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**Oum Prakash Sharma, Jyotsna Dikshit, Moumita Das and Sujata Santosh**

Implementing NEP-2020 by Empowering IGNOU Students towards  
Innovation and Entrepreneurship

**Prateek Chaurasia**

Advancing Generative Artificial Intelligence: Innovations and Potential  
Risks to Core Humanistic Values

**Tania Sarkar and Alok Kumar**

Innovative Institutional Practices in School Education: Bridging the Gap  
between Skills and Career Opportunities

**Meenal Kedar Oak**

Librarians' Role in Implementation of National Education Policy-2020: A Study

**Droupadi Murmu**

Design as a Catalyst for Social Change

– **Convocation Address**

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In This Issue		PAGE
<b>CONTENTS</b>		
<b>Articles</b>		
Implementing NEP-2020 by Empowering IGNOU Students towards Innovation and Entrepreneurship		3
Advancing Generative Artificial Intelligence: Innovations and Potential Risks to Core Humanistic Values		12
Innovative Institutional Practices in School Education: Bridging the Gap between Skills and Career Opportunities		18
Librarians' Role in Implementation of National Education Policy-2020: A Study		24
<b>Convocation Address</b> National Institute of Design, Ahmedabad		31
<b>Campus News</b>		33
<b>AIU News</b>		36
<b>Theses of the Month</b> (Science & Technology)		38
<b>Advertisement</b>		43

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# Implementing NEP-2020 by Empowering IGNOU Students towards Innovation and Entrepreneurship

Oum Prakash Sharma\*, Jyotsna Dikshit\*\*, Moumita Das\*\*\*  
 and Sujata Santosh\*\*\*\*

The National Education Policy (NEP-2020) is considered to revolutionise the entire education system in the country. Besides focusing on providing multidisciplinary and holistic education, the NEP-2020 aims at fostering creativity, critical thinking, research and innovation among the students for transforming India into a knowledge and self-reliant society. Some of the major thrust areas which are categorically emphasised in NEP-2020 include research and innovation, setting up start-up incubation centres, industry-academic linkages, hand-holding mechanisms for nurturing creative and innovative ideas of students, organising competitions for promoting innovation and creativity among student communities, and creating a culture for innovation. NEP-2020 also advocates for innovations in teaching and pedagogy, innovation in technology-enabled teaching-learning, curriculum, pedagogy, and assessment, etc., aimed at enabling the higher education institutions to contribute towards an empowered society. In that context, empowerment of an individual, particularly the students in higher education, both in curricular and co-curricular areas, is very important. The Indira Gandhi National Open University (IGNOU), being a great contributor in the field of higher education, caters to the educational needs of more than 3.7 million students and almost similar number of alumni across the country, and since a majority of them are youth, they have the potential to contribute to the growth of economy and development of the country.

In order to implement the National Education Policy-2020 in the context of innovation and entrepreneurship, IGNOU has taken several initiatives to empower the students in both curricular and co-curricular areas. On one hand, IGNOU has brought several innovative changes in the curriculum, pedagogy, learner support system and assessment mechanism. On the other hand, it has taken several initiatives to promote and support innovation, entrepreneurship

\*Director, National Centre for Innovation in Distance Education, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail : opsharma@ignou.ac.in

\*\*Deputy Director, National Centre for Innovation in Distance Education, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail : jdikshit@ignou.ac.in

\*\*\*Deputy Director, National Centre for Innovation in Distance Education, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail: moumitadas@ignou.ac.in

\*\*\*\*Assistant Director, National Centre for Innovation in Distance Education, Indira Gandhi National Open University, Maidan Garhi, New Delhi-110068. E-mail: sujatasantosh@ignou.ac.in

and startup culture in the university. For this purpose, IGNOU has a dedicated centre named the National Centre for Innovation in Distance Education (NCIDE), which not only identifies the potential innovators and entrepreneurs but also incubates them and provides need-based capacity-building programmes in the field of innovation and entrepreneurship regularly.

As highlighted in NEP-2020 to identify and encourage innovation and entrepreneurship, and also because of the changing scenario and announcement of the *Atmanirbhar Bharat Abhiyan* by the Government of India, there is a great need for the development of innovation and entrepreneurship skills among the youth of the Country. The *Abhiyan* aims at making the country independent of the tough competition in the global supply chain and empowering the people who have been adversely affected by the COVID-19 pandemic. IGNOU students also have great potential in this regard to contribute immensely towards *Viksit Bharat@2047*. In order to provide proper guidance and academic support on different aspects of innovation, business and entrepreneurship, and also keeping in view the focus of NEP-2020 on innovation and entrepreneurship, IGNOU has been organising specially designed training workshops aimed at empowering IGNOU students towards innovation and entrepreneurship development.

The specially designed training programmes called Student Empowerment for Entrepreneurship Development (SEED) include various types of awareness programmes and training workshops on ideation, problem solving, proof of concept, prototype development, IPR and patent filing, innovation, entrepreneurship and startups, etc. These student empowerment programmes, each of two to three days and having six to seven sessions each, are organised every quarter. Each SEED programme provides need-based and specialised training to the identified students and alumni of IGNOU.

The basic objectives of the SEED programme are:

- harnessing the potential of IGNOU students and supporting them for the growth and development of the country to make them self-reliant,
- encouraging and motivating the students of IGNOU towards entrepreneurship and startups,

- explaining the importance of innovation and entrepreneurship in the making of *Atmanirbhar Bharat*,
- making students aware of the intellectual property rights and patenting laws regarding the setting of business and startups,
- incubating the ideas and helping the students in converting their ideas into a Business Plan, and
- guiding the students in developing Bankable Business Proposals and connecting them with suitable incubators.

The entire SEED programme is divided mainly into five segments, including creating awareness on innovation and entrepreneurship, empowering students towards problem identification and ideation, empowering students for converting ideas into prototypes and business plans, empowering students for prototype validation and concept development, and empowering students for startup ecosystem development. The training programmes cater to the journey of a student from the ideation stage to the startup stage as a pre-incubation support. All the relevant concepts related to different stages of the journey, such as ideation, prototype building, business plan development and establishment of a startup are being dealt with in these training programmes. Finally, they are allowed to showcase their Startups at the National level through participation in the Startup Fest, Startup *Mahotsava*, IGNOU *Udyami Samagam* and Startup Meets, etc.

### **Methodology of Conducting SEED Programme**

The methodology of conducting SEED programmes is unique and innovative. Firstly, IGNOU students and alumni are invited to express their interest in the Pre-Incubation SEED programme and register online for the programme. After registration, participants are connected through a specially designed online training portal for SEED. Online training sessions are organised through Google Meet on the pre-scheduled days. After completing each session, students are provided with recordings of that session, supporting web resources, book chapters, and important links related to the session through the online SEED Training Portal. Based on every session, an e-activity is given to be completed by the participants. After completion of each session, an e-assignment is also given to the students to be completed within a given period, and it is a

compulsory condition for getting a certificate. In order to engage the participants in the programme, an online discussion forum has also been created on the portal through which the students and mentors can interact with each other. For the last several years, these SEED programmes have been organised regularly for -three days duration.

### **Selection of Participants for SEED Programme**

NCIDE organises a variety of innovation-centric activities like Idea Competition, Student Innovation Award, Smart India Hackathon, Idea to Startup Scheme, National Innovation Challenge, Startup Fests, Business Plan Competition, Startup Competition and Creativity Challenges, etc., regularly. Besides, for developing a database of budding and interested innovator and entrepreneur students, an online portal named IGNOU *Udyami* has been designed and developed to identify such students and alumni and provide them required support. In this way, more than 3000 students from all over the country have been identified who are very much interested in innovation, entrepreneurship and want to set up their enterprises. The participants of the Student Empowerment programmes are selected from amongst the shortlisted students who have participated in various activities organised by the university during the last few years. The shortlisted students from all over the country, who have shown interest in innovation, entrepreneurship and want to set up their own enterprises, are approached to express their willingness to participate in the SEED programme by registering online.

A brief description of the specially designed training programmes and workshops focusing on the implementation of NEP-2020 for empowering the students towards innovation and setting up their startups and enterprises is given in this paper.

### **Genesis of the SEED Programme at IGNOU**

Immediately after the implementation of the NEP-2020 in July 2020, NCIDE conceptualised and developed a series of student empowerment programmes aimed at encouraging and motivating the IGNOU students towards innovation, entrepreneurship, startups and skill development as an initiative of the IGNOU towards *Atmanirbhar Bharat*. The first one in the series was an eleven-day online training programme “Student Empowerment for Entrepreneurial Development (SEED)” for

IGNOU students, organised from July 27 to August 22, 2020. Thereafter, a series of Workshops and Sessions on Innovation, Entrepreneurship and Startups have been organised to encourage the youth towards Innovation and Entrepreneurship. Additionally, the Student Empowerment Programmes are being organised regularly every quarter.

During the first online SEED training Programme, a total of eleven training sessions were organised on various topics aimed at motivating and empowering the students towards innovation and entrepreneurship. These sessions included Innovation and Entrepreneurship for *Atmanirbhar Bharat*, Being a Creative and Innovative Entrepreneur; Developing Entrepreneurial Skills; Protecting Ideas and Commercialize the product; Converting an Idea into Business and Setting Up Enterprise; Conducting Market, Financial and Technological Research; Developing Business Model Canvas for an Idea; Developing a Bankable Business Proposal; Various Funding Opportunities; and Marketing of the Product with Focus on Digital Marketing. Besides, the students were also given an opportunity to interact with a few successful Innovators and Entrepreneurs. The various sessions of the SEED programme were taken by the experts from industry as well as academicians from IGNOU and other organisations.

For the first SEED, a total of 97 students registered and finally 65 students attended the full programme. It is important to mention here that the SEED programme was a well-planned and innovatively designed programme, enabling the students to get fully engaged in the teaching-learning process. Making the fullest use of the technology, the participants were connected and their mentors through a specially designed Online SEED Training Portal. The training portal provided access to all the video recordings of the sessions, learning materials in the form of web resources, book chapters and important links related to the various sessions. In order to enable the students to correlate the theory taught in the live sessions with the practical applications, a session-wise e-activity was given to be completed by the participants. Based on every session, an e-activity was given to be completed by the participants. After completion of each session, an e-assignment was given to the students to be completed within a given time period, and it was a compulsory condition for getting a

certificate. Asynchronous interactive learning was facilitated through the discussion forum integrated with the portal through which the students and mentors could interact with each other.

This high-quality online training programme for distance learners was a unique contribution of the university to identify, develop and create entrepreneurs and to make them self-reliant. As this programme was highly appreciated by the participating students, the University extended this programme to other interested students also to hone their entrepreneurial skills and thus provided the much-needed impetus for *Atmanirbhar Bharat*. Now, every year, three to four Student Empowerment Programmes are being organised every quarter, covering different concepts and skills required for being an Entrepreneur aiming at converting an Idea to a Startup.

Another SEED programme was organised from January 18-22, 2021. This five-day training programme had a series of five different sessions and workshops on Problem Solving and Ideation on January 18, 2021; Design Thinking and Critical Thinking for Innovation and Entrepreneurship on January 19, 2021; Entrepreneurship Development for *Atmanirbhar Bharat* on January 20, 2021; Pitching a Startup Idea for Entrepreneurship on January 21, 2021; and Identifying Intellectual Property Components for Innovation and Entrepreneurship on January 22, 2021. Subsequently, several other such student empowerment programmes have been organised, including a programme on Startup and Related Ecosystem development during January 23-25, 2024; Inspiration, Motivation and ideation during January 26-27, 2024 and empowering students for Startup Development during January 14-16, 2025. All the sessions were conducted mainly in the virtual mode in which students from all over the country participated. The sessions were highly interactive and informative. As an outcome of the training programme, the participating students were able to understand the importance of problem identification and thinking of innovative ideas as solutions. Besides explaining the various processes of ideation, the students were given an exposure to design thinking and critical thinking in connection with innovation and entrepreneurship. Some successful pitches were also discussed during the sessions to understand the various components of a good pitch. As IPR and patent filing are also

very important components in any innovation and startup venture, the basic concept and importance of IPR and patents in the context of entrepreneurship were also explained to the participating students.

### **Creating Awareness on Innovation and Entrepreneurship**

Creating awareness about innovation and entrepreneurship among the students is very important to inspire them towards startups. Therefore, immediately after the implementation of the NEP-2020 and also looking into the immense potential among the IGNOU students, NCIDE at IGNOU has organised more than 250 awareness programmes and sessions in the field of innovation, startup, IPR and entrepreneurship, etc., aimed at encouraging and motivating the students towards entrepreneurship and startups. In the series of empowering students towards innovation and startups as a part of NEP-2020 implementation, the first component of the SEED programme focused on creating awareness on innovation and entrepreneurship, covering topics like Problem Solving, Ideation, Design Thinking, Creative Thinking, pitching an Idea for a Startup and IPR Issues, etc. Awareness programmes on innovation and entrepreneurship are organised very frequently in online, offline and hybrid modes. For this purpose, stories of successful innovators and entrepreneurs are shared with the students from time to time. Additionally, around 50 weekly Facebook Live sessions on innovation and startup awareness and motivational programmes have also been organised during 2022-23. Every year, two-day student Empowerment programmes on Inspiration, Motivation and ideation are organised to create awareness and motivate students towards innovation and entrepreneurship. A large number of students have participated in these awareness programmes. The basic objectives of the programme include:

- Identifying and defining the problems, and understanding the process of problem solving, explaining the concept of ideation and explaining the various processes of ideation,
- Creating awareness among the participating students about design thinking and critical thinking, describing the process of design thinking, and discussing its importance for innovation and entrepreneurship,

- Motivating the students towards developing entrepreneurial skills and discussing the basics of entrepreneurship,
- Sensitising the participants about the need and importance of a pitch in context to a business idea or startup, and
- Describing the basic concepts and importance of IPR and patents in the context of Entrepreneurship.

Most of the sessions are conducted in a virtual mode in which students from all over the country participate. The sessions are highly interactive and informative. As an outcome of the training programme, the participating students can understand the importance of problem identification, and they are able to think of innovative ideas as solutions. Besides motivating the students towards entrepreneurship, they are exposed to the entrepreneurial skills and their importance in pitching a business idea.

### **Empowering Students for Problem Identification and Ideation**

The second most important component of the SEED programme is to empower the students to identify problems and think of a viable solution for the same. In order to inspire, motivate and encourage IGNOU students towards innovation, entrepreneurship and startups, NCIDE has organised four Student Empowerment Programmes of two to three days each on “Inspiration and Motivation for Ideation and Entrepreneurship” during 2021-25. These programmes were organised during December 01-03, 2021; November 09-11, 2022; November 28-29, 2023 and November 26-27, 2024. The basic objectives of this segment of the Student Empowerment programme include:

- Sensitising and motivating the IGNOU students towards Innovation and Entrepreneurship,
- Encouraging them towards problem identification, explaining the process of problem solving and ideation to find innovative solutions,
- Sharing the stories of successful innovations and startups by IGNOU students,
- Encouraging and motivating IGNOU students to come forward to adopt entrepreneurship as a career opportunity, and
- Guiding and mentoring the students to take their ideas further to convert them into Startups.

The participants of the programmes included the interested and self-motivated students of IGNOU who have registered on the IGNOU Udyami Portal. Out of more than 3000 students registered on the IGNOU Udyami portal, about 150-200 students registered for each training programme. Finally, around 40-50 students participated in each programme. The Student Empowerment Programme on Problem Identification and Ideation is aimed at imparting training on the topics, including innovation framework, innovation methodologies, problem identification, creative problem solving, ideation, and pitching event for ideas and entrepreneurship, etc.

The first session, basically a Workshop on Entrepreneurship and Innovation as a Career Opportunity, focuses on the skills required by an entrepreneur and highlights various prospects for the students to be entrepreneurs. The second session is a Workshop on Problem Solving and Ideation, mainly focused on the need for problem identification and finding innovative solutions with the help of various innovation methodologies. The objectives of the session are to describe the process of problem identification and stages of problem solving, to explain the methods of idea generation for innovation and startups, and to highlight the importance of ideation and problem-solving techniques in the journey of a startup. The importance of out-of-the-box thinking is explained with the help of examples.

In addition to it, the participants are given an exposure to the importance of the Field Visit for Problem Identification, in which the experts discuss the topics of problem identification, creative problem solving and ideation techniques. The basic objectives of the session are to explain the importance of field visits and local exposure in identifying suitable problems, to encourage students to become sensitised towards the issues and problems in their surroundings, and to guide the students on how to identify and record the problems. The students are also given activities and exercises related to problem identification, idea generation and creative problem solving. All the students participate in the exercises actively. They are guided to visualise their surroundings, workplaces and other areas to identify the problems which require innovative solutions. They are also given exposure to different techniques of ideation.

The next session focuses on developing an Online Repository of Ideas – An Idea Bank for the students of IGNOU. In this session, the concept of open innovation and crowd sourcing is highlighted, and the participants are encouraged to use the NCIDE's Online Portal for creating a repository of the ideas of the students in the form of an Idea Bank. Besides demonstrating the Idea Bank portal, the process of submitting the ideas by the students is also explained. Further, the e-portfolio component of the portal is presented through which the journey from ideas to startup could be documented.

In this programme, there are normally two special sessions by the successful innovator and entrepreneur students of IGNOU, where they share their success stories highlighting the innovative features, successful milestones and the challenges faced by them during their journey. While narrating the story of innovation, successful innovators of IGNOU are invited to share their success stories, highlighting their innovations and experiences of their journey as innovators. The objectives of the session are to highlight the innovative idea and to share the journey of innovation, focusing on how it was developed and evolved into an innovation. The session aims at explaining the firsthand experience of an innovator student focusing on the various phases of the journey from idea to a prototype or an innovation. Another session on My Startup Story is also conducted where a successful entrepreneur and startup founder shares her/his motivational story of setting up a startup. Various development phases, an entrepreneur goes through while setting up an enterprise are discussed in this session. The objectives of the session are to inspire and motivate students by sharing the story of a successful entrepreneur, explaining the different stages in the process of setting up a startup, and understanding the prospects and challenges of setting up a startup.

On the last day of this phase of the student empowerment programme, a session on Pitching of Ideas is conducted. In this session, the students present the problems identified by them. The objectives of the session are to discuss the business ideas and give them valuable inputs, thus guiding them, and to take feedback and suggestions from the participants for improvement in future. In the last session, the students were asked to identify a problem and then present their ideas about it and the intended solution. The experts provide them

feedback and guidance on how to build that idea further into a viable business idea. The students are provided with insights into the resources and the background required to work on the identified problem areas. This is followed by brainstorming on the various ideas shared to find innovative solutions to the problems identified. The resource persons guide the participants on the ideas pitched. In the concluding session, the participating students give their feedback and share their views and suggestions for the forthcoming training programmes to support and guide potential innovators and entrepreneurs.

### **Empowering Students for Idea Validation and Concept Development**

Moving ahead towards empowerment of IGNOU students for entrepreneurship, the next stage of Student Empowerment Programmes focuses on Validation of the idea and Concept Development. This phase of SEED is organised every year in January and February. Three such student empowerment programmes on Idea Validation and Concept Development have been organised during February 01-03, 2023; February 08-09, 2024 and January 14-15, 2025 in virtual mode. These programmes included workshops and training sessions on different topics related to validating the ideas and concept development. The basic objectives of the Student Empowerment for Idea Validation and Concept Development include:

- highlighting the concept and importance of validation of an Idea and the basics of a startup,
- making students aware of the concept of design thinking and its importance in innovation and startups,
- highlighting the importance and process of technology transfer and its commercialisation, and validation, and
- explaining the process of innovation development in the context of Technology Readiness Level (TRL).

The first workshop of this phase of SEED is normally on the topic 'Design Thinking, Critical Thinking and Innovation Design'. The basic objectives of the session are to create awareness among the participating students about design thinking and critical thinking, describe the process of design thinking, and discuss the importance of design thinking and critical thinking for

Innovation and Entrepreneurship. The concept of the innovation framework and the process of design thinking are explained through real-life examples. The core aspects of design thinking, like empathy, understanding of human needs and defining the existing problems in human-centred ways, are highlighted in the workshop. The importance of design thinking and critical thinking for innovation and entrepreneurship is also emphasised.

The second session is on ‘Commercialisation of Lab Technologies Tech-Transfer’. The basic objectives of the session are to explain the concepts of technology commercialisation; highlight the process and types of technology transfer; and describe with examples the challenges associated with to transfer of technology. Besides explaining the concept of technology transfer, the process of taking an idea to market and creating financial value with it, typically through licensing an invention, developing a new product or service or creating a new business, is explained in this session.

The third Session is on ‘Process of Innovation Development: Technology Readiness Level (TRL)’. The basic objectives of the session are to highlight the process of innovation development, explain the process of innovation development in context to Technology Readiness Level (TRL); and to describe assigning a TRL rank and its uses. Besides explaining the genesis of the Technology Readiness Level (TRL) and their journey of development, an activity on mapping technology readiness levels with the process of innovation development and design thinking steps is also undertaken in the workshop. Each session has certain assignments for the participants in the form of an MCQ test.

The fourth workshop focuses on the topic “Entrepreneurship Skill, Attitude and Behaviour Development”. Besides explaining the importance of the skills for entrepreneurship, several 21st-century skills which make a successful entrepreneur are also discussed in the session. Concepts and skills like confronting, self-doubt, willingness to experiment, accountability and leadership, ability to solve problems, along with technical skills, resiliency and time management, business management and financial skills are also explained with the help of examples. The need and importance of skills such as communication and listening skills, critical thinking skills, risk-taking skills, creative thinking skills, networking skills and customer service skills

are also highlighted in the workshop. The experts try to elaborate on these skills and explain their uses in the field of entrepreneurship with pertinent examples.

The last session covers the topic of ‘Achieving Problem-Solution fit and Product Market Fit’. The objectives of the workshop are to promote the importance of achieving problem-solution fit and product market fit to the success of new business; and to instil and build entrepreneurship skills in participants of the programme. Three stages of business, including the formation of business ideas, the validation of business ideas and the growth of business, are also highlighted in these sessions.

### **Empowering Students to Convert Ideas into Prototypes and Business Plans**

The next stage of the Student Empowerment Programme focuses on Prototype Design and Business Plan Development based on the ideas generated in the first segment of the SEED programme. The related workshops on Prototype Design and Business Model Development have been organised during May 17-19, 2022, April 18-19, 2023, April 23-24, 2024 and April 17-18, 2025 in virtual mode. The basic objectives of this stage of the Student Empowerment Programmes include:

- Motivating and encouraging IGNOU Students towards Innovation, Entrepreneurship and Startup,
- Making students aware of the concept of prototype and business model canvas development,
- Explaining the process of startup planning and related Ethical and Legal Issues for business plan development,
- Highlighting the importance of intellectual property rights and IP management for startups,
- Giving an exposure to the Incubators and their role in startup support, and
- Developing an online repository of business plans and prototypes developed by IGNOU students and alumni.

Normally, six sessions are organised at this stage to cover the various topics about innovation and business plan development. The first session is on prototype product and process design & development, whereas the second session focuses on business model canvas development. The third

session focused on how to plan for startup and legal and ethical steps, the fourth session covers various aspects of business plan development and related Intellectual Property Rights (IPRs) and IP Management for Startup, the fifth session give an exposure to the incubator unit and its role in startup support and the sixth session focuses on developing online repository of business plan and prototypes developed.

The first workshop of this phase of Student Empowerment Programme is on 'Prototype Product and Process Design and Development' and its basic objectives are to explain the concepts of prototype/process design and development with the help of examples; highlight the importance of designing and developing a prototype of product/process; and discuss the various methods of prototyping types of technology transfer, and explain quality factors for a good Prototype. various stages of a product development process, like ideation, product definition, prototyping, detailed design, validation/testing and commercialisation are explained. The participants are provided training on how to develop bankable business plans based on their ideas. The six quality factors required to develop a good prototype, viz. representation, precision, functionality, improvisation, cost-effectiveness and eco-friendliness, were also discussed.

The workshop on 'Business Model Canvas (BMC) Development' focuses on highlighting the importance of the business model canvas and explaining the components of the business model canvas with examples. The nine components of the Business Model Canvas, viz. customer segments, value proposition, revenue streams, channels, customer relationships, key activities, key resources, key partners, and cost structure, are explained with the help of examples. At the end of the session, all the participants are given as assignment to develop a Business Model Canvas for their Ideas.

The third Session was on how to plan for Start-up and Legal and Ethical Steps. The objectives of the workshop are to impart knowledge about the planning for a startup to selected IGNOU students, and to create awareness about the various legal and ethical steps related to setting up a Startup.

Session four is a workshop on Intellectual Property Rights (IPRs) and IP management for startups. The Expert spoke about intellectual

property, its features and how to protect it. Intellectual property (IP) refers to a brand, invention, design or other kind of creation, which a person or business has legal rights over. It was pointed out that almost all businesses own some form of IP, which could be a business asset. Intellectual Property Rights (IPR) are the legal rights given to the inventor or creator to protect their invention or creation for a certain period. The Expert describe the different types of intellectual property rights, such as copyrights, Patents, trademarks, copyrights, and trade secrets, and geographical indications. The need for valuation of IP associated with their business plan is highlighted, so that they can take the necessary steps to protect the intellectual property.

Besides giving an exposure to the incubators and their role in Startup support, the session focuses on developing a good business plan, which could be submitted for funding. Finally, this phase of the SEED programme includes the demonstration of an Online Repository of Business Plans and Prototypes developed by the students. All the sessions are highly interactive and full of discussions by the participants. Increased enthusiasm of the participants indicates the usefulness and impact.

### **Empowering Students for Startup Ecosystem Development**

In the series of empowering IGNOU students and alumni towards innovation, entrepreneurship and startups, the next stage of the Student Empowerment Programme focused on Startup and Related Ecosystem Development during July 18-20, 2023 and July 23-25, 2024. More than 150 Students and Alumni registered to participate in each training workshop. Around 50-60 students and alumni participated in the programme. These were the students who had participated in earlier Training Workshops also and they were now at the advanced stage of their prototype development. At this stage, they required specialised training and guidance to test and validate their prototype to convert it into a startup. The basic objectives of this stage of the Student Empowerment Programme include:

- Giving a broad idea about the existing innovation and start-up eco-system in the university and in the country,
- Highlighting the trends and opportunities for any innovative ideas to convert into a successful startup.

- Explaining the process and useful steps for getting Angel Investment and VC funding for early-stage Entrepreneurs,
- Exploring getting support for converting an innovative idea into a start-up from any incubation centre and accelerators, and
- Highlighting the process and useful steps for getting incubated in the nearby incubators.

The workshop had six different sessions covering the topics Innovation and Prototype Validation – Converting Innovation into a Start-up, Achieving Value Proposition Fit and Business Fit, Accelerators and Incubation-Opportunities for Students and Faculties – Early Stage Entrepreneurs”, Lean Start-up and Minimum Viable Product or Business, Angel Investment and VC Funding Opportunity for Early Stage Entrepreneurs, a Panel discussion with innovation and Start-up Ecosystem Enablers.

### **Outcome of the SEED Programmes**

The main outcomes of the SEED programme included creation of a motivated and empowered group of IGNOU students ignited towards setting up their enterprises, development of various types of resources including Power Point Presentations, Videos, Text, etc. on different topics covered under the training, inspired group of students to harness their creative and innovative mindset for the growth of the country and networking of the likeminded of students who are willing to work towards *Atmanirbhar Bharat*. Moreover, the success of the SEED programme and appreciation by the participating students also motivated us to organise such empowerment programmes for other segment of the students and alumni. After that, NCIDE is organising a series of awareness and training programme for inspiring the IGNOU students towards innovation, entrepreneurship and startups regularly. Another outcome of the SEED programme resulted in the development of Virtual Incubator for supporting and guiding the budding innovators and entrepreneurs, which has now turned into a physical incubator at the headquarters of IGNOU.

As a result of these programmes focused on encouraging students towards *Atmanirbhar Bharat*, IGNOU can create a strong ecosystem for Innovation and Entrepreneurship in the University. The student empowerment programmes have

inspired the students to harness their creative and innovative mindset for the growth of the country. It is also an effort towards building self-confidence, an attitude of collaboration and teamwork among the students, and providing them with enough space to interact with their peers virtually. Now, the participants of all these programmes are able to interact and network with like-minded students who are willing to set up their startups. As an outcome of these focused student empowerment programmes, several IGNOU students and alumni are coming forward to set up their enterprises, and now they can create job opportunities for others.

It is important to mention here that after implementing NEP-2020, more than 300 Innovative Ideas have been generated as solutions to the various problems of society. In addition to it, more than 80 Innovations have been developed, more than 40 Business Plans have been prepared by IGNOU students, and more than 65 Startup initiatives have been taken by the IGNOU students and alumni. The SEED programme and various other activities of IGNOU have played an important role in igniting the students’ minds towards generating new ideas and converting their ideas into startups and thus becoming self-reliant and contributing towards *Atmanirbhar and Viksit Bharat by 2047*.

### **Conclusion**

This initiative of NCIDE for empowering the students and alumni for innovation and entrepreneurship through a series of workshops and training sessions is a step towards the implementation of the NEP-2020 by the university. It is not only encouraging the students to think out of the box and keep innovating, but they are being inspired to generate new ideas, incubate them and act on them at the appropriate time to convert the ideas into innovation, leading to entrepreneurship. It is encouraging to see that the students are picking up grassroots-level issues and they are coming up with innovative ideas relevant to society, contributing towards a *Viksit Bharat@2047*. It is hoped that, as envisioned in the NEP-2020, these empowered students will not only be job seekers but they may be job providers. Thus, they may also be great contributors to the *Atmanirbhar Bharat Mission of the Government*, and thus making *Viksit Bharat@2047*.

□

# Advancing Generative Artificial Intelligence: Innovations and Potential Risks to Core Humanistic Values

Prateek Chaurasia\*

The present article deals with the discussions and arguments based on the fundamental intercept of generative AI in education and its impact and consequences. Generative AI has emerged as a potential support in creating text and documents. It has empowered the learning communities with various hands to generate the content; on the other hand, it poses a threat to the existing system by affecting the creative, articulation and other cognitive abilities among the individuals. Generative AI can promote innovativeness and support personalised learning, automated grading, and content creation in a more dynamic and versatile manner. It has vast advantages but has some potential threats also. Therefore, having a thoughtful eye on the use and implications of Generative AI becomes important. The article deals with the core discussion based on the utility of Generative AI and its challenges to core human values. The discussions and conclusion of the article can be utilised by the stakeholders of education and related wings of education, to comprehend the role and potential threats to the overall education system and can underline the appropriate use of Generative AI and its intercept in society in general and specifically for education.

Artificial Intelligence (AI) is becoming universal in modern developed societies. It is a significant factor in marketing, design, entertainment, the health sector, and other life interfaces. In addition, it is also increasingly present in Higher Education (HE). In the waste landscape of education, the integration and adaptation of Generative Artificial Intelligence (Generative AI) has initiated a transformative wave, reshaping established paradigms of learning, teaching, and assessment (Baidoo-Anu & Ansah, 2023). GenAI tools are altering the way teaching-learning content can be produced and provided. Concerning exam preparation and correction, GenAI has been found to transform educators' workloads and capabilities

to do so. (Yang, et. al., 2021). GenAI-driven course assistance tools are also valuable for homework and exam preparation (Labadze et al., 2023). In the future, content generated through human-AI conversations may become one of the main sources of knowledge production. As day by day, technology is advancing, most educators are attempting to identify opportunities to optimise and enhance the learning outcomes and help students learn in new ways, as well as identify and understand the various intercepts of GenAI and related tools on various aspects of life.

Today, there is a dilemmatic approach and a situation on how to use GenAI for teaching, learning and assessment. It should be used to enrich education and research. The recent changes in education and research to be properly and adequately activated by GenAI can be done by redesigning the policies and their social perspectives. Only by using this can it not ensure the potential of GenAI. In most of the research conducted on Gen AI, it was found that so far, GenAI tools were promising but always accompanied by several boundaries, inadequacies, and ethical issues (Hamilton, Wiliam, and Hattie, 2023).

This new development has already considerably impacted the education sector and prompted the release of numerous other generative AI tools. GenAI technologies are still rapidly evolving and likely to have a subterranean influence on education and research. On the other hand, it offers serious challenges that have yet to be fully understood. Therefore, their probable enduring implications for school education, higher education, and research need instant attention, otherwise they may have worse consequences in the future. It is high time to understand the role, need, and challenges of GenAI in the modern world of technology-dominated learning and other interfaces. Different AI approaches have been considered to foster innovative teaching and learning practices, presenting opportunities that would have otherwise been impossible to materialize.

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\* Assistant Professor, Faculty of Education, Banaras Hindu University, Varanasi-221010 Uttar Pradesh. E-mail: prateek.chaurasia100@gmail.com

## **Understanding Generative Artificial Intelligence (GenAI)**

Generative Artificial Intelligence (AI) is a form of AI that can freely generate new content, such as text, images, video, and audio. Generative AI provides innovative approaches for content production in the metaverse, filling gaps in the development of the metaverse. Generative AI (GenAI) is an Artificial Intelligence (AI) technology that automatically generates content in response to prompts written in natural-language conversational interfaces. Products such as ChatGPT have the potential to enhance the search experience, reshape information generation and presentation methods, and become new entry points for online traffic. This will significantly impact traditional search engine products, accelerating industry innovation and upgrading. GAI refers to a broad category of AI that focuses on synthesising—and/or generating—content or data that is often indistinguishable from human-generated content (Ebert & Louridas, 2023 and Guan, et. al., 2023). It offers insights for increasing the effectiveness of generative AI in creating creative content.

The content can appear in formats that comprise all symbolic representations of human thinking: texts written in natural language, images (including photographs, digital paintings, and cartoons), videos, music, and software code. GenAI is trained using data collected from webpages, social media conversations, and other online media. It generates its content by statistically analysing the distributions of words, pixels, or other elements in the data that it has ingested and identifying and repeating common patterns (for example, which words typically follow which other words). It has transformed interactions with the larger audience, emerged as an influential tool that effortlessly connects with users in a multitude of settings (Guan, et. al., 2023). Using GAI algorithms, original and visually appealing artwork has been produced. One notable example is the “Deep Dream” algorithm developed by Google (Fjeld & Kortz, 2017). It utilises deep neural networks to convert images into surreal and dream-like compositions by reshaping, enhancing and modifying patterns and structures. Artists and enthusiasts are frequently using this algorithm to generate fascinating and imaginative visual artworks (Maerten & Soydaner, 2023).

The specific technologies behind GenAI are part of the AI family of technologies commonly known as Machine Learning (ML). This machine learning generally uses algorithms to enable it to continuously and automatically improve its performance from data. It enables computers to modify or adapt their actions. The most common and rapid type of ML that has led to many of the advances in AI in recent years, such as AI for facial recognition, is artificial neural networks (ANNs), which are inspired by how the human brain works and its synaptic connections between neurons. Generative AI fundamentally works upon some major components like Machine learning (ML), Artificial Neural Networks (ANN), and Text generative AI, with the help of this, it becomes extremely productive in the world of content creation. Among all these, Generative Adversarial Networks (GANs) and Variational Autoencoders (VAEs) neural networks play a crucial role in Image generative AI (UNESCO, 2023). All this is combined and prepares an action plan for the functional aspect of generative AI.

## **Generative AI and its Growing Impact in the Present Era**

Generative AI has rapidly emerged as a transformative technology with applications across numerous sectors. In the present era, publicly available generative AI (GenAI) tools are spreading tremendously. While there is extensive research on AI adoption, especially in education and the workplace, there remains a need for a deeper understanding of how these factors influence adoption globally and across different contexts. This emergence of Gen AI has produced various kinds of threats also as in most countries, Gen AI leaves the data privacy of users unprotected and educational institutions largely unprepared to validate the tools. The increased expansion and placement of GenAI technologies in society have raised the utility and threat to the overall aspect of human civilisation. When we raise the concern of higher education, it will require higher education institutions to continuously monitor AI advancements and stay informed about their influences and applications in education in broader and comprehensive ways. Generative AI is inherently filled with various potentials that offer applications that can revolutionise educational practices related to teaching, learning

and assessment. The potential of AI in education extends beyond just its technological capabilities; it has the power to make education more accessible, engaging and customised to individual learning requirements. It introduces avenues for learning, teaching methods and interaction with educational content. GenAI has a wide range of educational applications, including learning management, intelligent tutoring systems, assessment and evaluation, and prediction of student performance (Crompton & Burke, 2023).

GenAI shows great promise, but various obstacles must be overcome before it can reach its full potential. Some of the primary problems that researchers and developers must solve to support the responsible and successful usage of GenAI models are ethical issues, data quality, explainability, security, and resource limits. GenAI models are vulnerable to confrontation in many ways. Further, large-scale GenAI model training and deployment necessitate significant computational resources and energy usage. It is critical to address these resource limits to make GenAI models more accessible and sustainable (Strubell, et. al., 2019). Gen AI is playing a very crucial role in generating various kinds of content that professionals across the discipline widely use. Its adoption is shaped by various factors, including organisational readiness, infrastructure, perceived benefits, and ethical considerations. Guzdial, et. al. (2018) elaborate on how generative models can boost and advance game design by creating dynamic content and characters and enriching the gaming experiences more interactively. Generative AI has also transformed

the era of use of traditional search engines on the web; it has changed the paradigm of retrieval of information through search engines to generative AI models like ChatGPT. It has overpowered the existing search engines with a unique AI model, i.e. Generative Pre-trained Transformer, commonly known as GPT. The strengths of generative AI, have largely influenced almost all the spheres of human endeavours like education, medicine, engineering, media, printing, and entertainment. Along with these implications and impact, ethical considerations of using gen AI have emerged with the alarming issues in society.

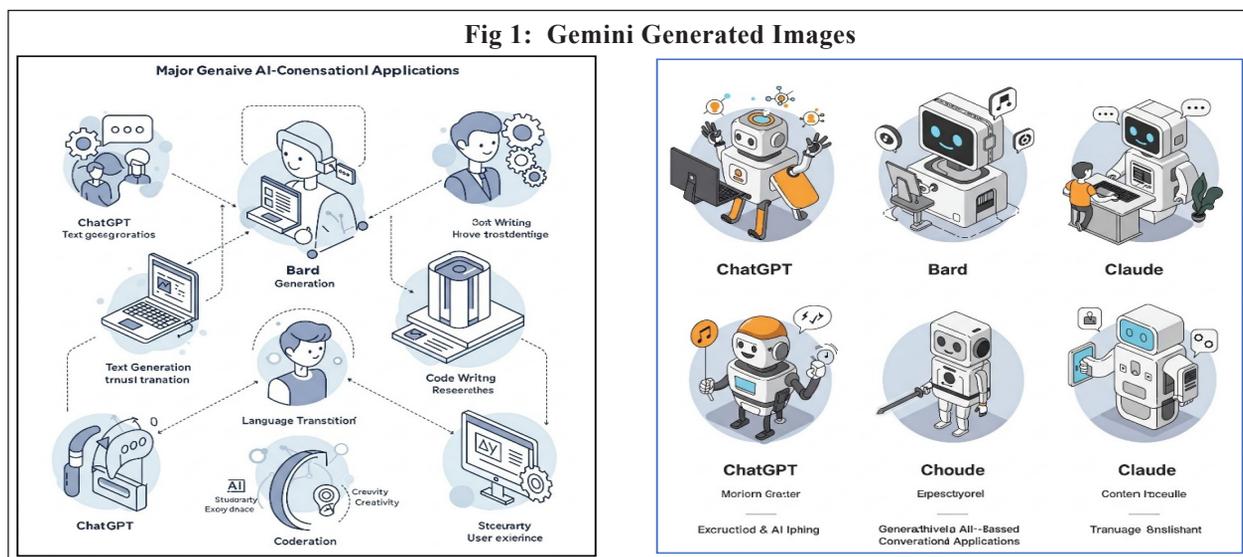
Gen AI and its multidimensional support to education.

- Creative Content Generation.
- Education and Training.
- Personalisation and Recommendation Systems.
- Design and Creativity Assistance.
- Healthcare and Medicine.
- Data Augmentation.
- Simulation and Modelling.
- Advertising and Marketing.

### Some Sample Images Created by Gemini 2.0 Flash

The command given to Gemini 2.0 Flash was, ‘Creates the Smart Art of Some Major Generative-AI-Based Conversational Applications’

Figure 1 shows the sample images developed by Gemini 2.0 Flash



### Some Sample Images Created by Chat GPT

The command given to Chat GPT was, ‘Creates the Smart Art of Some Major Generative-AI-Based Conversational Applications’

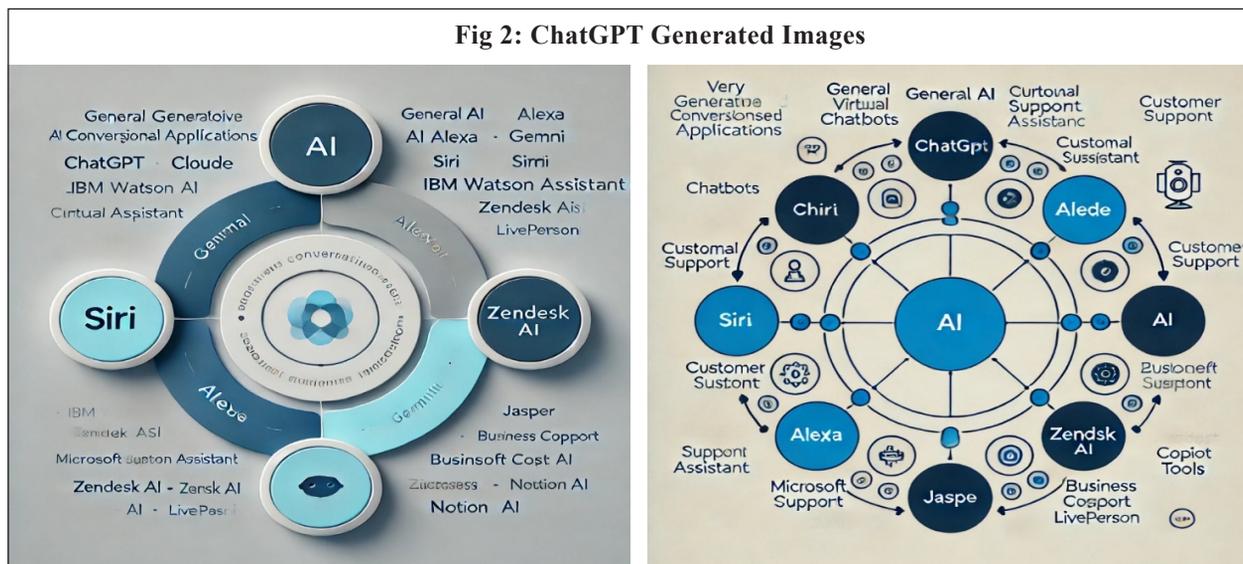
Figure 2 shows the sample images developed by Chat GPT. In Figure-3 some major Generative-based conversational applications are shown.

### Need for a Human-Centric Approach for Using Artificial Intelligence

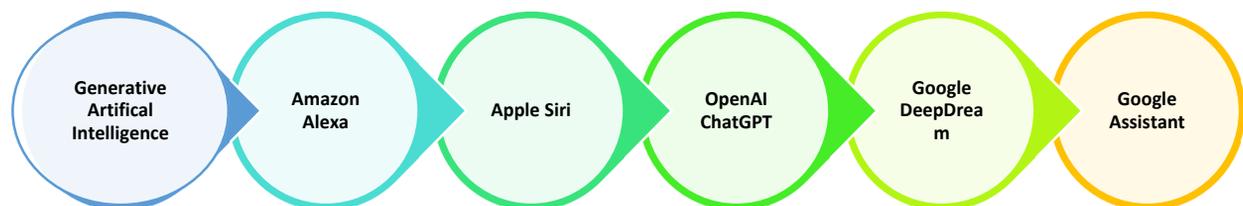
The rapid development and deployment of generative artificial intelligence have created numerous opportunities across various sectors. Creating art, generating text and images for scientific research and business optimisation. However, this swift evolution also raises significant concerns that necessitate the involvement of regulators and monitoring bodies. AI is growing faster and faster day by day, it has the intercept an impact on almost every aspect of human life. Since it affects every aspect of human life, it needs to be human-centric in approach and methods. the use of AI should be at the service of the development of human capabilities for inclusive, just and sustainable

futures. UNESCO’s first global guidance on GenAI in education aims to support countries to implement immediate actions, plan long-term policies and develop human capacity to ensure a human-centred vision of these new technologies. The 2019 Beijing Consensus on Artificial Intelligence (AI) and Education emphasises the human-centred approach to using AI in the context of education. This Consensus affirms that the use of AI technologies in education should enhance human capacities for sustainable development and effective human-machine collaboration in life, learning and work. Specifically, it addresses the requirement to ensure equitable access and digital opportunities for all.

The Consensus suggests adopting whole-of-government, intersectoral and multistakeholder approaches to the planning of policies on AI in education. These issues were further raised by discussing the Governmental strategies for regulating and facilitating the creative use of GenAI were mapped and reviewed in April 2023 (UNESCO, 2023b). The review suggests a series of seven steps that governmental agencies can take to regulate generative AI and reassert public control



**Fig 3 Generative-based Conversational Applications**



to leverage its potential across sectors, including in education.

### **Potential Risks of GenAI to the Learning Process and Core Humanistic Values**

Presently, GenAI approaches are useful and powerful for creating and developing artefacts based on the existing knowledge base. For decades, educational researchers have argued and found that deep and authentic learning is more than just the assimilation of written texts and artefacts (Nguyen, Rienties, and Richardson 2020). Generative AI has found applications in various fields, including art, entertainment, design, and scientific research. It has enabled the generation of realistic images, the synthesising of new music compositions, the creation of life-like characters and animation in video games, and assisting in drug discovery by designing novel molecules. The ability to generate content autonomously opens up new possibilities for human creativity and expands the boundaries of what machines can achieve. On the other hand, it has raised the threat to the core humanistic values. It poses a threat to human creativity and the ability to articulate in many ways. The content generated by applications like ChatGPT, Gemini, etc. has a serious issue of accountability and credibility. Future generations might face the challenge of knowing the concept of authorship and ownership in academics, as well as other literary writings. The excessive dependence on AI in general and particularly on generative AI tools during early childhood development Generative AI can have serious consequences on the creativity, writing skills and thinking skills of a child in early developmental stages.

The necessary cognitive processes involved in learning and problem-solving. In addition, another critical concern is the impact of generative AI on children's metacognition—their ability to monitor and control their thinking processes. Furthermore, the instant fulfilment of various kinds of generative AI tools may discourage children from developing patience and perseverance as it reduces the period to very little in terms of problem-solving, thinking, reasoning and other cognitive abilities. Generative AI has proved to be promising in many ways, and in the same way, it poses challenges to society. Therefore, it becomes the need of the hour to look into the situations from critical, pedagogical and humanistic angles.

### **Conclusions**

Technology and its associated wings have dominated the present era. The world is growing rapidly with various technologies and becoming highly dependent on them. These have virtues and shortcomings as well. As the human generation progresses, it keeps focusing on the developmental mechanism, patterns and possibilities for further extensions. Among this wide spectrum of possibilities, one of the major technological advancements is artificial intelligence, which has opened up various horizons for expanding the endeavours of human civilisation.

Generative artificial intelligence holds immense potential. However, its dominance necessitates careful oversight to ensure ethical use, protect individual rights, and mitigate risks. By establishing appropriate regulatory frameworks, we can harness the benefits of GAI while safeguarding society from its unintended consequences. It represents a transformative technology that has the potential to reshape various industries and drive innovation. Its ability to generate new and realistic content opens up exciting possibilities for creative expression, problem-solving, and personalised experiences. With continued research and development, generative AI is poised to make significant contributions to the future of technology and society as a whole. While generative AI has made significant progress, there are still challenges to overcome. Improving the realism of generated content, enabling better control over the generated output, and addressing ethical concerns are areas of active research. Therefore, it is now prominent to explore techniques for control, judicial and domain-specific applications to make generative AI more versatile and adaptable to different scenarios and contribute to society in a more meaningful and humanistic cultured way.

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## Edited Book

on

***Realising United Nations Sustainable Development Goals through Higher Education Institutions***

By

***Dr (Mrs) Pankaj Mittal***

and

***Dr Sistla Rama Devi Pani***

The Association of Indian Universities has come out with a new publication on the vital theme ‘***Realising United Nations Sustainable Development Goals through Higher Education Institutions***’ this year 2024. AIU undertook several initiatives, like organising consultancies, debates, discussions, and Vice Chancellors Meets with experts from the United Nations, the Government, NITI Aayog, and Industries to deliberate extensively on the various issues regarding SDGs. AIU also gathered articles from experts and erudite scholars on the implementation of the SDGs. Each article in the Book is unique and deals with a wide range of issues involved with SDGs in the words and opinions of the authors. This Book covers a range of articles on the status of implementation and the role that Higher Education Institutions can play in the speedy implementation of all 17 Sustainable Development Goals (SDGs). It certainly acts as a reference guide for those who are stuck in the process of achieving this extremely inevitable Agenda 2030. It provides a roadmap for the government and the universities to act timely to achieve the 2030 agenda for sustainable development.

For further details contact the Editors on Email Id : [ramapani.universitynews@gmail.com](mailto:ramapani.universitynews@gmail.com)

# Innovative Institutional Practices in School Education: Bridging the Gap between Skills and Career Opportunities

Tania Sarkar\* and Alok Kumar\*\*

India, with its diverse socio-economic, cultural, and geographical characteristics, has significantly impacted school education, where a substantial gap exists between educational opportunities and career prospects. Despite having a demographic dividend population, India is still struggling with choosing a career option. In the current generation, most students focus primarily on careers like doctors and engineers, rarely considering the possibility of other fields of work. This paper is primarily aimed at understanding the extent to which innovative institutional practices can be implemented within education at the school level to foster career development among students, as well as identifying some of the significant challenges associated with implementing such practices. The article examines educational practices at Visva-Bharati, Avivyakti Primary School, Arinko Academy, Yellow Train School, and SECMOL — alternative learning spaces that incorporate hands-on learning activities, interdisciplinary studies, and an emphasis on solving real-world problems, aimed at nurturing all areas of student development. Additionally, the paper addresses challenges such as curriculum misalignment with job market needs, the underdevelopment of soft skills, and inadequate school infrastructure. Integrating alternative practices in schools would foster new perspectives among students and unveil new career opportunities. Vocational education, focusing on the development of both technical and soft skills, enables students to be better prepared for diverse career opportunities, fostering self-esteem, emotional intelligence, and financial literacy. The findings suggest that a transformative shift in India's education system, as recommended by the National Education Policy 2020, is essential to equip students with the skills necessary for the 21<sup>st</sup> century.

India, with its vast population of 1.4 billion, is a land of immense diversity, where people come from varied backgrounds shaped by differences in

geography, natural resources, parental education, religion, culture, socio-economic status, caste, and class. These dimensions have a significant impact on the career aspirations of the younger generation. As a developing nation, India has seen an increase in its working population ratio, which rose from 31.4% in 2017-18 to 41.7% in 2023-24, according to the Periodic Labour Force Survey. However, this growth highlights a persistent employment gap, indicating challenges in matching workforce aspirations with adequate job opportunities. Recently, India Today (2024) highlighted the fact that India has been experiencing a demographic dividend for a long time, with a median youth age of 28 years. However, the full potential of this dividend is yet to be harnessed. The main reason for that lack of skill among youths. Mercer (2024) conducted a study, mentioning that only 45% of Indian graduates applying for jobs possess the skills needed to meet the rapidly changing demands of the industry. The report indicates that it is easier to find candidates with high employability in non-technical skills than those who are job-ready for technical roles, with 53% employable in non-technical roles versus 44% in technical positions. In this context, schools play a crucial role in shaping the future generation. Becoming a doctor or engineer is fetishised in India, and most parents will leave no stone unturned to fulfil this dream, irrespective of whether the child wants it. Often, schools and colleges driven by traditional curricula fail to help children pursue their actual interests, which ultimately contributes to the growing number of unhappy and dysfunctional adults in the workforce (Priya, 2017 and Sarkar, 2024). Teachers bear significant responsibility for this mindset. Giving students the tools and knowledge to plan for their futures realistically is a primary goal of education (Katherine & Melinda, 2004). Keeping in mind the needs of contemporary society and 21<sup>st</sup>-century skills, a fundamental transformation in the education system is necessary, as mentioned in the National Education Policy–2020.

As mentioned in NEP-2020, less than 5% of individuals in India receive formal vocational education. Skill-based education in India requires

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\*NCERT Doctoral Fellow, Faculty of Education, Banaras Hindu University. E-mail: [taniaeducation93@gmail.com](mailto:taniaeducation93@gmail.com)

\*\* Assistant Teacher (Geography). Res: Shivpur, PO--Patut, Patna- 801112 (Bihar). E-mail : [alok19940@gmail.com](mailto:alok19940@gmail.com)

as much attention as general education. It not only helps address the job crisis but also fosters acceptance of individuals' unique abilities. Every child is unique, yet the Indian education system suffers from a significant gap in practical learning. If vocational and skill-based education is integrated into the school curriculum and made compulsory, it can empower learners to earn a livelihood (Bhandari & Sharma, 2024). Students from lower socio-economic strata, in particular, can develop practical and vocational skills that enable them to start their careers at an early age.

### **Objectives**

The primary objective of this paper is to investigate how innovative institutional practices in school-based education can enhance students' career development and to examine the challenges associated with implementing these practices.

### **Methods**

In this paper, the researcher has reviewed various articles and explored websites that showcase institutional practices to assist students in learning career-oriented programs.

### **Target groups**

Education for career development can be imparted from an early age, where children can learn technical skills related to the environment, as well as hands-on tasks and other practical work through class XII. As per their aspiration, they can choose their field.

### **Discussion**

In the rapidly changing global landscape, students require a skill-oriented education. While knowledge and access to information have become increasingly widespread, individuals without proper skills may struggle to remain competitive on a global level. In this context, skill-based vocational education plays a crucial role in preparing students for future challenges.

To reflect on how schools can adopt alternative and innovative institutional practices in education, it is essential to explore ways that effectively contribute to students' career development. By integrating hands-on learning experiences, real-world problem-solving opportunities, and peer partnerships, schools can create environments that foster critical thinking, creativity, and adaptability.

Moreover, aligning the curriculum with emerging global trends ensures that students acquire relevant and in-demand skills, preparing them for dynamic career paths.

Encouraging interdisciplinary approaches, incorporating technology-driven tools, and emphasising experiential learning can further enhance the educational experience. Such practices not only equip students with technical expertise but also nurture essential soft skills, including communication, teamwork, and leadership, making them well-rounded and globally competent individuals. In today's technology-based society, we can teach students a wide range of knowledge and skills while also developing their Emotional Intelligence (EQ). This equips them to handle any adverse situation they may encounter competently. Here are a few examples, as highlighted by researchers, of existing innovative practices that contribute to students' career development.

### **Institutional Practices in School-based Education can Contribute to Students' Career Development**

#### ***A. Patha Bhavana (Visva-Bharati)***

The accomplishments of Visva-Bharati exemplify Rabindranath Tagore's visionary understanding of students' learning needs, emphasising experiential learning and skill-based education many years ago. In 1901, Tagore established an experimental school at Santiniketan with five students and five teachers. Initially named the Ashram School, it was later renamed *Patha Bhavana* in 1928. Day scholars and residential pupils were amalgamated at this institution. At Patha Bhavana, no formal examinations were conducted until the eighth grade. Teachers employed innovative teaching methods, fostering a sense of freedom that allowed students to express their thoughts creatively, particularly during the weekly Sahitya Sabha (literary assembly). In today's context, this highlights the importance of innovative writing skills and the increasing demand for content creators. The curriculum up to Class VIII included subjects like drawing, handicraft-making, nature study, woodworking, weaving, music, and dance, all of which were compulsory. Students were also taught clay modelling and storytelling, alongside creative activities such as tie-dye, Batik printing, and Alpona (traditional floor art). These

activities turned learning into a joyful and enriching experience, laying a strong foundation for holistic education. These activities turned learning into a joyful and enriching experience, laying a strong foundation for holistic education. At Visva-Bharati, several Vibhags were run by students, fostering empathy, collaborative learning, and experiential growth, which significantly contributed to their holistic development. At Santiniketan's *Ananda Bazar Utsav*, students from schools and colleges showcase and sell handmade products, food items, and creative artworks. This platform not only celebrates their talents but also paves the way for developing entrepreneurial skills. Here, Fig 1 shows different *vibhags* run by the School of Visva Bharati, which help to promote students' holistic development.

**Avivyakti Primary School**

Avani's *Avivyakti Primary School*, located in Tripuradev, Kumaon, was established in April 2011 as a small, creative learning center based on a child-centric learning model. It was set up on the campus to engage young children who often accompanied their parents to Avani, where they worked as weavers, natural dyers, farmers, or administrative personnel. The campus hosts various activities, including hand spinning, knitting, weaving, felting, braiding, painting, natural dyeing, gardening, and composting, offering rich learning opportunities for school children. These experiences, set within the lap of nature, help nurture sustainable entrepreneurship skills among the students.

**Green School (K-12) in Bali**

The Green School in Bali offers a curriculum that is highly focused on ecology and sustainability, making direct connections to the local geographical and cultural context. It is very hands-on, encouraging students to engage in practical activities that literally help them get 'hands dirty' and 'feel the mud between their toes' while concurrently maintaining literacy and numeracy skills. Cleaning an organic garden best describes part of the

learning experience toward sustainable practices. Moreover, students are equipped with practical skills regarding financial management as well as innovation, thereby preparing them for economic independence as well as a sustainable future.

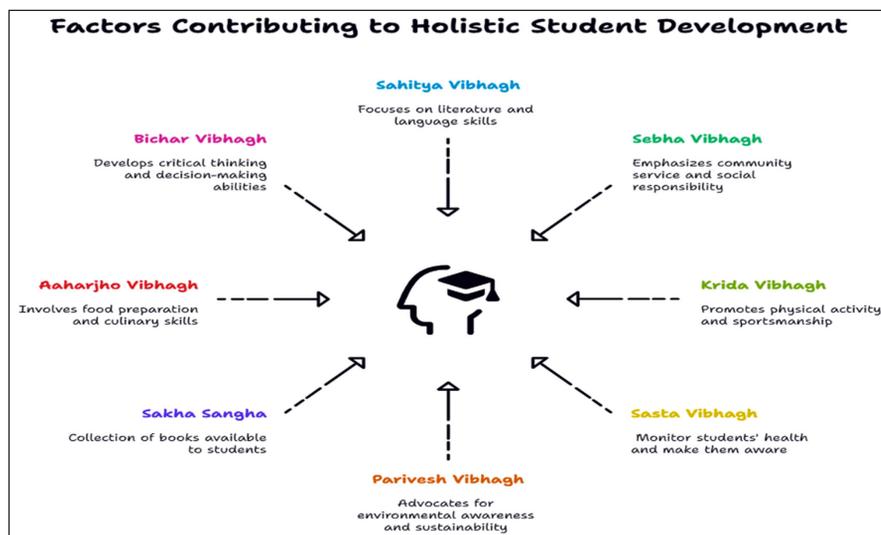
**NuVu School**

NuVu School, Massachusetts, USA, offers a distinctive studio-based education model that emphasises creativity, collaboration, and practical problem-solving. Unlike traditional schools, NuVu does not have a standard curriculum; instead, it offers interdisciplinary projects with expert mentors that help students develop skills in areas such as design, engineering, and art while confronting society's and technology's problems. The hands-on approach encourages experimentation and iterative processes that develop critical thinking along with resilience and innovation. This is personalised learning at its best: students work on projects that interest them and create portfolios of their work. NuVu prepares students for modern interconnected careers by integrating advanced technologies with the cultivation of teamwork. It is an inclusive school.

**SECMOL School in Ladakh**

The Students' Educational and Cultural Movement School, commonly known as SECMOL, is an innovative school that boldly practices the integration of education with entrepreneurship and sustainable living. The school empowers students through experiential

**Fig 1 : Different Vibhags, Patha Bhavana, and Their Activities**



learning opportunities specifically designed for the cultural and local context of rural Ladakh. Students manage the campus operations; they also run solar systems and organic farms, all contributing to the acquisition of practical skills that enhance independence and creativity among students. These activities instil entrepreneurial qualities in students by demonstrating sustainable business principles, approaches to challenges, and financial management arrangements. At SECMOL, agriculture is mathematics as well as biology; selling products makes economics and commerce learned while following a holistic approach to education grounded in reality.

### **Chirag School**

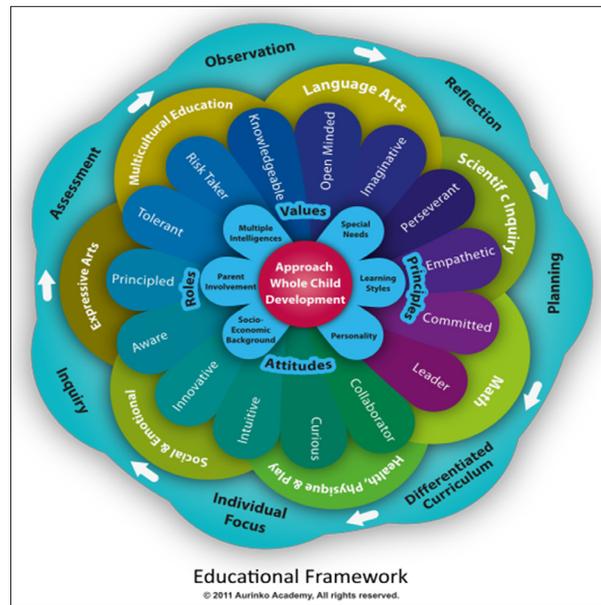
Chirag School in Uttarakhand offers a holistic and community-focused education, providing students with a solid foundation for diverse career opportunities. Through experiential learning, sustainable agriculture, environmental awareness, and life skills development, the school equips students to pursue careers in fields like eco-tourism, sustainable farming, environmental science, social work, and rural development. Additionally, the emphasis on creative arts, communication, and leadership fosters entrepreneurial spirit and opportunities in local crafts, media, and education. With a focus on practical knowledge and social impact, Chirag School prepares students to thrive in careers that contribute to both their local communities and broader global challenges.

### **Arinko Academy**

The curriculum of Aurinko Academy is influenced by Co-Constructivist theory, the Universal Laws of Karma, the teachings of eminent Gurus, the traditional Indian Gurukul System, and a well-studied and effective methodology developed by its creators, situated in Bangalore since 2011 supported by Cambridge Programs. Its main focus is to provide a learning environment where children strengthen their various skills and opportunities to nature and nurture their work hand in hand beyond traditional learning with the help of the Arinko ecosystem (teacher, parents and extended community).

Fig. 2 illustrates Aurinko Academy’s educational framework, which supports the overall development of its students. The institution will

**Fig 2 : Aurinko Academy’s Framework**



provide equal opportunities for learning tailored to their needs and interests. Aurinko teachers aim to instil a wish in a child's mind-

- a) To learn,
- b) To be content,
- c) To be responsible, and
- d) To love himself, the environment and the community.

Fifteen years, shown by Vivek, a young entrepreneur who designed wooden toys for educational reasons, clearly demonstrates the potential for employment choices beyond the fields of medicine and engineering.

### **Yellow Train School, Coimbatore**

The Yellow Train School in Coimbatore presents a refreshing alternative to learning, focusing more on experiential learning and holistic development rather than the mere bookish approach to learning. Students engage in activities like wildlife exploration, walking through organic farms, playing musical instruments, and learning pottery to nurture creativity, curiosity, and a deep relationship with nature. This might sound like a never-ending vacation, but it simultaneously equips students with essential life skills: critical thinking, collaboration, emotional intelligence, and problem-solving, all of which are foundational for any career path they choose.

This unique learning environment ensures children develop a strong sense of purpose and adaptability, preparing them for diverse career opportunities. Traditional professions, such as science, law, and engineering, or newly emerging fields like sustainability, the creative arts, and entrepreneurship, may be pursued. However, the values instilled at Yellow Train School—such as Independence, innovation, and a love for learning—will help position them to thrive in these paths.

### ***Earthlore Academy the Farm School***

To unlock the inherent potential of each student, so that they can build up their own space and identity. Students are developed to excel in innovation in academic performance and make them active contributors to society through innovative educational practices. It is an approach that holistically integrates learning from nature, experiential education, and community involvement.

Under the Montessori approach, adolescents engage in hands-on learning through agricultural work, growing various types of vegetables. These are sold along with their cooked dishes at the school feast, imparting important lessons in math, economics, and also vital life skills.

### **Challenges Associated with Incorporating these Practices**

#### ***Curriculum Misalignment with Job Market Needs***

In the current scenario, addressing job scarcity requires a strong focus on skill development. Degree vs. Skills: Why is India producing graduates with a low employability quotient? This is primarily due to the lack of skill-oriented education among Indian students. The traditional curriculum fails to equip children with the necessary tools to adapt to modern job market demands. Practical education, life skills, and skill-based learning can empower students to explore alternative career opportunities and thrive in a competitive environment.

#### ***Overlooked Significance of Soft Skills Development***

Globally, 21st-century skills, including technical expertise and critical thinking, are highly prioritised. However, we often overlook the importance of developing soft skills, such

as collaboration and teamwork. In today's era of AI-integrated learning and machine learning, innovation is rarely the work of a single individual. Instead, it requires collective effort, where every member of the group actively contributes to the learning and creative process.

### ***Inadequate Administrative Structure and Lack of Efficient Teachers***

To meet students' needs, teachers must engage in continuous professional development, an area where many Indian school educators fall short. Additionally, implementing skill-based education requires adequate equipment, which is often lacking in Indian schools.

### ***Implications for Career Development of School Students***

Incorporating skill-based education in schools can have several positive implications:

- ***Enhanced Self-Esteem:*** Students gain confidence as they recognise and develop their unique abilities and strengths.
- ***Improved Emotional Intelligence:*** Skill-based education fosters emotional growth, helping students build stronger interpersonal relationships and adapt better to challenges.
- ***Collaboration and Teamwork:*** Students learn to work together effectively, honing their ability to collaborate in diverse environments.
- ***Financial Literacy:*** Skill development in areas such as finance and marketing equips students with practical knowledge for managing money and understanding economic concepts.
- ***Career Flexibility:*** Students are exposed to a wide range of career opportunities, encouraging them to explore alternative and non-traditional career paths beyond academics.

### **Conclusion**

The incorporation of skill-based education within India's school curriculum is essential for addressing the growing job crisis and preparing students for future challenges. Innovative educational models that blend theoretical learning with practical skills can significantly contribute to students' personal and professional development. By focusing on both technical skills and soft

skills like collaboration, emotional intelligence, and financial literacy, schools can help students explore diverse career paths beyond traditional roles. Despite challenges such as curriculum misalignment and inadequate infrastructure, there is immense potential to transform the educational landscape in India through skill-based education. This transformation is crucial for leveraging the country's demographic dividend and ensuring that future generations are equipped with the knowledge and abilities necessary to thrive in an increasingly complex and competitive global workforce.

India's skill-based education is crucial for addressing the job crisis and preparing students for future challenges. By combining theoretical learning with practical skills, schools can help students explore diverse career paths. Despite challenges like curriculum misalignment and inadequate infrastructure, this transformation can equip future generations with the necessary knowledge.

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# Librarians' Role in Implementation of National Education Policy-2020: A Study

Meenal Kedar Oak\*

Education is a fundamental need for achieving full human potential, developing an equitable society and ultimately promoting national development. Therefore, every country is supposed to provide high-quality education for national sustainable development in all fields. To fulfil this objective, every nation abides by laid-down educational policies to upgrade the quality of education. As far as India is concerned, the recently launched educational framework, NEP-2020 showcases the growing developmental imperative of our country. The policy aims to increase Gross Enrolment Ratio (GER) at the school level through universalising education, ensuring inclusive and equitable quality education, and promoting lifelong learning opportunities for all.

In this policy implementation process, the participation of every element of the educational frame is required to get the expected results in due course of time. The policy has underlined the importance of the faculty in developing India/Bharat as a knowledge superpower; in this overall development process, the role of the knowledge director/librarian as a provider of information, the conservator and preserver of heritage knowledge through digitisation, is crucial in today's world of educational reforms and revamps. The paper envisions a few requisites for the information professionals that will assist policymakers and the educationalists in making the process of reforming and revamping more effective and efficient.

The National Education Policy of India 2020 is the first education policy of the 21<sup>st</sup> century. This policy aims to address developmental imperatives of our country. The Policy document proposes revision and revamping of all aspects of the education structure, including its regulation and governance. This shall help to create a new system that is aligned with the inspirational goals of 21<sup>st</sup>-century education, including SDG4. While building upon India's traditions and value-based system, the

education policy proposes the recruitment of the best and brightest to enter the teaching profession at all levels. This shall ensure livelihood, respect, dignity and autonomy, instilling basic methods of quality control and accountability. India shall have the highest population of youngsters worldwide in the next decade, and our ability to provide high-quality education relying on skills and overall development is the best way forward for developing and maximising the country's rich talent and using resources for the well-being of individuals, society, the country and the world at large.

## Education Policies in India: A Review

Like the other educational policies of different countries, more emphasis is on a holistic approach to education in NEP-2020. If we look at the historical part of education policy in independent India, it started in 1948 as the University Education Commission. Later on, in the year 1964, under the chairmanship of Dr. D. S. Kothari, well known as Kothari Commission report. In 1986 first time in the form of the National Education Policy which came into effect in 1992. Now, under the chairmanship of Dr. Kasturirangan in 2020 known as the National Education Policy. The process started in 2016, and after a lot of initiation from all stakeholders and an enormous number of suggestions, the draft report was finally presented in 2019.

## Educational Policies: A Global and a National Review

David Thomas Boven, in his PhD thesis, quotes Peter Robb, in many cases, the British supported native education to sponsor Indians in their own culture and advance their knowledge of India and apply that knowledge to employ and govern more effectively. In 1835, Thomas Macaulay, the first Law Member of the Governor General's Council, produced his *Minute on Indian Education*, and a decision was made in favour of an officially sanctioned Western education model. Education was deeply rooted since the British colonial period and in the era of the East India Company. In the present policy document, the Indianisation of Gurukul schools and education in the mother tongue is prominently seen.

\*Librarian, MES's Institute of Management & Career Course, Pune -411052, Maharashtra. E-mail: mko.imcc@mespune.in

Japan has undergone reforms in its education policy since 2018. The key factors in Japanese education policy are:

- Motivation to learn and apply learning to life.
- Acquisition of knowledge and technical skills.
- Skills to think, make judgments and express oneself.

For effective implementation of this Japan changed the teaching career, changed the selection process, and rearranged the syllabus to include skills and schedule of teachers to allow more time for training. The provisions to strengthen school children at an early age are seen due to this structure 6 + 3 + 3 + 4. Holistic education and lifelong learning are the basis of Japan's education policy; similarly, more emphasis is seen on education in the mother tongue, Skill education, and liberal education in NEP- 2020.

UNESCO very clearly has mentioned that around 15-20% of the government's total budget of every country is spent on the education sector and employing many teachers as civil servants (Education policies and strategies | UNESCO); the educational policies of Asian countries studied in a focused manner by Peng, Peiru (2022) from the University of Glasgow also studied Impact of Globalization on it, further mentioned that successful implementation of education policy requires sufficient resources and qualified teachers, and for Asian countries, it's a need to implement education policies in line with the background of globalization according to their own political and cultural backgrounds to improve their educational level and social efficiency.

As far as Bharat is concerned, an attempt is made to study the literature by reviewing the views of national-level scholars about Indian educational policy (NEP-2020); educational policies were formulated by the government of India to promote and regulate education in 1968, 1996 & 2020, respectively. Vora, Manu (2023) from Northwestern University, USA has shared his experiences as an invited member of the AICTE NEP-2020 Implementation Plan Strategy Committee, where he expressed the need for the adoption of innovative pedagogy and assessments for the successful implementation of NEP- 2020 in India; Chen, Ziyi (2023) has analyzed the first 20 pages of the Indian National Education Policy 2020. The paper is studied and written in the light of theories of pedagogy as

first-Human Capital; second, Traditional Academic; third-Learner Centred; fourth-Social Efficiency; fifth-Social Reconstruction. The paper discovered that even though all the theories are in the policy, the learner-centred policy is highly dominant. A qualitative approach was used and deeply studied the aspects of NEP-2020 along with the Bhagwat Gita (Maharaj, Ahuja and Malhotra, 2021) and has concluded that through the learning concerning pedagogy from our ancient treatise Shrimad Bhagwat Gita, the NEP can be implemented successfully. Voluminous papers on the challenges in the effective implementation of NEP-2020 in India are observed; major challenges underlined by a few of these are preparing compatible experts on the global level, changing ideas of nurturing the learner for a particular job market, and difficulties in revamping Indian education divided into two streams private and government organizations (Ratna, Anita 2023), creating a sense of ownership among the stakeholders, the diverse nature of institutions at the state level, lacking innovation, a sizable educational system with universities in different regions, figuring out pedagogical restrictions (Lakshmi, Vijaya, and Ugandhar, 2023), the challenges of blended learning underlined are the requirement of access to digital technology, and teacher training (Karthik, 2023). Scholars also have suggested strong solutions such as increasing public spending by about 6% of GDP on the educational system, multidisciplinary education (Aithal, & Aithal, S2020), gradual implementation of NEP 2020, redesigning the curriculum, and industry linkages, development of a robust monitoring and evaluation mechanism, and the involvement of all stakeholders in the implementation process (Yadav, 2023) also underlined the importance of government initiatives such as Make in India, Start-up India, Skill India, and Self Reliant (*Atma-Nirbhar*) India through which the need for strong answers to India's challenges is addressed. A comparative analysis of NEP 2020 by a Programme director (Ramesh, Sujatha, Indian education system with the American educational policy was done by the ISRO and Natarajan, K Retd, 2019) and found that the American system is traditionally highly flexible and allows a student to choose from a variety of courses and envisages similar flexibility in the choice and change of courses by underling the glory of Indian education ancient universities and culture. NEP 2020 through the Perspective of internationalisation of education, is underlined (AIU Report 2021).

The literature reviewed on the related aspects indicated that there will be numerous challenges in the implementation process of NEP-2020; however, it is also observed that India is focused soundly on the ethos and heritage knowledge with a strong cultural base, however the need is to revamp the current educational system by introducing a new one which will focus the constructive thinking and skills for Overall Development of Budding Youths of the Country to Match the Expected Gross Enrollment Ratio (GER) up to 50% by 2035 from 26.3 (2018).

### **Structure of NEP-2020**

The NEP document consists of 4 parts and each part is dedicated to different academic stages. The policy document discusses at length every stage of the academic structure and describes how the methods can be adopted in the new system so as to have holistic development. The gist of each part is as under:

#### ***Part I: School Education***

A paradigm shift is seen in the structure. From 10 + 2 + 3 to 5 + 3 + 3 + 4, the vision of the policymakers is that 85% of children's brains have absorbed the knowledge by the age of 6 years. Holistic development, a wide choice of subjects and courses year to year, shall be the new distinguishing features of secondary education. The SDP and SCDP shall be the primary mechanisms to align all stakeholders of the school, including the DSE. Topic-centred, Project-based Clubs and Circles shall encourage and support at the level of schools, school complexes, districts and beyond. This Policy is in complete consonance with the provisions of the RPWD Act 2016, and endorses all its recommendations about school education. Separate strategies shall be formulated for focused attention, reducing the social category gaps in school education. Each stakeholder and participant of the education system shall be accountable for performing their role at the highest level of integrity, full commitment, and exemplary work ethic. As per the 75th-round household survey by NSSO in 2017-18, the number of out-of-school children in the age group of 6 to 17 years.

#### ***Part II: Higher Education***

The NEP policy document is focused on developing youth power in the 21<sup>st</sup> century by transforming the higher education system through key reforms. The focus of policy is on access, quality,

equity, affordability, and accountability in higher education to make India a knowledge superpower centre of knowledge – *Vikasit Bharat*. Increasing the GER from 26% to 50% in the higher education belt by 2030 is the main focus of the policy. Highlights of NEP-2020 for higher education can be summarised as:

- Internationalisation of higher education.
- Increasing the Gross Enrollment Ratio to 50% by 2025, through scholarships, Gender education funds, and special education zones.
- Focused Multidisciplinary and Holistic higher education.
- Autonomy in higher education with the curriculum design and more accountability
- More Inclusiveness and equity.
- Focused research and innovation – setting up the MERUs (Multidisciplinary Education and Research Universities), NRF (National Research Framework).
- Multiple entries and multiple exits with the curriculum flexibility.
- ICT-focused teaching-learning process.
- Setting a single overarching umbrella body for higher education -Higher Education Commission of India (HECI) by replacing AICTE and the UGC.
- Skill building-Integration of vocational education into mainstream education – exposure to 50% of the learners to vocational programs.
- Academic banks of credits (ABC) and promotion of vocational courses and internships.
- Emphasising multilingualism – teaching regional languages, English and foreign languages, establishing IITI.
- Expansion of Open and Distance Learning (ODL)- programs of credit-based MOOCs, Online Courses, & Digital repositories, a significant role in GER 50%.
- Internationalisation of Higher education – facilitation for foreign universities to operate, foreign collaborations, mobility for faculty.
- Redesignation of MHRD as the Ministry of Education (MoE).

#### ***Part III: Other Key Areas of Focus***

The transformation of the entire nation into a digitally empowered society through the launch

of the Digital India Campaign led to a knowledge-driven economy. The higher educational institutions in the private belt shall be encouraged and further incentivised to use the regional Indian languages as the instruction medium and also to offer bilingual programs. Further, the educational institutions in the public and private sectors shall devise a variety of strategies for improving the educational quality and attractiveness of books published in all Indian languages. As a part of preserving and promoting the culture of the nation, the academies for the highly spoken language in India may also be established. Strengthening of the Centre Institute for Educational Technology for the promotion and expansion of the Digital Infrastructure for Knowledge Sharing (DIKSHA) and other technology initiatives related to the education sector. For employment opportunities, proficiency in Indian languages will be included as one of the important parameters of qualification. It involves a carefully designed and appropriate conduct of the pilot studies to measure the benefits of digital education. *United Nations Educational, Scientific and Cultural Organization* (UNESCO), has announced 197 'endangered' Indian languages, whereas subjects like performing arts and science practicals have certain limitations in digital education, which can be overcome to some extent with innovative initiatives, thus efforts to preserve all the Indian languages shall be taken with a reformed attitude, as this is the cultural wealth of India which truly makes it an "Incredible" as rightly says the slogan of Indian Tourism.

#### ***Part IV: Making it Happen***

The reformation of the educational sector on the educational policy guidelines is considered extremely critical, even though achieving a high-quality and equitable public education system is highly needed for India's future economic, social, cultural, intellectual, and technological progress and growth. The Central and the States will work together to increase public investment in the Education sector to reach 6% of GDP at the earliest. Implementation of the new educational policy in a phased manner is required for the successful implementation of each policy point. This implementation shall need multiple initiatives and actions, which will be taken by various national and state-level bodies in a systematic and synchronised manner.

#### ***Vision of NEP***

This National Education Policy envisioned an education system reformed based on the Indian ethos that will contribute to transforming India

(Bharat), which will be a vibrant knowledge society. It aims to provide high-quality education to all, thus making India a global knowledge superpower. The curriculum and pedagogy of Indian institutions must develop among the students a deep sense of respect towards the Fundamental Duties and Constitutional values, creating a bond with the nation with a consciousness regarding the roles and responsibilities of a mature and responsible citizen in a changing world.

#### **NEP Implementation: Role of Librarians**

The National Educational Policy, India (NEP-2020) has not mentioned any specific role of the Knowledge resource centers and the LIS professionals in the implementation process; however, in this overall process of national development towards the knowledge superpower, the role of KRCs, being a center of conservation and preservation of the heritage knowledge resources and to that of the LIS professionals as a provider of knowledge through various offline and online resources of knowledge is certainly a crucial one!

As an information administrator and a teacher of teachers, the role of LIS professionals is discussed herewith in the background of the expected transformation to take place during the NEP 2020 implementation process to make the output of the process 'more productive'.

#### ***Policy Awareness***

There is an utter requirement for library professionals to engage themselves in the process of policy implementation by studying the policy at a deeper level, and also actively discussing in formal and informal modes with the faculty and policymakers in the nation. It will add new vistas and channels to the policy implementation.

#### ***Directions for Information Retrieval on NEP and Related Literature***

The policy document in 21.9. Envisage the availability and accessibility of books for inculcating the habit of reading. This Policy recommends that all schools, colleges, universities, public libraries, and special libraries be strengthened and modernised to ensure an adequate supply of books to cater to the needs and interests of all students, including persons with disabilities and other differently-abled persons.

For implementation, as expected in the policy document, there has to be a librarian who can

facilitate this to happen with special skills. Being a teacher of teachers, it is LIS professionals provide basic and advanced levels of supportive information provision on NEP and related policies to the entire academic fraternity and also direct them through focused information retrieval to make them aware of new policy and their implementation in higher education and the changes going around during the user education programs and through organizing special user sessions.

This is to be done with the proactive provision of digital and print material for policy implementation for the ready reference for all the library users, active participation in knowledge conservation of policy documents published at various levels in the digital format, organizing the sessions on new educational policy at the knowledge resource center will certainly assist in channelizing the implementation process more effectively.

### ***Multidisciplinary Approach, Syllabi and Elective Designing***

The policy document very clearly explores on multidisciplinary approach and to achieve it, the librarians need to be vigilant. The LIS professionals' proactive participation in skill enhancement under the multidisciplinary approach is highly required. This is needed to design the electives under the syllabi on varied aspects as follows:

- Advanced and basic knowledge of information search.
- Critical reading, critical writing, and critical thinking.
- Advanced electives for researchers on -Research Ethics & scholarly publishing.

Revision of LIS programs syllabi –

- Designing a new course of IKS -addition of the topics of Library Science based on Indian Knowledge systems to inculcate and form the Indian Library Science footing, which is almost of negligible contribution in the current syllabi of LIS programs of the Indian Universities in the current scenario.
- Advanced knowledge – introducing advanced courses for imbibing the knowledge of ontology and knowledge mapping, RTI, and IPR as well as advanced management techniques based on quality management mainly service quality measurement techniques, library benchmarking, and ICT

skills for considering the global development for provision of more effective and dynamic LIS professionals to the academic and the corporate community of India

### ***Collaborative Work***

The policy document (7.5) expects an adequate number of counsellors/trained social workers, teachers to teach all subjects, with adequate resources such as a library, science laboratories, computer labs, skill labs, playgrounds, sports equipment facilities, etc. It also expects collaborative professional development programs, sharing of content and content development, joint activities such as art and science exhibitions, sports meets, quizzes and debates, etc. To meet these expectations, the pro-activeness of LIS professionals is required to conduct collaborative projects with the teaching fraternity for more effective policy implementation. The experimental and result-oriented projects like Bibliotherapy, Database awareness programs, Reading clubs, brainstorming sessions with the faculty, etc. can be of the utmost significance in promoting a culture of reading and knowledge sharing.

### ***Regional Language Promotion***

Policy document (2.8) insists on enjoyable and inspirational books for students at all levels and also highlights the need for high-quality translation. In this regard, the librarians have a special role to play as the books shall be prepared/translated into Indian languages and shall be made available extensively to information seekers, schools, HE institutes, and local public libraries. Public and school libraries shall be significantly expanded to build a culture of reading across the country. Digital libraries shall also be established for the preservation of manuscripts, rare and valuable regional language collections. School libraries with rich collections shall be set up in villages to serve the rural community during non-school hours. Book clubs may meet in public/school libraries to facilitate and promote reading. A National Book Promotion Policy needs extensive initiatives to be undertaken to ensure the availability, accessibility, quality and readership of books across geographies, languages, and levels.

The policy document (Section 3.3) takes care of the education of children with disabilities. Knowledge resource centres can develop a special section for students with disabilities, which will be full of supplementary tools for the disabled through the provision of a Braille reader, an audio book

collection, and barrier-free entries in the libraries/ Knowledge resource centres.

### ***Working on Literacy Level and Increasing Awareness***

Policy documents in 2.2 and 2.4 explore attaining foundational literacy and numeracy for all children. The highest priority of the education system shall be to achieve universal foundational literacy and numeracy by 2025. Looking at this goal, library professionals have a lot of scope and work to carry out in terms of information literacy. The Policy can become relevant only if the most basic learning requirements, i.e., reading, writing, and arithmetic, are achieved. Library professionals need to put targeted efforts for the wide spread of the mission, further by applying statistical tools and managerial skills for close tracking and monitoring progress is needed to be done. A systematic analysis can be done for work monitoring and assessment; after achieving the expected results, central reporting can be done.

### ***Content Creation and Dissemination of Digital Information***

The policy document (24.4) explored content creation, digital repositories, and dissemination of information. Being an information professional, developing digital content such as video lectures and scholarly materials in collaboration with the faculty members for the new syllabi through the needs analysis technique will become more directional and supplementary towards the effective implementation of policy. Further, being a preserver and the conservator of the knowledge system, the role of LIS professionals in maintaining the content created in the digital format through the digital institutional repositories is essential. The development of institutional repositories in the digital format as an institutional intellectual property, including the preservation of the research work, project reports, manuscripts, and books in incunabula by utilising the open-source digital library software, is expected from the LIS professional. Simultaneously, the library web page design and the content creation, periodic updating, the library portal, subject gateways, and provision of links to subscribed electronic resources, along with the direct links to the latest education policy documents extremely essential.

### ***Promotion of Mother Tongue***

Use of regional languages for preparing the policy document/s of the knowledge resource

centre and also in English language, publishing the newsletters in English and regional language, shall also promote the utilisation level of regional language among the budding learners of the society.

### ***Building the Skill Education Resources***

Considering the needs of learners, institutions under electives as prescribed under NEP-2020, a special collection is required to be developed in the knowledge resource centre to cater for the information needs.

### ***Being a Catalyst in Developing a Healthy Research Culture***

Considering the need for an education stream, the director of, Knowledge Resource Centre/librarian is required to design special courses for the research scholars, postgraduates, and undergraduates at various levels to imbibe a better research culture as mentioned in NEP- 2020. This can be done through sensitising the parents and the faculty and through the library's experimental work for cultivating good reading habits and as a sense of Indian heritage and culture amongst the readers at every level to build their capacity for wisdom.

### **Observations and Discussion**

The librarians need to act as proactive agents and catalysts to increase the effectiveness of the implementation of the overall process of NEP by taking initiatives in various parameters. This should be done primarily by a thorough study of the educational world, including the state, national, and global level educational platforms; further, the collaborative experiments for nurturing the Indian heritage through imbibing the cultural and ethical behavioural patterns among the budding youngsters will be a considerable required input towards the implementation of NEP in the nation.

Based on the content analysis conducted from the various policy documents of education, a few observations have been made from the librarians' perspective that are necessary to ponder upon for effective implementation, they are:

- creating updated awareness amongst librarians at all levels of education;
- interactive sessions and discussions on policy documents among the librarians and the faculty members;
- The enhanced role of the librarians shall be to act as a bridge between authority members, educators, and students;

- creating a database of publishers, authors, translators, eBook creators and audiobook creators;
- educating librarians for information transfer by applying the CAS and SDI services for effective syllabus designing and updating; and
- Continuous communication with authority members and educators for the dissemination of authentic information.

## Conclusion

The government of India has envisioned a developed Bharat by building the capacity of youth, focusing on education reforms till 2048. In this development process, the participation and contribution of every element of the educational sector are essential to get the expected level of results in policy implementation; ultimately, it will support the achievement of a developed Bharat.

The present paper has reviewed the Indian educational policies along with the educational policies in foreign countries like Japan, USA and other Asian countries, which are summarised in the literature review. It is found that countries like Japan and other Asian countries are implementing policies on similar principles. Further, a detailed study of the National Educational Policy, NEP 2020, is done to know the expected educational reforms to happen in *Bharat*. The policy document did not mention any particular role of the library professionals; therefore, an effort has been made to relate the relevant policy sections with the library professionals to channel the smooth and effective implementation of NEP- 2020.

After the content analysis of the policy, it is realised that the National Educational Policy implementation requires a Multidimensional role from the information professionals at all levels of education in India; it demands initiative, involvement, and policy interpretation. Proactive information services by retaining the cultural heritage of reading and learning will surely raise the effectiveness of the policy implementation. The research support services and the special elective design by the LIS professionals will attain the focus of the researchers and thus will directionally channel the overall research process as mentioned under the national educational policy. The need for knowledge directors/librarians is to plan strategically and utilise managerial and administrative skills to become the

catalyst in the process of policy implementation, research, and nation-building.

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# Design as a Catalyst for Social Change

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**Droupadi Murmu, Hon'ble President of India delivered the Convocation Address at the 44<sup>th</sup> Convocation Ceremony at the National Institute of Design, Ahmedabad on February 27, 2025. She observed, “As you step out in the world and begin your career now, you will surely remember that this exceptional education was made possible by our society and you will be happy whenever you get an opportunity to pay back to the society, no matter how and where.” Excerpts**

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I am glad to be here today with you. I find the atmosphere here quite pleasing and inspiring. Ahmedabad is home to some of the most distinctive educational initiatives in post-Independence India, and the National Institute of Design is one of them. NID indeed holds a place of its own, not only as the pioneer of design of education and practice in the country, but also for its unique way of teaching. Its faculty and students have consistently raised the bar of excellence in this field. I am sure the students completing their studies today will continue this great tradition.

Design can mean different things to different people, but in essence it is a very simple concept. An example of design thinking is the invention of the wheel, and it changed the world forever. Design can also produce something that is visually pleasing. For example, the invitation for the Republic Day ‘At-Home’ ceremony last month was designed by the NID. It featured visual elements associated with south India, and was very much appreciated by everyone.

The concept of design has many aspects and the NID has excelled in all of them, with emphasis on ‘design as a service for the betterment of society’. There are many problems all around us, and many of them require not great resources but design tweaks. Creative thinking can lead to solutions that can improve the ease of living, especially for the underprivileged communities. To put it differently, design is often a less noticed but crucial factor in social and economic development of our country.

Traditionally, in our country, design has been interwoven in the fabric of everyday life in all communities. Some of the historical facts are well known, and I am happy to note that the NID has done exemplary work in studying the lesser known design traditions. I am sure there is much more

to be done in this regard. We need to study and document knowledge systems, including design systems, of more traditional communities. Their cultural practices, I believe, hold the key to some of the challenges that confront the world in the twenty-first century. Therefore, revitalizing the historical solutions drawn from India’s diverse cultures and leveraging them for innovation will benefit not only the nation but will also contribute to global progress.

Design forms a bridge between tradition and modernity. It brings together time-honoured knowledge, crafts, and artistic practices, which are often rooted in rural and tribal communities, on one hand, and contemporary technologies and design principles on the other. This fusion fosters innovation and also preserves our rich cultural heritage.

This is particularly important in rural and tribal settings, where traditional skills need to be enhanced, adapted and integrated with modern needs to create sustainable livelihoods. NID’s outreach programmes exemplify this by sharing expertise with traditional and social sectors across India. This fosters innovation and exploration of new market potential for crafts through collaborations with artisans.

Our designers have demonstrated the power of design to create positive social change. They are making impactful design interventions in the social sector, bringing improvements in crucial areas such as healthcare, housing and sanitation. They are focusing their skills and expertise on addressing real-world problems, which often affect marginalised communities. This way, they are also helping bridge the urban-rural divide. After all, the benefits of designers’ expertise must reach all segments of society, promoting equitable and balanced development.

The NID has been at the forefront of all such praiseworthy efforts. Moreover, it has applied the same creative thinking to the problem of design education and created a model of its own. Its interdisciplinary, holistic approach to problem-solving offers valuable lessons for other educational institutes. Indeed, integrating design pedagogy into the education system can make learning more meaningful too.

Those of you who are completing the studies today are fortunate to have been taught in this great institution by eminent teachers and practitioners. On this important day in your life, I would like to say a few words to you. This place has taught you skills and nurtured your talents. As you step out in the world and begin your career now, you will surely remember that this exceptional education was made possible by our society and you will be happy whenever you get an opportunity to pay back to the society, no matter how and where.

In design, as I understand it, there is form and then there is function. Making beautiful things is a creative work and brings joy as well as monetary rewards. But never forget the functional aspect. There are problems that await your solutions. Your creative spark can change the lives of people. Do spend some time in villages, and if possible in remote areas. It will inspire new ways of looking at the world, and if you can help people there with your learning, so much the better. Think of the humble 'charkha' and then think of Gandhiji who rediscovered it and sought out people to enhance its design. His sole motive was to free millions of people from poverty. His notion of design had a beauty of its own.

My congratulations to the students as well as the faculty, the administrators, the director and the Governing Council on today's occasion. My best wishes to you all.

Thank you. Jai Hind! Jai Bharat! □

### **Attention Readers!**

#### **Revised Schedule of AIU-AIMA Skill-based Programmes**

The following Skill-based Programmes organised by the Association of Indian Universities (AIU), New Delhi in collaboration with All India Management Association (AIMA), New Delhi have been rescheduled as:

- The 'Leadership Development Programme for Vice Chancellors' has been scheduled for August 21-23, 2025. Now, the dates have been rescheduled for **September 24-26, 2025** (In Person, AIMA/AIU, New Delhi).
- The 'Capacity Building Programme for Doctoral Educators' has been scheduled for August 07-09, 2025. Now, the dates have been rescheduled for **September 18-20, 2025** (In Person, AIMA, New Delhi).
- The 'Certificate Course in Emerging Technologies' has been scheduled for August 02, 2025. Now, the date has been rescheduled for **September 06, 2025** (Online, Weekends Only)

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## CAMPUS NEWS

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### **International Conference on Innovations in Agriculture and Outreach Programmes**

A two-day International Conference-*VAKSANA* on 'Innovations in Agriculture and Outreach Programmes: Challenges and Opportunities' was organised by the Shri Vaishnav Vidyapeeth Vishwavidyalaya (SVVV), Indore, Madhya Pradesh, through online mode, recently. The event was inaugurated by traditional lamp lighting as a tribute to Saraswati Mata, the Goddess of Knowledge, by the dignitaries, Shri. Kamal Narayan Ji Bhuradiya, Secretary, Shri Vaishnav Vidyapeeth Trust, Indore, Dr. K N Guruprasad, Dean, Faculty of Agriculture, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, Prof. Vinod Dhar, Coordinator, Shri Vaishnav Institute of Agriculture, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore and Coordinators of the event, Dr. Suhas Mane and Dr. Narayan Gurav.

The Guest of Honour, Dr C D Mayee felicitated by Dr. K N Guruprasad, virtually. In the Welcome Address, Dr K N Guruprasad threw light on the funding policy for research and education in agriculture should be 2 per cent of GDP as per the recommendation of the World Bank; however, presently, India has spent only 0.7 per cent of GDP on research and education in agriculture, including extension. Dr. Guruprasad also underlined the need to maintain the proper ratio of extension workers and the number of farmers for effective transfer of technologies. He also emphasised that there is a need to provide agriculture education in the regional language. The Book and Souvenir of *Vaksana-2024* was released virtually by Shri. Kamal Narayan ji Bhuradiya and Dr. K N Guruprasad.

The session was continued with a brief introduction of the Guest of Honour, Dr C D Mayee, by Dr. Yuvraj Shinde, followed by his deliberation on 'Indian Agriculture: Innovations to Meet the Emerging Challenges' through a pre-recorded video.

Dr. Mayee began with the importance of Agriculture in the Indian economy and the strengths of Indian agriculture, with lots of statistical data about export, import, and change in production levels over the period. He spoke about the transformation of Indian Agriculture and Agriculture vibrant sectors like Horticulture and Fisheries. He also mentioned major challenges such as population, malnutrition, water

scarcity, climate change, yield gap, and size of farm holding etc. He also pointed out the need for policy reforms to address challenges like waste to wealth, sustainable development, and startups. He also mentioned that there is a need for genome editing in India instead of genome modification in crops.

The session was concluded with a Vote of Thanks to all the dignitaries proposed by Shri Kamal Narayan ji Bhuradiya, followed by the national anthem. The session was moderated by Dr Anu Naruka and Dr Kishor Muthal was the rapporteur for the inaugural session.

The Technical Session was chaired by Dr. Santosh Dhar, Rector, Shri Vaishnav Vidyapeeth Vishwavidyalaya and Dean, Faculty of Doctoral Studies and Research, Dean, Faculty of Management, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore. Dr. Chhavi Tiwari and Rajni Solanki were moderators for the session and introduced the dignitaries with profile presentations. Dr. Hiral Gundaniya was the rapporteur of the session.

Dr. Santosh Dhar felicitated the Guest Speaker, Dr. Pramod Sawant, Former Professor, Extension Education, Dr. Babasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli. Maharashtra. In initial remarks, Dr. Dhar said that social media helps to develop community, and it plays a very crucial role in the transfer of agricultural technologies from researchers to the farmers, but there are some challenges because 75% population lives in rural areas where farmers are facing availability and connectivity of internet.

Dr. Sawant enlightened the participants with his profound knowledge about the role of social media in the transfer of agricultural technologies. He began with the concept of social media and different platforms like Facebook, YouTube, WhatsApp, etc. He explained the benefits of social media in the transfer of technologies over traditional methods. Dr Sawant also commented on challenges in the use of social media, along with possible solutions for better use of social media. The session was continued with various oral presentations. Participants from different states of India presented their research papers, showcasing a wealth of innovative ideas and findings. Dr Rajni Solanki proposed the Vote of Thanks to the dignitaries and the session was concluded.

Dr. Namit Gupta, Dean, Faculty of Engineering and Architecture, Director, Shri Vaishnav Institute of Technology and Science, Professor, Electronics and Communication, Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore, was the chairperson of the next session. Dr. Milind Ahire, Professor, Department of Agricultural Extension Education, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra, was the guest speaker who delivered a lecture on the topic 'Carbon Footprint and Carbon Sequestration in Agriculture'. The session was resumed with poster presentations by 17 different researchers. Dr Babasaheb Walunekar was the session moderator and Dr Megha Vishwakarma was the rapporteur for the session. Dr. V R Sampath, Director, Shri Vaishnav Institute of Textile Technology, SVVV chaired the technical session. Dr Tirunima Patle was the moderator and Prof Satish Patidar was the rapporteur for the session.

During the Valedictory Session. Both the guests, Dr Narendra Singh Rathore, Former DDG, ICAR, New Delhi and Dr Rattan Lal, Distinguished University Professor, Ohio State University, Columbus, USA felicitated by the Chairperson, Dr K N Guruprasad, virtually followed by a report presentation by Dr Narayan Gurav. Dr Narendra Singh Rathore deliberated on the topic 'Agriculture: Past, Present and Future', whereas Dr Rattan Lal delivered a lecture on 'Transforming Agriculture for Adaptation and Mitigation of Climate Change'. Both guests highlighted the present status of Indian agriculture and the strategies needed to face the existing as well as future challenges. Dr Rattan Lal stressed more on the issue of soil health, mentioning its importance for human health. He suggested some points for a better-quality education that would be helpful for the teachers. Dr H M Patil, Mr Amar Dixit and Ms Anoosha Reddy gave feedback about the event. Dr. K N Guruprasad presented the concluding remarks. The Vote of Thanks was proposed by Prof Vinod Dhar.

### **International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication**

A two-day International Conference on 'Signal Processing, Computation, Electronics, Power and Telecommunication' is being jointly organised by the Departments of Electrical and Electronics Engineering (EEE), Electronics and Communication Engineering (ECE) and Computer Science and Engineering (CSE), National Institute of Technology Puducherry, Karaikal, from December 06-07, 2025.

The event aims to bring students, experts, scholars, and industry professionals from all over the world to present and discuss emerging ideas and trends in their respective research fields. The Technical Tracks of the event are:

- *AI and Applications.*
- *Blockchain / Network Security and Privacy.*
- *Cyber-Physical Systems/ IoT.*
- *Renewable Energy Sources, Smart grid Technologies & Applications.*
- *Electric Mobility and Smart Infrastructure.*
- *Automation & Robotics.*
- *Communication.*

For further details, contact the General Chair, Dr. M Venkatesan, Head, Department of Computer Science and Engineering, National Institute of Technology Puducherry, Karaikal-609609. E-mail: [iconscept@nitpy.ac.in](mailto:iconscept@nitpy.ac.in) / [nitpy.iconscept@gmail.com](mailto:nitpy.iconscept@gmail.com), Mobile No: 09655938902. For updates, log on to : [www.nitpy.ac.in](http://www.nitpy.ac.in).

### **National Seminar on Gender-specific Lingo, Identity, and Informal Communication**

A two-day National Seminar on 'Gender-Specific Lingo, Identity, and Informal Communication in University Spaces: A National, Transdisciplinary Inquiry' is being organised by the Department of German Studies, Faculty of Arts, Banaras Hindu University, Varanasi, Uttar Pradesh, from September 18-19, 2025. The research scholars and academicians across a wide range of multidimensional and multidisciplinary fields, including Sociology, Geography, Psychology, Political Science, History, Economics, Anthropology, Mass Communication, Language and Culture, and Linguistics, may participate in the event.

In recent years, with the rise of social media, online activism, and AI-driven communication, the nature of student interaction has changed rapidly. Informal language is now circulated across digital platforms in ways that tend to blur the lines between the private and the public, the humorous and the political, the personal and the collective. By studying such shifts, the Seminar seeks to highlight how informal speech is not just reflective of youth culture, but is actively constitutive of it. The Subthemes of the event are:

- Youth Language and Gender Identity in a Multicultural Context.

- From Slang to Literature: Youth Language in Contemporary Texts and Films.
- Meme Talk and Digital Expression on Campus in India and Germany.
- Multilingual Campuses: Everyday Code-Switching in Indian and Foreign Languages.
- Gender-specific lingo in the Classroom.
- Migrant Youth, Multilingualism, and German Intercultural Literature.
- Language of Protest and Student Movements around the World.
- Gendered Language in German and Indian Academic Culture.
- Humour, Sarcasm, and Informal Power Dynamics.
- Caste and Class in Everyday Speech.
- Queer Voices and Linguistic Creativity Globally.
- Chat Apps, AI, and Campus Conversations.
- Slang and the Challenges of Translation.
- Documenting the Unspoken: Ethics in Informal Language Research.
- Language, Emotion, and Coping in University Life.
- Regional Flavours: Mapping Youth Language Across India and Germany.
- Echoes of Empire: Colonial Traces in Slang.
- Surveillance, Free Speech, and Digital Youth Spaces.
- Youth Language and Culture in the 21<sup>st</sup> Century.
- Language Transition from Millennials to Gen Zs.

For further details, contact the Organising Secretary, Dr. Gitanjali Singh, Department of French Studies, Faculty of Arts, Banaras Hindu University, Varanasi–221005, Uttar Pradesh, E-mail: [gitanjalifr@bhu.ac.in](mailto:gitanjalifr@bhu.ac.in) / [german.bhu@gmail.com](mailto:german.bhu@gmail.com). For updates, log on to: <https://www.bhu.ac.in>

### **Seminar on Emerging Fields in Education Research**

A two-day Seminar on ‘Emerging Fields in Education Research: Shaping Future Directions with NEP-2020’ is being organised by the MIER College of Education, Jammu from November 14-15, 2025. The event is sponsored by the Indian Council of Social Science Research, New Delhi. The event aims to advance academic and policy-oriented discussions on critical areas of educational transformation outlined

in the National Education Policy (NEP)- 2020. It will provide a platform to engage in dialogues and workshops focused on understanding the challenges and opportunities of NEP 2020's implementation across diverse educational contexts. The key themes of the Event are:

#### ***Digital Education and Learning Technologies***

- Blended Learning: Combining classroom and online approaches to improve engagement.
- AI in Education: Using AI for personalised learning and smarter assessment.
- Digital Literacy: Building essential digital skills for students and educators.

#### ***Skill-Based and Experiential Learning***

- Vocational Training: Aligning education with industry needs through partnerships.
- Project-Based Learning: Developing critical thinking through hands-on experiences.
- Lifelong Learning: Creating opportunities for continuous skill development.

#### ***Social-Emotional Learning and Mental Health***

- SEL in Curriculum: Building resilience and interpersonal skills.
- Mental Health Support: Addressing student wellbeing challenges.
- Positive Learning Environments: Creating inclusive and supportive spaces.

#### ***Global Citizenship and Environmental Education***

- Global Awareness: Understanding cultural diversity and global issues.
- Sustainability Education: Incorporating UN Sustainable Development Goals.
- Environmental Responsibility: Promoting ecofriendly practices and climate awareness.

#### ***Cyber Safety and Digital Citizenship***

- Online Safety: Teaching privacy protection and responsible online behaviour.
- Digital Citizenship: Promoting ethical engagement and critical thinking online.
- Safety Frameworks: Implementing effective policies for digital learning environments.

#### ***Ethics and Responsible Technology Use***

- AI Ethics: Navigating privacy, bias, and automated decision-making.

- Human Connection: Balancing technology with meaningful personal interaction.
- Ethical Guidelines: Developing frameworks for responsible technology use in education.

For further details, contact Convener, Dr. Nishta Rana, MIER College of Education, B.C. Road, Jammu-180 001, Mobile No: 09086033747/09419186287, E-mail: [principal@miercollege.in](mailto:principal@miercollege.in). For updates, log on to: [www.miercollege.in/events/](http://www.miercollege.in/events/)

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## AIU News

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### **Roundtable of Newly Appointed Vice Chancellors at Rashtriya Raksha University, Gandhinagar**

A two-day Roundtable of Newly Appointed Vice Chancellors on ‘Transforming Higher Education: Innovations, Collaborations and Strategies for a Future-Ready India’ was jointly organised by the Association of Indian Universities (AIU), New Delhi and Rashtriya Raksha University (RRU), Gandhinagar, Gujarat, from April 08-09, 2025. The event brought together academic leaders from premier institutions across the country to discuss key issues, strategies, and innovations in Indian higher education. Focused on building a future-ready academic ecosystem, the event featured several technical sessions, keynote addresses, and collaborative dialogues aimed at equipping Vice Chancellors with visionary approaches to governance, technology integration, entrepreneurship, mental health, and policy leadership. The event brought together Vice Chancellors from across the nation for meaningful dialogue on the evolving challenges and opportunities in academia. Vice Chancellors from over 20 prestigious institutions including Rajiv Gandhi National University of Law, Rabindranath Tagore University, Vivekanand Global University, Hemchandracharya North Gujarat University, Krishna University, Desh Bhagat University, Maharaja Suhel Dev State University, Krantisurya Tanya Bhil University, ITM Skills University, Dr. C.V. Raman University, Chaitanya (Deemed-to-be University), Krishna University, Children’s Research University, Indian Institute of Teacher Education, Birsa Munda Tribal University and Saurashtra University participated in the roundtable.

The inaugural ceremony began with welcoming remarks by Prof. Priyanka Sharma, Dean, Extension and Distance Learning Directorate (EDLD), followed by a comprehensive address by Prof. Kalpesh H Wandra, Pro Vice Chancellor, Rashtriya Raksha University. He emphasised the transformative role of Vice Chancellors and underlined how institutions

like Rashtriya Raksha University contribute to the national educational and security discourse. This was followed by a felicitation of the AIU dignitaries.

Prof. Bimal N Patel, Vice Chancellor, Rashtriya Raksha University, during the inaugural address, underscored the importance of bold leadership, innovative thinking, and deep engagement with national priorities. Sharing a personal anecdote from his time at the United Nations Law Commission, Prof. Patel emphasised the need for Vice Chancellors to shape their institutions through purpose-driven leadership and strategic alignment with national goals.

Dr. Pankaj Mittal, Secretary General, AIU, in her address, outlined AIU’s global leadership in supporting over 1000 universities and emphasised internationalisation, policy training, and holistic development. Prof. Vinay Kumar Pathak, President of AIU, echoed the importance of diversity and contextualised governance in Indian universities.

The first Technical Session was on ‘Student Support, Mental Health and Well-Being’. Prof. Rajan Welukar emphasised that student support is central to university leadership. He introduced the concept of the ‘hidden curriculum’—emotional intelligence, mindfulness, and extracurricular engagement—as vital to student well-being. His 5 Cs model—Curriculum, Campus, Community, Career, and Cost—provided a holistic lens. He advocated for policies supporting emotional growth and shared frameworks like the N<sup>3</sup> model (Nature, Nurture, Nation) and Integral Education, inspired by Sri Aurobindo, to promote inclusive growth.

The second Technical Session was on ‘Strategic Planning, Resource Generation and Financial Management’. Prof. Vinay Kumar Pathak addressed the need for context-specific institutional strategies. Drawing from his leadership experience, he emphasised transparency, stakeholder feedback, and digital tools like the SAMARTH platform. He highlighted how paperless operations and student

support portals can improve efficiency. Prof. Pathak also discussed the importance of difficult, yet essential, decision-making to strengthen institutional resilience and long-term sustainability.

During the next session on ‘Globalisation and Internationalisation of Higher Education’, Dr. Pankaj Mittal provided a roadmap for internationalisation aligned with NEP-2020. She outlined India's potential to become a global education hub, emphasising the recruitment of international students, the setting up of foreign campuses, and twinning programs. She stressed that every university must now establish an International Students Office and shared AIU’s tools like INIHE and the India Immersion Programme. Ranking frameworks, legal compliance, and due diligence were underscored for safe international partnerships.

The Session on ‘University Management, Governance and Leadership’ was conducted, and Prof. Rajan Saxena presented a systems approach to academic leadership, explaining how governance, administration, and institutional purpose must be harmonised. He cautioned against adopting a corporate-style management approach in higher education and advocated for a values-based, mission-driven strategy. His talk highlighted the centrality of talent development and ethics in leadership.

Dr. Sanjeet Singh discussed strategies to elevate institutional quality and academic output through rankings and accreditations during the session on ‘Quality Assurance, Rankings and Accreditation’. He explained how various national and international frameworks (e.g., QS, NAAC, NIRF) should be chosen based on university goals. Emphasis was placed on continuous benchmarking, stakeholder engagement, and strategic investment in research and innovation to raise institutional standing.

During the Session on ‘Integration of Indian Knowledge Systems’, Prof. A D N Bajpai stressed the importance of embedding Indian Knowledge Systems within university curricula. He viewed IKS as universal and timeless, rooted in India’s educational heritage. He proposed a four-step phased integration model starting with identification and moving toward full-scale curricular adoption. He suggested dedicated IKS centres for fostering research, pedagogy, and practice around ancient Indian wisdom.

After the felicitation of Prof. Piyush Kumar Sinha, he focused on entrepreneurship, innovation,

and incubation in higher education. He urged Vice Chancellors to develop institution-specific incubation models and to foster an innovation-led mindset. Prof. Sinha introduced the concept of KASH (Knowledge, Attitude, Skill, Habit), framing it as a foundation for cultivating a robust entrepreneurial culture within universities. He emphasised building collaborations with industries and promoted a shift from reactive administration to proactive solution-seeking.

The next Session was on ‘Academic Excellence through Technology and AI Integration’. Shri Narottam Sahoo highlighted how technology and AI are revolutionising higher education globally. He called for urgent reforms to bridge India’s digital divide and to align academic outcomes with market needs. His recommendations included enhancing faculty training, ensuring access to digital infrastructure, and building institutional collaborations with tech industries. He cited global examples and Indian platforms like NPTEL and SWAYAM, urging Vice Chancellors to position their institutions as digital-first and future-ready.

Prof. Bimal N Patel concluded the technical session with his address on transformational leadership. Drawing from his experience leading RRU, he discussed drafting institutional vision-mission documents aligned with national priorities. He emphasised engaging with government stakeholders and fostering a culture of internal accountability. Prof. Patel highlighted how adapting to national needs—such as starting foreign language training for the armed forces—can redefine a university’s relevance. His philosophy, ‘One Nation, One Mission’, called on Vice Chancellors to prioritise the nation's interest through visionary leadership and dynamic institutional responsiveness.

Dr. Amarendra Pani, Joint Director (Research Division), AIU, presented the vote of thanks to the speakers, host university, and participants for their valuable contributions. Dr. Pani appreciated the meticulous preparation by the team RRU led by Prof. Priyanka Sharma, Mr. Kashyap Parmar and others, which culminated in the successful execution of the event. Dr. Pani reaffirmed AIU’s commitment to empowering higher education leaders and fostering transformation across institutions. The event ended with recital of a vedic shloka symbolising resilience and continuous pursuit of excellence.

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# THESES OF THE MONTH

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## SCIENCE & TECHNOLOGY

A List of doctoral theses accepted by Indian Universities  
(Notifications received in AIU during the month of June-July, 2025)

### BIOLOGICAL SCIENCES

#### Biotechnology

1. Kasana, Harit. **Designing, development and evaluation of recombinant anti-CD 20 therapeutic monoclonal antibody.** (Prof. Ashwani Mathur and Dr. Harish Chander), Department of Biotechnology, Jaypee Institute of Information Technology, Noida.
2. Pandey, Virendra Kumar. **High yielding acid tolerant pectinase production utilizing fruit waste.** (Dr. Deepak Mishra), Faculty of Life Science and Technology, AKS University, Satna.
3. Shaheen, Sonam. **Developing multipotential PGPM formulations to abate abiotic stress and support plant growth.** (Prof. Krishna Sundari), Department of Biotechnology, Jaypee Institute of Information Technology, Noida.

#### Botany

1. Bhat, Irshad Ahmad. **Ex-situ propagation, conservation and biochemical characterization of *Aquilegia fragrans* Benth: An important and endemic medicinal plant species of Western Himalaya.** (Prof. Zahoor Ahmad Kaloo), Department of Botany, University of Kashmir, Srinagar.

#### Life Science

1. Anusha. **Insights into mechanism of action of ginger rhizome-derived exosome-like nanoparticles against triple-negative breast cancer cells.** (Dr. Priya S), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
2. Arvinden, V R. **Leveraging genomics for identification of rare and prevalent inborn error of immunity.** (Dr. Sivaprakash Ramalingam), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
3. Ashrita. **Development of high efficient regeneration system and production of Steviol glycosides in *Stevia rebaudiana* (Bertoni).** (Dr. Ashish R Warghat), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

4. Dhiman, Ankita. **Addressing the poor pH tolerance issue and therapeutic potential of serratiopeptidase using computational and experimental approaches.** (Dr. Rituraj Purohit), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
5. Kotnala, Bhavya. **Nutritional status and disease management of phenylketonuria using plant based phenylalanine free protein hydrolysate.** (Dr. Arun Kumar V and Dr. P Vijayaraj), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
6. Mahato, Hrishikesh. **Regulation of SIERF36 mediated developmental transitions in tomato.** (Dr. Aniruddha P Sane), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
7. Mukherjee, Ashmita. **Extraction of keratin from human hair and fabrication of keratin-based biomaterial for hemorrhage control.** (Dr. Krishnananda Chattopadhyay, Dr. Paulomi Ghosh and Dr. Indu Bhusan Deb), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
8. Nidhina, K. **Jackfruit derived pectin oligosaccharide: Method of preparation, prebiotic potential and efficacy in management of obesity.** (Dr. Nisha P), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
9. Singh, Anjali. **Decrypting the mechanism of Sertraline mediated augmentation of antibiotic efficacy against *Mycobacterium tuberculosis*.** (Dr. Vivek Rao), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
10. Sushma. **Physiological and molecular characterization of Ethyl Methanesulfonate (EMS) derived mutant lines of *Gossypium herbaceum* L using mutmap approach.** (Dr. Pramod Arvind Shirke and Dr. Hemant Kumar Yadav), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

## Microbiology

1. Momin, Kasanchi M. **Development of novel polymerase spiral reaction assay for rapid detection of staphylococcus aureus and salmonella contamination in food of animal origin.** (Dr. Shiny C Thomas), Department of Microbiology, Assam Don Bosco University, Guwahati, Assam.

## Zoology

1. Ali, S Saadath. **Avian diversity and species assemblage in Shivamogga Taluk, Karanataka.** (Dr. K L Naik), Department of Zoology, Kuvempu University, Shankaraghatta.
2. Sharma, Preeti. **Effect of food preservative (Sodium Benzoate) and food coloring agent (Allura Red) alone and in combination on blood and liver in male Swiss Albino Mice and possible protective role of Gomutra.** (Dr. Lata Shahani), Department of Zoology, IIS University, Jaipur.

## EARTH SYSTEM SCIENCES

### Environmental Science

1. Chaithra, C. **A study on potential fungal and bacterial strains for the remediation of textile industry effluent.** (Dr. Hina Kousar), Department of Environmental Science, Kuvempu University, Shankaraghatta.

## ENGINEERING SCIENCES

### Aerospace Engineering

1. Mahendran, S. **Design and development of dynamic flight control of flap.** Department of Aeronautical Engineering, Hindustan Institute of Technology & Science, Chennai.

### Computer Science & Engineering

1. Adline, F R. **Test suite optimization for enhanced software fault detection and location.** Department of Computer Science & Engineering, Hindustan Institute of Technology & Science, Chennai.
2. Chowdhury, Keya. **Development of thumbnail-preserving cryptosystem for cloud-based multimedia data.** (Dr. Subhrajyoti Deb), Department of Computer Science & Engineering, ICFAI University, Tripura.
3. Das, Bappaditya. **Crop disease detection using deep learning based image classifier.** (Dr. C S Raghuvahshi), Department of Computer Science & Engineering, Rama University, Kanpur.

4. Kushagra. **An efficient lung disease diagnosis model using machine learning techniques.** (Dr. Rajneesh Kumar), Department of Computer Science & Engineering, Maharishi Markandeshwar University, Ambala.
5. Thakur, Ujwala. **Machine intelligence-based recognition of human activities with spatial and temporal dynamics.** (Dr. Amarjeet Prajapati and Dr. Ankit Vidyarthi), Department of Computer Science & Engineering, Jaypee Institute of Information Technology, Noida.
6. Vankayalapati, Bhuvana Kumar. **Optimizing MIDI music generation and recognition with ACOA-LSTM and enhanced residual GRU.** Department of Computer Science & Engineering, Hindustan Institute of Technology & Science, Chennai.

### Electrical & Electronics Engineering

1. Mittal, Shweta. **I/Q imbalance mitigation and NOMA in RF/FSO cooperative relaying systems: Analysis and enhancement.** (Dr. Pankaj Kumar Yadav and Dr. Vivek Kumar Dwivedi), Department of Electronics & Communication Engineering, Jaypee Institute of Information Technology, Noida.
2. Nagaraju, Addagatla. **Transformer-less single-phase multilevel inverter for solar photovoltaic systems with voltage boosting property.** (Prof. Rajender Boini), Department of Electrical & Electronics Engineering, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.

### Electronics & Communication Engineering

1. Arora, Sapna. **Design and implementation of ultrawideband antenna for wireless applications.** (Dr. Sharad Sharma), Department of Electronics & Communication Engineering, Maharishi Markandeshwar University, Ambala.
2. Karan Singh. **Machine learning approaches for reliability and design optimization in ultra large scale integrated circuits.** (Dr. Shruti Kalra), Department of Electronics & Communication Engineering, Jaypee Institute of Information Technology, Noida.
3. Manochandar, T. **Investigation on Alzheimer dementia diagnosis using computational intelligence techniques.** Department of Electronics & Communication Engineering, Hindustan Institute of Technology & Science, Chennai.

- Sharma, Nitika. **Design and development of metamaterial based antennas for hyper themia application.** (Dr. Rajesh Khanna, Dr. Amanpreet Kaur and Dr. Hari Shankar Singh), Department of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

#### Information & Communication Engineering

- Khairnar, Samata Subhash. **Role of digital technologies in day to day lives of elderly in Maharashtra.** (Prof. Mira K Desai), Department of Extension and Communication, S.N.D.T. Women's University, Mumbai.

#### Mechanical Engineering

- Jackson, Irudhayam S. **Evaluating the bio-mechanical behaviour of CFR peek on artificial implant in human dental system.** Department of Mechanical Engineering, Hindustan Institute of Technology & Science, Chennai.

#### Mining Engineering

- Khan, Asfar Mobin. **Innovative approach in modelling of coal dust explosibility for Indian coal by CFD technique.** (Dr. Santosh Kumar Roy and Dr. Niroj Kumar Mohalik), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### MATHEMATICAL SCIENCES

#### Mathematics

- Bilal Rashid. **Applications of wavelets in forecasting climate changes in J & K.** (Prof. Khalil Ahmad and Dr. Pankaj Sharma), Department of Mathematics, Al-Falah University, Faridabad.
- Malligawad, Manjunath. **Finsler space models on gravitation.** (Dr. S K Narasimhamurthy), Department of Mathematics, Kuvempu University, Shankaraghatta.
- Sangeeta. **Study of some queuing process characterized by various types of customers behaviour.** (Dr. Deepak Gupta and Dr. Man Singh), Department of Mathematics, Maharishi Markandeshwar University, Ambala.

#### Statistics

- Mantayya, Math Muragesh. **Optimum perishable inventory control with non-stationary demand a new optimal policy.** (Dr. D Gopinath and Dr. B S Biradar), Department of Mathematics and Statistics, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.

### MEDICAL SCIENCES

#### Food Science & Nutrition

- Lalan, Bijal. **Dietary intake and trans fatty acid content of selected Indian foods in Mumbai.** (Dr. Meena Mehta), Department of Food Science & Nutrition, S.N.D.T. Women's University, Mumbai.
- Makode, Madhuri Vishwanath. **Quality of life in patients with anaemia before and after iron supplements.** (Dr. Meena Mehta), Department of Food Science & Nutrition, S.N.D.T. Women's University, Mumbai.

#### Pharmaceutical Science

- Konatham, Mounika. **Development and characterization of solid lipid nanoparticles: A modern formulation approach in drug delivery system.** (Dr. Kothapally Daniel), Department of Pharmacy, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
- Naaz, Falak. **Role of biomarkers in predicting diabetic complications.** (Prof. Ch Praveena), Department of Pharmacy, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
- Palla, Sailakshmi. **Design, synthesis and possible biological evaluation of novel 1,4- benzoxazinone derivatives.** (Prof. Puligilla Shankaraiah), Department of Pharmacy, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
- Swapna, K. **Validating ethno-medicines from tribal area of Telengana with a view to isolation and developing new drug molecule for targeting HIV.** (Dr. Srujana M Prof. Estari Mamidala), Department of Pharmacy, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.

### PHYSICAL SCIENCES

#### Chemistry

- Adarshgowda, N. **A comprehensive studies on characterization and photocatalytic performance of symphonized nanostructured materials.** (Dr. H S Bhojya Naik), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.
- Arpitha, S B. **An efficient electrochemical sensing of some organic molecules at different modifies electrodes.** (Dr. B E Kuamaraswamy), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.

3. Bangaru, Mallikarjuna. **Synthesis of some new quinoline derivatives as anti-proliferative agents.** (Prof. T Narasimha Swamy), Department of Chemistry, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
4. Bora, Dipjyoti. **Development of polymer bio-composite films with improved physio-chemical properties.** (Dr. Jayaramudu Jarugala), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
5. Das, Sumanta Kumar. **Studies on heteroatom and Fe, Co, Ni based oxygen reduction catalyst for polymer electrolyte fuel cells.** (Dr. Akhila Kumar Sahu), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
6. Jagtap, Anuradha Vijay. **Developing new catalytic material for C1 molecule activation.** (Dr. Vinod C Prabhakaran), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
7. Kannekanti, Praveen Kumar. **Design and synthesis of new imidazole derivatives as anticancer agents.** (Prof. T Narasimha Swamy), Department of Chemistry, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
8. Kapil. **Exploration of metal and metal-free approaches for the synthesis of functionally diverse isoquinolines and quinolines: Their applications in the synthesis of samoquasine a derivatives.** (Dr. K Rajender Reddy), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
9. Kasaboina, Kalyani Priya. **Synthesis and biological screening of some new 1,8-naphthyridine derivatives.** (Prof. Kumara Swamy Jella), Department of Chemistry, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
10. Kopperi, Harishankar. **Sustainable production of fuels and chemicals from biogenic waste and plastics by hydrothermal liquefaction in biorefinery framework.** (Dr. S Venkata Mohan), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
11. Kummari Narendar. **Phytochemical and synthetic studies on bio-active constituents from traditional flora and evaluation of their anticancer properties.** (Dr. K Suresh Babu), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
12. Manasa, Guttikonda. **Synthesis and biological activity of some new 1,2,3-triazole linked heterocycles and their insilico studies.** (Prof. Jagadeesh Kumar Ega), Department of Chemistry, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.
13. Manjunatha, L S. **Modified electrode sensor for some drugs: A voltammetric study.** (Dr. B E Kumaraswamy), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.
14. Meena, Rachana. **Metal-free functionalization of peptides and bactericidal activity of salicylamide conjugates and heterochiral helical peptides.** (Dr. Damodara Reddy N), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
15. Mohanapriya, N. **Imine as constructional units for organic-inorganic hybrid structures for energy applications.** (Dr. C Naveen Kumar), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
16. Neha. **Waste derived fillers and their conjugated polymer based composites for advanced anticorrosion coatings.** (Dr. Praveen K Saini), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
17. Parmar, Mukesh Bharatbhai. **Studies on some nitrogen- containing compounds of therapeutic interest.** (Dr. Jignesh H Pandya), Department of Chemistry, Saurashtra University, Rajkot.
18. Pawan Kumar. **Sulfonylation reactions of para-quinone methides and alkene-tethered indoles: synthesis of diarylmethyl sulfones, chiral Alkyl/ Aryl – sulfonyl spirocyclopentyl p-dienones and sulfonylated-2,3 dihydro 1H pyrrolo [1,2 a]indoles.** (Dr. Utpal Das), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
19. Prathap, A. **Facile biofabrication of photo-functionalized materials for environmental remediations.** (Dr. H S Bhojya Naik), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.
20. Reddy, Sontireddy Surender. **Design, synthesis and biological evaluation of some newer 1,8-naphthyridine derivatives.** (Prof. J Kumara Swamy), Department of Chemistry, Chaitanya (Deemed To Be University), Himayatnagar, Hyderabad.

21. Sathisha, H C. **Synthesis and characterization of metal nanoparticles: Electrochemical and dye degradation studies.** (Dr. Anitha), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.
22. Shreya, A. **Synthesis and characterization of novel metal based composite nanomaterial and evaluate their photocatalytic applications.** (Dr. H S Bhojya Naik), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.
23. Valentine, Anadede Chikaodili. **Study of CO2 corrosion inhibition in oil and gas environments.** (Dr. Rakesh C Barik), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
2. Kavya Rajeev. **Exciplex OLEDs: Strategies for white emission and multifunctional devices.** (Dr. K N Narayanan Unni), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.
3. Lath, Subodh Kant. **Synthesis and characterization of synthetic and natural polymer based nanocomposite electrolytes.** (Dr. Rajender Kumar and Dr. Rajiv Kumar), Department of Physics, Career Point University, Hamirpur.
4. Thakur, Shilpa. **Structural, optical and photocatalytic exploration of Nickel Oxide (NiO) nanoparticles by the incorporation of trivalent metal ions.** (Dr. Rajender Kumar), Department of Physics, Career Point University, Hamirpur.

### Physics

1. Desai, Aniket Gautam. **Integrated biomarker response of juvenile fish (*Etrophus suratensis*) exposed to plastic additive and co-contaminant.** (Dr. Mandar Nanajkar), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

**Shri Mudhaidevi Shikshan Sanstha's, Deur**  
**Prof. Sambhajirao Kadam College, Deur**  
At & Post-Deur, Tal-Koregaon,  
Dist-Satara. 415524 (Maharashtra)

(Affiliated to Shivaji University, Kolhapur)  
(Permanently Granted)

**WANTED**

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Post	Vacant post	Reservation
1.	Principal	01	Open to All - 01

Note: For detailed information about posts, qualifications and other terms and Conditions please visit University website : [www.unishivaji.ac.in](http://www.unishivaji.ac.in).

**Chairman,**  
**Shri Mudhaidevi Shikshan Sanstha, Deur**  
Tal- Koregaon, Dist-Satara  
Pin – 415524

Place : Deur  
Date : 12 August, 2025

**HABIB EDUCATIONAL & WELFARE SOCIETY'S**  
**M.S. COLLEGE OF LAW**  
111, Habib Educational Complex, M.H. Mohani Road, Kausa,  
Mumbra, Thane - 400 612.  
Phone: 09372203508 Email: [president.hews@gmail.com](mailto:president.hews@gmail.com)

**MINORITY COLLEGE**

**APPLICATIONS ARE INVITED FOR THE FOLLOWING POST FROM THE ACADEMIC YEAR 2025-2026**

**UN-AIDED**

Sr. No.	Cadre	Subject	Total No. of Posts	Category
1.	Principal	-	01	01 - OPEN
2.	Assistant Professor	Law	07	07 - OPEN
3.	Assistant Professor	LL.M	02	02 - OPEN
4.	Librarian	-	01	01 - OPEN

The above posts are open to all, however candidates from any category can apply for the post.  
Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/CC/2019-20/05 dated 05th July, 2019.  
Candidates having knowledge of Marathi will be preferred.  
"Qualification, Pay Scales and other requirement are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1, dated 8th March, 2019 and University circular No. TAAS/(CT)/ICD/2018-19/1241, dated 26th March, 2019 and revised from time to time" The Government Resolution & Circular are available on the website [mu.ac.in](http://mu.ac.in)  
Applicants who are already employed must send their application through proper channel. Applicants are required to account for breaks, if any in their academic career.  
Application with full details should reach to the **PRESIDENT, Habib Educational & Welfare Society's, M.S. COLLEGE OF LAW, 111, Habib Educational Complex, M.H. Mohani Road, Kausa, Mumbra, Thane- 400 612.** Within 15 days from the date of publication of this advertisement.

Sd/-  
**PRESIDENT**

This is University approved advertisement.

Opinions expressed in the articles published in the University News are those of the contributors and do not necessarily reflect the views and policies of the Association.



## CENTRAL UNIVERSITY OF RAJASTHAN

Reaccredited to Grade A++ by NAAC  
Category-I Status by UGC

Advt. No. CURAJ/R/167/Rectt./2025/1494

Date: 25.07.2025

Online Application Invited For

**18 TEACHING POSITIONS**  
(Direct Recruitment)

Architecture

Atmospheric Science

Bio Medical Engineering

Cardiology

Culture & Media Studies

Economics

Electronics and Communication Engineering

English

Physics

Social Work

Society Technology Interface

Statistics

For more details, visit : [www.curaj.ac.in](http://www.curaj.ac.in)

Registrar



## JAM 2026 JOINT ADMISSION TEST FOR MASTERS



Organizing Institute : IIT Bombay

The Joint Admission test for Masters (JAM) is conducted to provide admissions to Masters programmes at IITs for taking up science as a career option for the students. It will be conducted as a Computer Based Test in SEVEN Test Papers, namely, Biotechnology (BT), Chemistry (CY), Economics (EN), Geology (GG), Mathematics (MA), Mathematical Statistics (MS) and Physics (PH).

Candidates should apply ONLINE from 5<sup>th</sup> September to 12<sup>th</sup> October 2025.

For more details, please visit website <https://jam2026.iitb.ac.in/>



IIT Bombay is not responsible for printing errors, if any

### Kamdhenu Sevabhavi Sanstha's VASUNDHARA COLLEGE OF ARTS, SCIENCE & COMMERCE GHATNANDUR, TQ. AMBAJOGAI, DIST. BEED (M.S.)

#### WANTED

Applications are invited for the posts of Assistant Professor (Permanent Non-Grant) in the Vasundhara College of arts, Science & Commerce, Ghatnandur, Tq. Ambajogai, Dist. Beed (M.S.). Eligible candidates should submit their applications along-with all necessary documents within 15 days from the date of publication of this advertisement.

Sr. No.	Subject	No. of Posts	Qualifications	Reservation
1	Chemistry	01	M.Sc. with B+, SET/NET/Ph.D.	SC-01 ST-01 VI(A)-01 OBC-02 EWS-01 OPEN-03 SEBC-1
2	Physics	01		
3	Zoology	01		
4	Botany	01		
5	Computer Science	01		
6	Mathematics	01		
7	Military Science	01		
8	Commerce	03	M.Com. with B+, SET/NET/ Ph.D.	

- Educational qualifications and recruitment for the above posts are as per the norms of UGC, Dr Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajanagar Govt. of Maharashtra and Kamdhenu Sevabhavi Sanstha, Ghatnandur.
- All the above posts will be filled on the basis of Fixed Pay.
- The candidates belonging to reserved category should submit one copy of their application to the Dy. Registrar, Special Cell, Dr. B.A.M. University, Chhatrapati Sambhajanagar.
- Candidates who are already in service should apply through proper channel.
- The complete application should be submitted to **Secretary, Kamdhenu Sevabhavi Sanstha c/o Vasundhara College of Arts, Science & Commerce, Ghatnandur. Tq. Ambajogai, Dist. Beed-431519.**
- No T.A/D.A. will be paid to candidate called for the interview.

Secretary  
Kamdhenu Sevabhavi Sanstha, Ghatnandur  
Mob-No- 9822898727 /9421922138

President  
Kamdhenu Sevabhavi Sanstha, Ghatnandur

**BHARAT SHIKSHAN SANSTHA'S**  
**SHRI CHHATRAPATI SHIVAJI COLLEGE, OMERGA DIST. DHARASHIV**

**Corrigendum**

**WANTED**

Applications are invited from the eligible candidates for the following vacancies in Bharat Shikshan Sanstha's Shri Chhatrapati Shivaji College, Omerga at senior college level (Granted). The applications duly completed in all respect should reach to **The Secretary Bharat Shikshan Sanstha Omerga**, Shri Chhatrapati Shivaji College Campus, Omerga Dist. Dharashiv – 413606 (MAH.)

Sr. No.	Subject	No. of Posts	Reservation
1	Principal	01	Open

**NOTE:-**

- 1) **The advertisement is made as per No Objection Certificate from Hon'ble Dy. Secretary, Higher Education Maharashtra Govt., Mumbai, vide letter No. JDHE Chhatrpati Sambhajinagar/ NOC/2025/51 dt. 25-07-2025 and Dr. Babasaheb Ambedkar Marathwada University Chhatrapati Sambhajinagar letter special cell/2025/430 dt. 09-08-2025.**
- 2) **For more details visit college web: [www.scsco.org.in](http://www.scsco.org.in).**

**Secretary**  
Bharat Shikshan Sanstha, Omerga  
11-08-2025

**President**  
Bharat Shikshan Sanstha, Omerga

**WANTED**

Applications are invited for the post of **Principal** (Granted) to be filled in Shri Mahantswami Shikshan Prasarak Mandal's **Shri Kumarswami Mahavidyalaya, Ausa, Tal. Ausa, Dist. Latur**. Eligible candidates should submit their application along-with all necessary documents **within Fifteen days** from the date of publication of the advertisement by Registered post only. This advertisement is published as per NOC Letter –JDHE Nanded/NOC/2025/51 date 30.07.2025.

Post	Name of the College	No. of Post	Full Time	Reservation
Principal	Shri Kumarswami Mahavidyalaya, Ausa, Dist. Latur	01 (One)	Full Time	Unreserved

**Educational Qualifications:-**

**A. Eligibility:-**

1. A Master's Degree with at least 55% marks (or an equivalent grade in a point scale wherever grading system is followed) by a recognized University. 2. A Ph.D. Degree in concerned/allied/relevant discipline (s) in the institution concerned with evidence of published work and research guidance. 3. Professor/Associate Professor with a total experience of fifteen years of teaching/research in Universities, College and other Institutions of Higher Education. 4. A minimum of 10 research publication in peer reviewed or UGC listed journals. 5. A minimum of 110 research score as per Appendix II, Table 2 of UGC regulations 2018. 6. Academic Eligibility and other rules regulations as per UGC Regulation of 18 July, 2018 and Govt. Resolution No Misc-2018/C.R.56/UNI-1 Dated 08 March 2019. 7. The vacant post is being filled subject to the decision of Hon'ble High Court, Aurangabad Bench Petition No. 12051/2015.

**B. Tenure:-** A College Principal shall be appointed for a period of five years, extendable for another term of five years on the basis of performance assessment by a committee appointed by the University, constituted as per these Rules.

**Salary & Allowances:-** Pay Scales as per the UGC, State Government of Maharashtra & Swami Ramanand Teerth, Marathwada University, Nanded Rules from time to time.

**NOTE:-** 1) Prescribed application form is available on the University **website : ([www.srtmun.in](http://www.srtmun.in))**. 2) No T.A./D.A. will be paid to attend the interview. 3) Eligible Candidates those who are already in services should submit their application through proper channel. 4) All attested Xerox Copies of certificates and other relevant documents should be attached with the application form. 5) The original certificates must be provided at the time of interview.

**Correspondence Address:** The President/Secretary, Shri Mahantswami Shikshan Prasarak Mandal's, Shri Kumarswami Mahavidyalaya, Ausa, Dist. Latur. Maharashtra 413520.

**Adarsh Shikshan Prasarak Mandal's  
SHRI BAPUSAHEB D. D. VISPUTE COLLEGE OF EDUCATION, NEW PANVEL  
Adarsh Plot No. 41, Near Railway Station, Sector 15, New Panvel, Dist. - Raigad.**

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FOR THE ACADEMIC YEAR 2025-26.

**UNAIDED**

Sr. No.	Post	Particular	Total No. of Post	Post Reserved for
1.	Principal	---	01	01-OPEN
2.	Assistant Professor	(Education in Marathi, Hindi, English, Geography, History, Economics, Science, Mathematics Methods)	07	01-SC, 01-ST, 01-DT (A), 01-OBC, 01-SEBC/EWS, 02- OPEN
3.	Librarian	--	01	01-OPEN

The posts reserved for the Backward Class candidates will be filled in by backward category candidates (Domicile of State of Maharashtra) belonging to that particular category only.

Reservation for women will be as per **University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019.**

Candidates having knowledge of Marathi will be preferred.

**"Qualifications, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1 dated 8th March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241 dated 26th March, 2019 and revised from time to time." The Government Resolution & Circular are available on the website: mu.ac.in.**

Applicants who are already employed must send their application through proper channel. Applicants are required to account for breaks, if any, in their academic career.

Application with full details should reach the **CHAIRMAN, Adarsh Shikshan Prasarak Mandal's Shri Bapusaheb D.D. Vispute College of Education, New Panvel. Adarsh Plot No.41, Near Railway Station, Sector-15, New Panvel within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/- CHAIRMAN

**PRABHAKAR PATIL EDUCATION SOCIETY'S B. Ed. COLLEGE  
VESHVI-ALIBAG, DIST. RAIGAD-402209**

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2025-26:

**UNAIDED**

Sr. No	Cadre	Subject	Total No. of Posts	Post Reserved for
1.	Principal	-	01	01-OPEN
2	Assistant Professor	(Education in Marathi, Hindi, English, Economics, Commerce, Mathematics, Science Method	06	01-SC, 01-ST. 01-DT (A), 01-OBC, 01-SEBC/EWS, 01-OPEN.
3.	Librarian	-	01	01-SC

The posts reserved for the Backward Class candidates will be filled in by backward category candidates (Domicile of State of Maharashtra) belonging to that particular category only.

Reservation for women will be as per **University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019.**

Candidates having knowledge of Marathi will be preferred.

**"Qualifications, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18th July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1 dated 8th March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241 dated 26th March, 2019 and revised from time to time."**

**The Government Resolution & Circular are available on the website: mu.ac.in.**

Applicants who are already employed must send their application through proper channel. Applicants are required to account for breaks, if any, in their academic career.

Application with full details should reach the **CHAIRMAN, PRABHAKAR PATIL EDUCATION SOCIETY'S B. ED. COLLEGE, VESHVI-ALIBAG, DIST. RAIGAD - 402209 within 15 days** from the date of publication of this advertisement. **This is University approved advertisement.**

Sd/-  
CHAIRMAN

# GATE 2026

## GRADUATE APTITUDE TEST IN ENGINEERING

**Organizing Institute: Indian Institute of Technology Guwahati**

Contact No.: +91 361 258 6500, Website: <https://gate2026.iitg.ac.in>

**Graduate Aptitude Test in Engineering (GATE)**, a Computer Based Test (CBT), is an all-India examination conducted nationwide jointly by IISc and all IITs on behalf of the National Coordination Board-GATE, Ministry of Education, Government of India. Admission to Postgraduate programs with Government Scholarships/Assistantships at engineering colleges/institutes in the country is open to those candidates who qualify GATE, subject to fulfilling the admission criteria of the concerned admitting institute. Some Public Sector Undertakings (PSUs)/Government Organizations may also consider the GATE score for their recruitment. GATE 2026 shall be conducted in selected cities and towns across India. There are no international centers for GATE 2026 examination. Foreign/Indian nationals residing abroad must travel to India to appear for GATE 2026. A new sectional paper on Energy Science is being introduced in the Engineering Sciences (XE) paper in GATE 2026. GATE 2026 score will be valid for THREE YEARS from the date of announcement of results.

**Eligibility for GATE 2026:** The candidate should be studying in the 3<sup>rd</sup> or higher year of any undergraduate degree program OR should have already completed any government-approved degree program in Engineering/Technology/Architecture/Science/Commerce/Arts/Humanities.

**GATE 2026 will be conducted for the following papers:** Aerospace Engineering (AE), Agricultural Engineering (AG), Architecture & Planning (AR), Biomedical Engineering (BM), Biotechnology (BT), Civil Engineering (CE), Chemical Engineering (CH), Computer Science & Information Technology (CS), Chemistry (CY), Data Science & Artificial Intelligence (DA), Electronics & Communication Engineering (EC), Electrical Engineering (EE), Environmental Science & Engineering (ES), Ecology & Evolution (EY), Geomatics Engineering (GE), Geology & Geophysics (GG), Instrumentation Engineering (IN), Mathematics (MA), Mechanical Engineering (ME), Mining Engineering (MN), Metallurgical Engineering (MT), Naval Architecture & Marine Engineering (NM), Petroleum Engineering (PE), Physics (PH), Production & Industrial Engineering (PI), Statistics (ST), Textile Engineering & Fibre Science (TF), Engineering Sciences (XE), Humanities & Social Sciences (XH), and Life Sciences (XL).

**Two-paper combinations in GATE 2026:** A candidate may appear for either ONE or TWO test papers from the approved list of combinations given on the GATE 2026 official website. The scheduling of two test papers is subject to the availability of infrastructure and feasibility. Even if a candidate chooses to appear for TWO test papers, the candidate should fill ONLY ONE application form. Duplicate applications will be rejected, and the **fee, once paid, shall not be refunded under any circumstances.**

**Disclaimer:** Qualifying GATE does NOT guarantee admission, scholarship, or a job. Admission to any institute or recruitment by an employer are fully dependent on the admission criteria of the admitting institute or the recruitment procedure of the employer, respectively. GATE committee is NOT liable for any legal obligations related to admission, scholarship, or a job.

<b>Important Dates* for Application Submission</b>	Opening Date of online registration/ application portal	<b>August 25, 2025</b>
	Closing Date of Regular online registration/application	<b>September 25, 2025</b>
	Last date of EXTENDED period for online Registration/ application (with late fee)	<b>October 6, 2025</b>
<b>Dates* of Examination</b>	<b>February 7, 8, 14, and 15, 2026</b>	

\*Dates are liable to change

**Application fee\* (per paper) to be paid is as follows**

\*Candidates opting for two papers have to pay twice the below-mentioned fee.

<b>Gender/category</b>	<b>Regular period</b>	<b>Extended period</b>
Female/SC/ST/PwD candidates (with disability greater than or equal to 40%)	₹ 1000/-	₹ 1500/-
All other candidates including foreign nationals	₹ 2000/-	₹ 2500/-

<b>Application Portal</b>	All eligible candidates must apply and pay the fee via ONLINE mode only. GATE 2026 Website: <a href="https://gate2026.iitg.ac.in">https://gate2026.iitg.ac.in</a>	
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**For more information, please refer to the following websites of the zonal coordinators.**

GATE Office IISc Bengaluru- 560012 <a href="https://gate.iisc.ac.in">https://gate.iisc.ac.in</a>	GATE Office IIT Bombay Powai, Mumbai-400076 <a href="https://gate.iitb.ac.in">https://gate.iitb.ac.in</a>	GATE Office IIT Delhi Hauz Khas, New Delhi- 110016 <a href="http://gate.iitd.ac.in">http://gate.iitd.ac.in</a>	GATE Office IIT Kanpur Kanpur- 208016 <a href="https://gate.iitk.ac.in">https://gate.iitk.ac.in</a>
GATE Office IIT Kharagpur Kharagpur- 721302 <a href="https://gateoffice.iitkgp.ac.in">https://gateoffice.iitkgp.ac.in</a>	GATE Office IIT Madras Chennai- 600036 <a href="https://gate.iitm.ac.in">https://gate.iitm.ac.in</a>	GATE Office IIT Roorkee Roorkee- 247667 <a href="https://gate.iitr.ac.in">https://gate.iitr.ac.in</a>	GATE Office IIT Guwahati Guwahati- 781039 <a href="https://gate2026.iitg.ac.in">https://gate2026.iitg.ac.in</a>

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**SOMAIYA**  
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## Somaiya Centre for Integrated Science Education and Research (SciSER®)

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### Eligibility:

- Applicants must hold a Master's Degree (1-year or 2-year) in any science discipline, or a professional degree such as M.Tech or M.Pharm, recognized as equivalent to a master's degree by the relevant statutory regulatory authority, with a minimum aggregate of **55% marks (or equivalent) as per UGC regulations**.
- Candidates seeking admission after completing a 4-year or 8-semester bachelor's degree programme (e.g. B.Tech, B.E., B.Pharm, MBBS, BDS, BAMS, BHMS, or B.Sc. (Honors)) must have secured at least **75% marks (or equivalent) as per UGC regulations**.
- Applicants whose master's dissertation has been evaluated but whose viva-voce examination is pending may be provisionally admitted to the JRF programme, subject to successful completion of the master's degree prior to final admission.
- Candidates holding a degree considered equivalent to a master's degree from foreign educational institutions accredited by recognized assessment and accreditation agencies in their respective countries are eligible for admission, subject to verification of equivalence and compliance with quality standards.

### JRF Entrance Exam:

- Passing the SVU JRF Entrance Exam is mandatory unless exempted.
- Exemptions include UGC-CSIR-NET-JRF and DBT-JRF
- Exempted candidates must still complete the application form.

### Important Dates

Application Deadline: **5<sup>th</sup> Sept, 2025**      Interview : **24<sup>th</sup> Sept, 2025**  
Exam Date : **13<sup>th</sup> Sept, 2025**      Programme Start: **1<sup>st</sup> Oct, 2025**  
Result Declaration : **20<sup>th</sup> Sept, 2025**

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## SCHOOL OF ENGINEERING

Applications are invited for the following positions

### POSITION

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<b>Associate Professor</b> CSE   AIML   DS	Ph.D in CSE and minimum of 08 years teaching/research/industry experience
<b>Assistant Professor</b> CSE   AIML   DS   Maths	First Class PG and minimum 02 years teaching experience. Preference will be given to Ph.D candidates

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Interested candidates can send their detailed resume to  
**[careers.soe@aurora.edu.in](mailto:careers.soe@aurora.edu.in)**

Only shortlisted candidates will be called for the interview.

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