information, evaluate arguments, and develop their own perspectives. They may also gain experience with conducting research, interpreting data, and effectively communicating their findings. Overall, the major subject prepares students for success in their chosen field by providing them with in-depth knowledge, specialized skills and intellectual abilities they need to thrive.

Note on Major Subject –

- (i) Minimum 50% of total credits must be completed.
- (ii) Elective courses, vocational skill courses, internships/apprenticeship, filed projects, research projects relate to major.
- (iii) It is possible to switch majors within a similar field after the first year.

(2) **Minor** Subject (s)

A minor subject is expected to enhance knowledge base in multi / inter disciplinary areas. For instance, an economics major might choose a minor in mathematics to gain a strong foundation in qualitative analysis, a crucial skill for data analysis. A minor subject helps students to explore their curiosity outside their major. This can be especially helpful for those who aren't entirely sure of their career path yet.

Note on Minor subject(s)

- (i) The minor may be from pool/baskets of courses from the different discipline of the same faculty.
- (ii) Minor subjects can be from different faculty altogether.
- (iii) UG students pursuing a minor must complete all minor coursework within the first three years of their UG studies.

(3) **Generic/ Open Elective (GE/OE)** courses

Generic / Open electives (GE/OE) are meant to provide multidisciplinary or interdisciplinary education to students. Generic electives allow students to delve into subjects beyond their major, fostering a well-rounded intellectual foundation. These electives can provide opportunities to hone valuable skills applicable across disciplines and careers. A student of science faculty may select German or French language as GE to enhance international career options.

Open electives can serve as an avenue to discover potential career paths by allowing students to sample subjects they might not encounter in their major coursework. You might discover a hidden passion for photography, coding, or even ancient history.

These shall consist of a pool/basket of courses offered by various departments under different faculty of study. Basket of GE/OEs from Science faculty may comprise of Data Science, AI, Introduction to nano technology, Statistical packages, Astronomy and Astrophysics, Computer vision, Image processing etc. Similarly, electives from Arts faculty may comprise of Economics, Ancient History, Psychology, Political Science, Social work, Ethics etc.

Note on GE/OE -

The GE/OE must be chosen compulsorily from faculty other than that of the major and must be completed in first two years of study.

(4) Vocational and Skill Enhancement Courses (VSEC)

Offered across all academic disciplines, Vocational and Skill Enhancement Courses (VSECs) provide students with practical and hands-on-training. These courses aim to equip them with the competencies, proficiency, and skills highly sought after by employers. The vocational and skill enhancement courses are designed to make students more skilled and employable, giving them a competitive edge in the job market.

India's focus on vocational education perfectly aligns with Sustainable Development Goal 4.4, which promotes quality education with relevant skills. This emphasis equips young people with the tools they need to thrive in the workforce, unlocking the full potential of India's demographic dividend.

Note on VSEC-

Vocational Skill Courses (VSC) should include Hands-on-training corresponding to the Major and/or Minor subject. Wherever applicable vocational courses will include skills based on advanced laboratory practicals of Major. Skill Enhancement courses (SEC) to be selected from the basket of skill courses approved by college/university. SECs should be offered in first 2 years of education.

(5) Life Skills & Knowledge Integration Courses

In today's complex world, success goes beyond academic achievement. These courses aim to nurture essential life skills like communication, critical thinking, problem solving, fostering well rounded individual to apply their learning to real-world problems and make informed decisions. There are three group of courses dedicated namely **Ability Enhancement Courses (AEC)**, **Value Education Courses (VEC)** and **Indian Knowledge System (IKS)**.

The NEP recognizes the importance of multilingualism. Under **AEC**, English communication and Modern Indian Languages like Hindi/Marathi should be taught in first two years of UG education. These courses aim to strengthen students' communication skill in both English and their chosen Indian language. This includes proficiency in reading, writing, speaking, and listening. Effective communication is vital for academic success, employability and navigating everyday life. Strong language skills are foundational for lifelong learning.

A value education system that includes Understanding India, Environmental Science/Education, and Digital/Technological solutions for the future. Understanding India fosters patriotism, tolerance and critical thinking about social issues. Environmental Science builds awareness, problem solving skills and a responsible lifestyle. Digital solutions bridge the digital divide, enhance creativity, and prepares

students for the digital workplace. This holistic approach cultivates well-rounded individual who can contribute meaning fully to society.

The first course on **IKS** should be a generic course should be taught in the first year where students are exposed to introductory information on IKS. IKS serves as a wellspring for innovation and promotes the application of traditional knowledge to address contemporary challenges. Subject specific IKS should contain advanced information pertaining to the subject, which may be considered as a part of the major credits in the second or third year. Furthermore, IKS fluency positions graduates to bridge gap between Indian and global knowledge system.

(6) **Experiential Learning Courses or Real-World Engagement courses**

Experiential learning course, also known as real-world engagement courses, take education beyond the classroom. These courses immerse students in practical experiences, fostering deeper understanding and valuable skills. Here is a breakdown of common courses.

Field projects/Internships/Apprenticeships- Apply classroom knowledge in professional settings, gaining hands-on experience and building professional networks.

Community Engagement and service- Address real-world challenges while developing social responsibility and civic engagement skills.

Co-curricular Courses- Co-curricular programs enhance students' life beyond academics, including health and wellness initiatives, yoga, sports, cultural clubs, NSS/NCC, and opportunities to explore fine, applied, visual and performing arts.

Research Projects- Students learn how to apply theoretical knowledge to solve real-world problems. Students conduct independent research under faculty guidance, developing critical thinking, problem solving and research skills.

7.0 Conclusion

The NEP represents a significant shift towards more holistic and skill-based education system for future-ready graduates. Its emphasis on inter/multi-disciplinary learning, critical thinking and real-world applications equips students with knowledge and abilities to flourish in the dynamic job market of 21st century. By offering greater flexibility and a focus on personalized learning, the NEP empowers students to become well-rounded individual prepared for success in their chosen career paths.

References:

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[2]<https://htedu.maharashtra.gov.in/Main/DocMasters/Website/Media/1/NEP%20Task%20Force%20Report.pdf>

[3]<https://dhepune.gov.in/wp-content/uploads/2017/01/GR-20230420-Revised-Guidelines-for-Credit-and-Program-Structure.pdf>

[4]<https://dhepune.gov.in/wp-content/uploads/2017/01/GR-20230420-Revised-Guidelines-for-Credit-and-Program-Structure.pdf>