

Important Announcement:

IIT Bhubaneswar invites applications for the upcoming Autumn 2026-27 session from interested candidates working at an established industry in India as engineers for at least three years or more for M.Tech. in “Advanced Maintenance Technology” programme (in blended mode – lectures will be via online mode during evenings or weekends, laboratories and all examinations will be conducted in-person mode).

Programme details:

The proposed “Advanced Maintenance Technology” programme is offered for engineers who have been working / or have worked in industry/plant for 3 years or more and are thus aware of the maintenance procedures being followed in plant and are looking to extend their knowledge and update their qualifications with a view to career advancement. Engineers from industries, including the steel, automotive, pharmaceutical, nuclear, petrochemical and aerospace industries, may participate in this program. It does not require GATE qualification but selections will be made through a procedure of evaluation of applicants. This proposed programme will help build the fundamental knowledge base needed for predictive and preventive maintenance of both normal and complex, and critical systems and structures. The technical management aspects of maintenance technology will be covered so as to prepare the student for a range of roles associated with maintenance in plants, including critical areas.

The minimum time required to complete the program is two years. However, it can also be completed at relaxed pace within five years. The admissions will be made open once a year (i.e. Autumn Semester).

Essential qualification:

Name of the School	Name of the M.Tech programme	Previous Degree	Essential / Desirable requisite
School of Mechanical Sciences (SMS)	M.Tech. in Advanced Maintenance Technology (blended mode – lectures will be via online mode during evenings or weekends)	B.Tech. in Mechanical Engineering or equivalent	Minimum 60% marks or 6.5 CGPA on a 10-point scale in previous degree.
School of Infrastructure (SIF)		B.Tech. in Civil Engineering or equivalent	Minimum 3 years of experience in industry at engineering level.
School of Electrical Sciences (SES)		B.Tech. in Electrical Engineering or equivalent	
School of Minerals, Metallurgical and Materials Engineering (SMMME)		B.Tech. in Metallurgical Engineering or equivalent	

Shortlisting criteria:

Shortlisting will be done based on marks scored in B.E./B.Tech. or equivalent.

Selection procedure:

Shortlisted candidates will have to appear for interview (in-person) and selection process will be based on the performance during the interview.

For details about regulations, please refer to this website:

<https://www.iitbbs.ac.in/wp-content/uploads/2024/01/Blended-Mode-MTech-Regulations.pdf>

Application fee (Non-refundable): Rs. 500

Fees structure:

S.No	Tuition fee component	Rs.	Remarks
Part-A			
1.	Registration fee (one-time)	25,000/-	One time (valid for 5 years). After 5 years, Rs. 5,000/- per semester
Part-B			
1.	Tuition fee for lecture/lab course	1000/- per hour	40 hours for 3 credit course, 52 hours for 4 credit course
2.	Tuition fee for project work	40,000/-	For every 4 credits
3.	Tuition fee for seminar course	1000/- per hour	3 contact hour per week

Coordinator:

Name: Dr. Srinivasa Ramanujam Kannan

School: School of Mechanical Sciences

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Co-Coordinator:

Name: Prof. Brahma Deo

School: School of Minerals, Metallurgical, and Materials Engineering

Email: bdeo@iitbbs.ac.in

Co-Coordinator:

Name: Prof. Sarat K. Panda

School: School of Infrastructure

Email: sarat@iitbbs.ac.in

Curriculum of M. Tech. Programme in “Advance Maintenance Technology”

Semester 1					
Sl. No.	Course No.	Course Name	L-T-P	Credits	
1	ML6L021	Corrosion Science and Engineering	3-0-0	3	
2	ME6L001	Vibrations	3-1-0	4	
3	ID6L007	Time Series Analysis of Dynamical Systems	2-0-2	3	
4	XX6LYYY	Elective I	3-0-0/ 3-1-0	3/4	
5	XX6LYYY	Elective II	3-0-0/ 3-1-0	3/4	
6	ID6P101	Corrosion & Vibration Laboratory	0-0-3	3	
7	ID6S101	Seminar*	0-0-4	3	
Total L-T-P and Credit			14-3-9	22/24	
Semester 2					
Sl. No.	Course No.	Course Name	L-T-P	Credits	
1	ME6L009	Engineering Measurements	3-1-0	4	
2	ID6L003	Chaos in Dynamical Systems	3-0-0	3	
3	XX6LYYY	Elective III	3-0-0/ 3-1-0	3/4	
4	XX6LYYY	Elective IV	3-0-0/ 3-1-0	3/4	
5	ID6P102	Measurement & Instrumentation Laboratory	0-0-3	3	
6	ID6D101	Thesis – Part I	---	2	
Total L-T-P and Credit			12-3-3	18/20	
Semester 3					
Sl. No.	Course No.	Course Name	L-T-P	Credits	
1	ID6D102	Thesis - Part II	---	14	
Total L-T-P and Credit			---	14	
Semester 4					
Sl. No.	Course No.	Course Name	L-T-P	Credits	
1	ID6D103	Thesis - Part III	---	14	
Total L-T-P and Credit			---	14	

List of Electives:

Subject Name	Subject Code	L-T-P	Credit
Elective- I & II			
Dynamics of Structure	CE6L301	3-1-0	4
Materials Design	ML6L010	3-0-0	3
Manufacturing planning and control	ME6L316	3-0-0	3
Fluid-Structure interaction and separated flow	ME6L169	3-0-0	3
Condition monitoring driven maintenance of electrical machines	EE6L027	3-0-0	3
Elective- III & IV			
Engineering Design Optimization	ME6L007	3-0-0	3
Structural Health Monitoring	CE6L029	3-0-0	3
Design and analysis of welded structure	ME6L326	3-1-0	4
Instability of slender structural components	CE6L313	3-1-0	4

* In the ‘Seminar’ course the students are exposed to state-of-the-art methods in preventive/predictive/productive maintenance. They learn and practice certain advanced techniques/tools. Senior industry experts are invited to interact and share their knowledge. In addition, the students are required to give seminars on assigned topics. An examination is conducted on the items learned by students.