

# Invitation of Applications for Internship Positions February 25, 2025

#### 1. Introduction

Madan Bhandari University of Science and Technology (MBUST) was established through the promulgation of the Madan Bhandari University of Science and Technology Act, 2079 (2022 AD) on August 3, 2022. This Act grants extensive autonomy to the University creating an enabling environment for developing MBUST into a world-class research-oriented university. MBUST holds the promise of making a direct contribution to the economic development of the country through the creation of new knowledge and technology, which should enhance the competitiveness of the country's economy.

The MBUST vision is to be a world-class university and the mission is to build prosperous and just Nepal. MBUST is committed to provide world-class education by attracting talented and committed students and academic staff, and providing a conducive environment for research and development activities focused at solving real-life problems of the industry using the state-of-the- art knowledge and technology.

#### 2. Academic Programs

The teaching and research activities of the University are guided by the real-life problems of the industry. Teaching and research programs of the University are delivered through the Institutes engaged in research related to specific economic sectors. The MBUST students pursue their study in close collaboration with related industries and are expected to develop a new technology for collaborating industrial partners. This approach is designed to produce graduates who are "job creators" rather than "job seekers".

MBUST has been offering PhD and Master of Applied Science (MAS) programs in Organic Agriculture, Forest Biomaterials Science and Engineering, and MAS programs in Artificial Intelligence, Data Science and Sustainable and Resilient Infrastructure.

# 3. Internship Position and Eligibility

To support its ongoing and planned research activities, MBUST is currently seeking to recruit interns for a period of 3 to 6 months. These interns will contribute to various research projects by assisting in data collection, analysis, fieldwork, and laboratory experiments, depending on the specific research focus. This opportunity aims to provide hands-on experience while enhancing the interns' academic and professional development in their respective fields. Interested candidates with the following qualifications are welcome to apply; however, *priority will be given to those who commit to enrolling at MBUST as a student in the MAS or PhD program, as applicable*.

<b>Research Group and Area</b>	No. of Intern s	Academic Qualification*	Desired Skills	Contact Person
Organic Agriculture				
<ul> <li>Cryopreservation of mushroom cultures</li> <li>Domestication of wild edible mushrooms</li> </ul>	1	Bachelor's degree in relevant subject	Knowledge of medium preparation, fungal culture and preservation techniques	Dr. Bhushan Shrestha <u>bhushan.shrestha@mbust.ed</u> <u>u.np</u>
	1	Master's degree in relevant subject	Knowledge of fungal culture, mushroom growth and development	
• Plant disease experiments, disease inventory preparation, pure culture preservation of isolate disease and	2	Bachelor's degree in relevant subject	Knowledge in microbiology, agriculture and biotechnology	Dr. Anupama Shrestha anupama.shrestha@mbust.ed u.np
<ul> <li>beneficial microorganisms, regular disease survey.</li> <li>Bio-fertilizer optimization experiments, plant growth promoting experiments.</li> <li>Nutrient and microbial component analysis of compost.</li> </ul>	1	Master's degree in relevant subject	Strong background in composting and microbial experiments	
<ul> <li>Rice and millet research</li> <li>Potato and micro-tuber research</li> <li>Blast research</li> <li>Cloning and genome editing research</li> </ul>	2	Bachelor's (preferably Master's) degree in relevant subject	Strong background in Molecular Biology and Genetic Engineering, with a preference for genome editing research.	Dr. Sarbesh Das Dangol sarbesh.das.dangol@ mbust.edu.np
Forest Biomaterials				
• Phytochemistry	1	BSc or MSc in Organic Chemistry, Botany, Microbiology or Biotechnology	Background in phytochemical analysis including chromatography, mass spectrometry and molecular docking.	Dr. Sabina Shrestha sabina.shrestha@mbust.edu. np
<ul> <li>Wood seasoning</li> <li>Mechanical characterization and performance of wood</li> <li>Biochar production and its utilization</li> </ul>	1	BSc or MSc (preferably Master's) in Engineering, Physics,	Background in forest sciences, ecology, biology, or related disciplines. Skills in statistics and data	Dr. Sudip Pandey sudip.pandey@mbust.edu.np

<b>Research Group and Area</b>	No. of Intern s	Academic Qualification*	Desired Skills	Contact Person
	1	Forestry or Chemistry, Wood Science	analysis using tools such as R, Arc GIS. Passion and	
<ul><li>Forest Ecology and Ecophysiology</li><li>Plant fiber utilization</li><li>Forest fire</li></ul>	1	BSc or MSc (preferably Master's) in Forestry, Environmental Science, Natural Resources Management, Botany, or Biotechnology	willingness to work in both field and laboratory settings.	
Bamboo structure	1	BE in Civil Engineering (Preferably with elective courses in structural dynamics, earthquake engineering, or building-related subjects, along with a thesis in a relevant area.)	Experience in material testing, and strong background of structural dynamics and finite element method.	Dr. Kishor Timsina <u>kishor.timsina@mbust.edu.n</u> p
Sustainable and Resilient Infrastructure				
• Sustainable and resilient reconstruction of traditional stone masonry buildings, including structural strengthening for adaptive reuse	1	ME/MSc in Structural Engineering or ME/MSc in Earthquake Engineering	Strong background in structural assessment of Nepal's traditional buildings, structural dynamics and finite element method.	Dr. Kirti K. Joshi <u>kirti.kusum.joshi@mbust.edu</u> <u>.np</u> Dr. Kishor Timsina <u>kishor.timsina@mbust.edu.n</u> <u>p</u>
	1	BE in Civil Engineering	Knowledge of building materials and structural analysis. (Preferably with elective courses in structural dynamics, earthquake engineering, or building-	

Research Group and Area	No. of Intern	Academic Qualification*	Desired Skills	Contact Person
	S		related subjects, along with a thesis in a relevant area.)	
• Documentation and analysis of the exterior and interior features of traditional stone masonry buildings for their adaptive reuse	1	B Arch	Knowledge of Nepal's vernacular architecture. Proficient in drafting (CAD 2D/3D), freehand sketching, and writing technical reports.	
• Improved performance in existing buildings regarding functionality, safety, comfort, and aesthetics	1	B Arch	Knowledge of planning and design of modern office buildings, including preparation of master plans. Proficient in drafting (CAD 2D/3D), freehand sketching, and writing technical reports.	

Note: \*Minimum CGPA of 2.75 out of 4 (or equivalent) for Bachelor's degree holder and minimum CGPA of 3 (out 4) for Master's degree holder.

#### **Important notes:**

- The period of internship will be decided based on the mutual understanding and is subject to review based on the interns' performance.
- Successful candidates with a Bachelor's degree will receive a monthly allowance of Rs. 10,000, while those with a Master's degree will receive Rs. 15,000 during the internship period.
- The positions are full-time and based in Chitlang (Google map: <u>https://maps.app.goo.gl/vayZsxqF35YzuG2R9</u>)
- Candidates awaiting final results may also apply, but they will not receive any allowance if selected till the final results are published.
- Those who have applied for internship prior to this notice should also apply if interested.

# 4. Application Documents

Candidates will be selected for the internship position based on their academic qualification, skills, passion, and attitude. Non-Nepali citizens may also apply.

# Mandatory documents to be submitted

- 1. Academic transcripts
  - a. Master's level (if applicable)
  - b. Bachelor's level
  - c. Secondary school transcript (grade 12)
  - d. Secondary Education Examination transcript (grade 10)
- 2. Cover letter
- 3. Personal statement (see Appendix 1)
- 4. Citizenship certificate/Passport
- 5. CV

# **Optional documents**

- 1. Publication list
- 2. Experience certificates
- 3. Additional transcripts
- 4. Other documents (not more than five)

Documents (single PDF file) should be emailed to <u>info@mbust.edu.np</u> (cc. to the email address of respective contact person) with the subject titled "**Application for internship 2025**".

# 5. Selection Process

Candidates will be selected based on the evaluation of academic qualification, skills, and interview.

# 6. Timeline

Applications will be accepted until **March 12, 2025**, or until the positions are filled, whichever occurs first.

# Appendix 1

#### **Framework for Personal Statement**

A personal statement shall be a concise description of the personal background, academic journey and research interests of the applicant of up to 800 to 1,000 words (*ref.* framework below). It shall also highlight specific qualities and special skills of the applicant which may be helpful for the successful completion of the internship. The applicant shall also describe the reasons for selecting MBUST and the program.

Section	Content		
1. Introduction	Brief introduction of yourself.		
2. Personal Background	Key details about your background (e.g., upbringing, cultural influences). Personal experiences that shaped your academic and career aspirations.		
3. Academic Journey	Overview of your educational background. Key academic achievements, projects, or coursework relevant to the program. Any challenges overcome during your academic journey.		
4. Research Interests	Specific areas of research or academic interest. How these interests align with the program and MBUST's focus. Any prior research experience or publications (if applicable).		
5. Qualities and Special Skills	Personal qualities (e.g., resilience, teamwork, leadership). Technical or specialized skills relevant to the program. Examples demonstrating how these qualities and skills will contribute to the internship.		
6. Reasons for Choosing MBUST and the Program	Why MBUST is the right fit for your academic and career goals. Specific aspects of the program that appeal to you. How the program aligns with your long-term aspirations.		
7. Conclusion	Summarize your motivation and readiness for the internship. Express enthusiasm for contributing to and learning from MBUST. Closing statement reflecting your commitment and future goals.		