

MoUs and Institutional Partnerships

The MoU was formalized between Rajasthan Technical University (RTU), Kota and the Bhartiya Shiksha Board to strengthen collaboration in training, placement, skill development, R&D services and other academic matters. The collaboration aims to integrate vocational skills with technical education at the school level and to align school-level curriculum with National Skills Qualifications Framework (NSQF) levels and industry standards. The MoU facilitates joint course development, faculty and teacher capacity building, co-branded assessment and certification, and industry exposure, internship and apprenticeship opportunities for students. This initiative creates clear academic pathways from school-level vocational courses to higher technical education and enhances students' employability through nationally recognized, industry-relevant credentials.

The collaboration particularly supports schools by bringing new-age technologies such as AI, data analytics, IoT, robotics, automation, digital fabrication, green technologies, drones and AR/VR into school-level skill programs through short-term courses aligned to NSQF levels 1–4. Skill labs, virtual labs, shared resource centres and mobile lab units help schools with limited laboratory facilities offer practical, hands-on learning. The initiative also promotes research, innovation and project-based learning through hackathons, innovation challenges and incubation activities, and supports community and regional development by encouraging local entrepreneurship, regional crafts and sustainable technologies, including the establishment of Skill-Tech Hubs and Centres of Excellence in schools and colleges affiliated with both institutions.

Dr. Nidhi Gusain
Senior Researcher, HoD Skill Development



MEMORANDUM OF UNDERSTANDING (MoU)

BETWEEN

RAJASTHAN TECHNICAL UNIVERSITY, KOTA (RAJ.)

&

**BHARATIYA SHIKSHA BOARD, PATANJALI YOGPEETH, PHASE-2,
BAHADRABAD, HARIDWAR, UTTARAKHAND**

FOR

**TRAINING, PLACEMENT, SKILL DEVELOPMENT,
R&D SERVICES AND OTHER ACADEMIC MATTERS**

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (hereinafter called as the 'MoU') is entered into on this the nth DAY OF - MONTH - Two Thousand and YEAR (DATE IN NUMERALS), by and between

Rajasthan Technical University, Kota (Raj.), THE FIRST PARTY represented herein by its Name of Competent Authority / Representative (hereinafter referred as "RTU" or "First Party", the institution which expression, unless excluded by or repugnant to the subject or context shall include its successors — in-office, administrators and assigns).

AND

BHARATIYA SHIKSHA BOARD, PATANJALI YOGPEETH, PHASE-2, BAHADRABAD, HARIDWAR, UTTARAKHAND, and represented herein by its **AUTHORIZED SIGNATORY**, (hereinafter referred to as "BSB" or "Second Party", company which expression, unless excluded by or repugnant to the subject or context shall include its successors — in-office, administrators and assigns).

(First Party and Second Party are hereinafter jointly referred to as 'Parties' and individually as 'Party') as

1. WHEREAS:

- 1.1. First Party, Rajasthan Technical University (RTU) is located in Kota in the state of Rajasthan. It was established in 2006 by the Government of Rajasthan to enhance the technical education in the state.

The university, located on the Rawatbhata Road, about 14 kms from Kota Railway Station and nearly kms from Kota Bus Stand. The university currently affiliates about 90 Colleges for the study of Bachelor of Technology, Master of Technology, Master of Business Administration, Master of Computer Applications, Bachelor of Hotel Management and Catering Technology, Bachelor of Architecture and Master of Architecture. The number of enrolments in the University is nearly one lakh at present. There is a conducive research environment for research in all the disciplines whose post graduate programs are being run. University has a number of research centres in the affiliated colleges and in the University Departments in Rajasthan Technical University, Kota to run the Ph.D. programs.

The University aims to provide quality technical education which may help the state in its technical development and will boost the technical environment in the country.



- 1.2. Second Party, the Bhartiya Shiksha Board (BSB), a National Board of School Education notified by the Government of India, Ministry of Education, having its principal office at Patanjali Yogpeeth, Phase-2, Delhi-Haridwar National Highway, Bahadrabad, Haridwar, Uttarakhand.

This is an All India Board with the objective of integrating Indian Knowledge System with mainstream education, and preparing students with 21st century skills so that they can compete effectively at both local and global levels. To date, the Board has affiliated and associated nearly 600 schools across the country, marking a remarkable milestone in its growth and outreach. Through its objectives, BSB aims to create an indigenous and conducive educational environment for education stakeholders in the country. In line with the vision of **NEP 2020 and NCF 2023**, BSB has developed its own curriculum and textbooks to promote holistic, value-based, and contextually relevant education.

- 1.3 The Parties believe that collaboration and co-operation between themselves will promote more effective use of each of their resources, and provide each of them with enhanced opportunities.
- 1.4 The Parties intent to cooperate and focus their efforts on cooperation within area of Training, Placement, Education, Consultancy, Research and other Technical matters.
- 1.5 Both Parties, being legal entities in themselves desire to sign this MoU for advancing their mutual interests.

2. POSSIBLE STRATEGIC COLLABORATION

2.1. Integration of Technical and Vocational Education

Joint development of courses that blend vocational skills with technical education for schools. **Joint development of courses integrating vocational skills with technical education at the school level** to provide students with early exposure to applied learning, strengthen foundational technical competencies, and create seamless pathways for progression to higher technical education. This collaboration will equip students with practical, industry-relevant skills from an early school level which will enhance their employability, and create clear academic pathways from school-level vocational courses to higher technical education, ensuring both skill development with streamlined career progression.

2.2. Curriculum Co-Development and Alignment with NSQF

Collaborative design and alignment of curriculum with National Skills Qualifications Framework (NSQF) levels. **Collaborative design and alignment of curriculum with NSQF levels** to ensure standardized skill development based on industry needs, national recognition of qualifications,

and smooth vertical mobility across education and training pathways. Alignment of school-level skill programs with the **NSQF** and **industry standards** establishes a nationally recognized benchmark for quality and relevance in education. It ensures that learning outcomes are clearly defined, measurable, and comparable across institutions. Through NSQF alignment, students gain qualifications that are **portable, credit-based, and progression-oriented**, enabling smooth mobility between school, vocational, and higher education. Industry alignment further ensures that the curriculum and assessments reflect **real-world skill requirements**, making learners employable and future-ready. Together, this dual alignment strengthens the credibility of the Board's certifications, fosters trust among employers and higher institutions, and positions the Board as a **national leader in outcome-based, industry-relevant education**.

Technology and Digital Learning Initiatives: Development of virtual labs, e-learning modules, and digital content for vocational and technical subjects. Integration of AI-based automation, simulation-based learning, and dashboard analytics in ICT education. Incorporation of applied engineering, ICT, and automation concepts in school-level skill programs. Suggestive Thematic Areas for Incorporation of Applied Engineering, ICT, and Automation Concepts (Aligned with Industry 4.0):

- 2.2.1. **Smart Systems and Automation:** Builds foundational understanding of intelligent automation and system integration—core aspects of Industry 4.0 like Robotics, Mechatronics, and IoT-based applications for real-world problem-solving. Sensor integration, embedded systems, and automated control processes.
- 2.2.2. **Digital Design and Fabrication:** Encourages creativity and equips students with hands-on experience in digital manufacturing. Like 3D printing, CAD/CAM modeling, and digital prototyping. Application of design thinking for innovation and product development.
- 2.2.3. **AI, Data, and Analytics:** Develops analytical and computational thinking, preparing students for data-driven workplaces. AI-based office automation, predictive analytics, and dashboard creation. Coding fundamentals and machine learning concepts through practical exercises.
- 2.2.4. **Green and Sustainable Technologies:** Promotes sustainable innovation and aligns technology learning with environmental responsibility. Renewable energy systems (solar, wind, and bio-energy). Smart agriculture, water management, and environmental monitoring using automation.
- 2.2.5. **Emerging and Disruptive Technologies:** Nurtures adaptability and prepares learners for evolving technological landscapes. Like Drone technology, augmented reality (AR), and virtual reality (VR) applications. Exploration of future-ready technologies fostering innovation and entrepreneurship.

2.3. Mechanism:

- 2.3.1. **Curriculum Co-development:** Jointly prepare short-term (30–50 hours) school-level courses aligned to NSQF levels 1–4.
- 2.3.2. **Faculty Development and Capacity Building:** Organizing the joint training programs, Faculty Development Programs, and orientation workshops for school and college teachers on new-age technologies such as AI, IoT, Robotics, and Data Analytics. Exchange of expertise and resource persons for teacher upskilling and professional development. **Assessment & Certification:** Co-branded certification under the **BSB - RTU** (and possibly **NCVET-aligned**) framework. RTU faculty can train school teachers as “Skill Mentors”.
- 2.3.3. **Research, Innovation, and Project-Based Learning:** Joint research projects on skill gap mapping, employability enhancement, and regional development through technology-led interventions. Promotion of innovation, entrepreneurship, and design thinking among students through joint hackathons, innovation challenges, and incubation activities can be planned.
- 2.3.4. **Skill Labs & Demonstration Centers:** Existing infrastructure can be utilized, which may include established district-level institutions or labs that can be hosted in selected schools or RTU-affiliated institutions. To support schools with limited laboratory facilities, virtual labs, shared resource centers, and mobile lab units may be established in collaboration with technical institutions or industry partners. These facilities will enable students to gain practical, hands-on experience in applied engineering, ICT, and automation without the need for extensive on-site infrastructure.
- 2.3.5. **Skill Certification and Assessment:** Collaboration in assessment design, evaluation standards, and digital credentialing. Joint development of automated and AI-based assessment tools for skill evaluation.
- 2.3.6. **Industry Interface and Apprenticeship Opportunities:** Linking school students to industry exposure, internships, and apprenticeship programs under RTU's industrial network. Joint facilitation of campus-connect programs and industry partnerships for future employability.
- 2.3.7. **Community and Regional Development Initiatives:** Joint programs for promoting local entrepreneurship, regional crafts, and sustainable technologies. Establishment of Skill-Tech Hubs or Centres of Excellence in schools and colleges affiliated with both institutions.

3. ROLES AND RESPONSIBILITIES

3.1. BSB shall

- 3.1.1. Identify and on-board participating schools.
- 3.1.2. Provide infrastructure and integrate courses into school timetables.
- 3.1.3. Bear implementation and operational expenses.

- 3.1.4. Coordinate documentation and reporting.
- 3.1.5. Duly compensate RTU and its experts for their expertise and time.
- 3.2. RTU shall
 - 3.2.1. Provide academic guidance and technical support.
 - 3.2.2. Assist in training, quality assurance, and certification.
 - 3.2.3. Facilitate access to expert faculty and resources.
- 3.3. Financial Understanding
 - 3.3.1. Course development costs to be borne by BSB.
 - 3.3.2. Any involvement of the staff of the university shall be duly compensated.
 - 3.3.3. All operational delivery costs to be borne by BSB.
 - 3.3.4. There shall be no financial liability on the university as a result of this understanding.
- 3.4. Each Party agrees that it shall not, at any time, after executing the activities of this MoU, disclose any information in relation to these activities or the affairs of business or method of carrying on the business of the other without consent of both Parties.
- 3.5. It is expressly agreed that First Party and Second Party are acting under this MoU as independent entities, and the relationship established under this MoU shall not be construed as a partnership. Neither Party is authorized to use the other Party's name in any way, to make any representations or create any obligation or liability, expressed or implied, on behalf of the other Party, without the prior written consent of the other Party. Neither Party shall have, nor represent itself as having, any authority under the terms of this MoU to make agreements of any kind in the name of or binding upon the other Party, to pledge the other Party's credit, or to extend credit on behalf of the other Party.
- 4. INTELLECTUAL PROPERTY AND COPYRIGHT CLAUSE
 - 4.1. Co-ownership: All training content, curriculum materials, manuals, assessment tools, and related intellectual property jointly developed under this MoU shall be co-owned by BSB and RTU.
 - 4.2. Usage Rights: Both parties shall retain non-exclusive, perpetual, and royalty-free rights to use, reproduce, adapt and disseminate the materials for educational and

non-commercial purposes even after the termination or expiry of this MoU, unless otherwise agreed in writing.

4.3. Restrictions: Any modification, commercial licensing, or third-party use of such content shall require mutual written consent.

5. ARBITRATION

5.1. Any dispute arising with regard to any aspect of this MoU shall be settled through mutual consultations and agreements by both Parties.

5.2. In the event of non-resolution of disputes through mutual consultation, the Parties hereby submit to the exclusive jurisdiction of the Kota Courts of Law. The arbitration shall be conducted in accordance with Arbitration and Conciliation Act of 1996 and the venue of the arbitration shall be in Kota jurisdiction of dispute.

6. FORCE MAJEURE:

6.1. In no event shall the Parties be responsible or liable for any failure or delay in the performance of their obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God.

6.2. It is being understood that the Parties shall use reasonable efforts which are consistent with accepted practices in the academia to resume performance as soon as practicable under the circumstances.

7. DURATION

7.1. This Memorandum of Understanding shall become effective upon signing by both Parties and shall remain in effect for a duration of FIVE (5) years. It may be extended for another duration with mutual agreement.

7.2. The MoU may be terminated by either Party by giving three months' notice and settling all outstanding dues, if any, within that period.

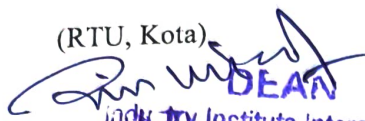
7.3. If a sponsored or joint project is underway at the termination of this MoU, the MoU would be deemed to have been extended till the completion of the Project. At the termination of the MoU or any joint project, any property created in execution of joint projects shall remain in-situ.



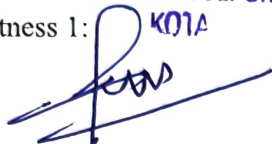
AGREED and SIGNED

For, First Party

(RTU, Kota)


DEAN
Industry Institute Interaction &
Institutional Relations
Rajasthan Technical University

Witness 1: KOTA



The nodal officer or the Contact Persons details:

A.1. For the first Party:

Name: Brajesh Tripathi

Designation: Professor

Address:

Email: btripath@rtu.ac.in Phone: 9991855052

A.2. For the Second Party:

Name: Dr. Nidhi Gargain

Designation: Senior Researcher

Address: BSB, Noida Office.

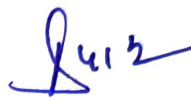
Email: nidhigargain@bsb.org.in Phone: 9810202838

For Second Party

(BSB, Haridwar)



Witness 2:



(DR. Anil Sharma)

Member BSB

