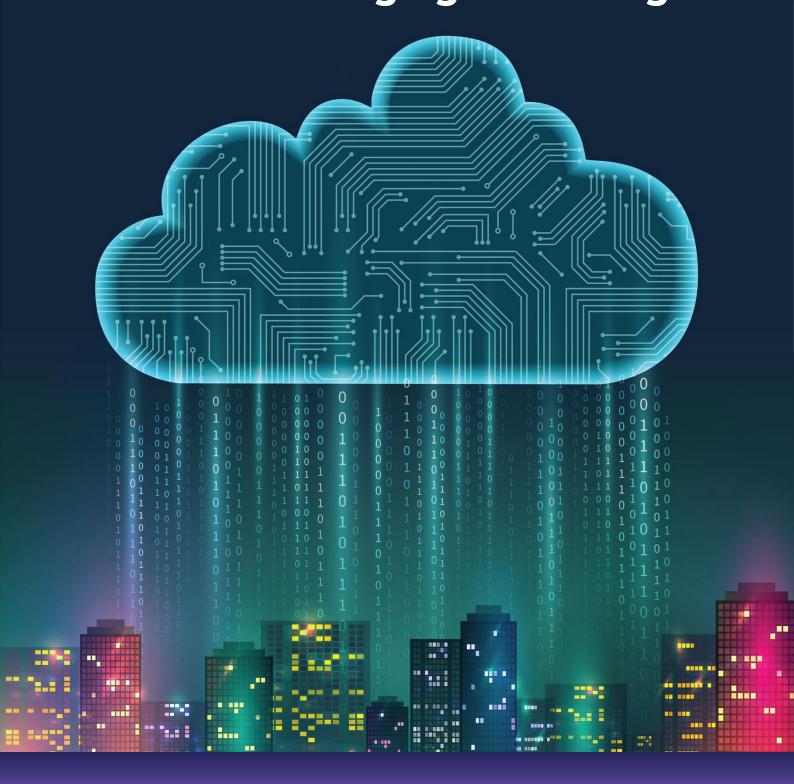


# Executive MTech IN Cloud and Emerging Technologies



## 2 Years I Online Immersive Sessions I Graduate from an IIT

### WHY UPSKILL FROM IIT BHILAI?

Indian Institute of Technology (IIT) Bhilai was established in the state of Chhattisgarh by the Ministry of Education in the year 2016.

IIT Bhilai is presently housed in its permanent campus at Kutelabhata, Bhilai, Chhattisgarh.

At IIT Bhilai, we understand the demands of the dynamic corporate landscape, and our Executive MTech programs are meticulously crafted to provide a seamless blend of academic excellence and real-world applicability. Whether you aspire to advance in your current role, switch career paths, or stay ahead of industry trends, our Executive MTech courses offer the strategic edge you need to thrive in a competitive landscape.





# **Program Overview**

The Cloud and Emerging Technologies Executive Program is a forward-focused course designed to equip professionals with the expertise to navigate and lead in the rapidly evolving tech landscape. This program provides in-depth knowledge of cloud computing fundamentals, architecture, and deployment models, along with insights into emerging technologies such as blockchain, Internet of Things (IoT), quantum computing, and edge computing. Participants will gain hands-on experience with cloud platforms, understand the principles of scalability and security, and explore how emerging technologies integrate with cloud ecosystems to drive innovation.

# Who Can Apply?

- Min 2 years of Experience within preceding 5 Years
- Should have B.Tech/ BE/ M.Tech/ MSc (In Relevant Field- 4 Semester Program) / MCA (4 Semester Program) / MS Degree (min. 4 Semester Program).
- In the qualifying degree at least 55 percent marks or equivalent 5.5 CGPA/CPI must be there. In case of the candidate belonging to SC, ST, or Persons with Disability (PwD) category, this is relaxed to 50% or equivalent 5.0 CGPA/CPI. For MCA/MSC passed graduates, the percentage score of MCA/MSC would be considered. For BE/BTech Engineering graduates without PG specialization, the percentage score of the undergraduate degree would be considered. For a post graduation in the Engineering field of study, PG score qualification can be considered.
- Selection process will be scheduled post counseling & application process, depending on the number of eligible applications as per seat availability for the program. This entire process will be online.

# PROGRAMME OBJECTIVES

To develop a strong foundation in cloud computing fundamentals, including architecture, networking, and virtualization.

To gain expertise in advanced cloud architecture for designing scalable, secure, and cost-efficient solutions.

To acquire hands-on skills in programming for cloud and distributed systems, enhancing the ability to create cloud-native applications.

To master principles of cloud security and compliance for robust and reliable operations.

To explore emerging technologies like Blockchain, IoT, AR/VR, and Quantum Computing through specialized electives.

To integrate advanced technologies with cloud ecosystems, driving innovation in modern applications.

To learn multi-cloud strategies and operations for effective cloud resource management.

To engage in project-based learning, including minor, major, and capstone projects, for real-world application of skills.

To enhance expertise in digital transformation strategies, enabling effective adoption of emerging tech in organizations.

To experience flexible online learning with expert faculty guidance, combining live sessions and self-paced study.



# PROGRAMME HIGHLIGHTS

# **Comprehensive Industry-Aligned Curriculum**

Learn the latest in data science and analytics, including machine learning, big data technologies, and predictive modeling, ensuring relevance to modern industry demands.

# **Flexible Online Learning for Professionals**

The fully online mode allows you to balance your work commitments while advancing your expertise, with live sessions and self-paced study options.

# **Expert Faculty and Industry Mentors**

Gain insights from IIT Bhilai's distinguished faculty and experienced industry professionals, combining academic excellence with real-world expertise.

# **Prestige**

Certification from one of India's most renowned institutions, boosting your professional credentials.

### **Career-Focused Outcomes**

Equip yourself with in-demand data science skills and earn an IIT Bhilai certification, giving you a competitive edge and unlocking new career opportunities in the data-driven economy.

# **Virtual Instructor-Led Training**

Learn through Virtual Instructor-Led Training (VILT)



# **CORE LEARNING OUTCOMES**

Strong Understanding of Cloud Fundamentals

Develop a solid foundation in cloud computing concepts, networking, and virtualization, enabling participants to design and manage cloud-based solutions effectively.

- Proficiency in Advanced Cloud Architecture

  Gain expertise in building scalable, secure, and cost-efficient cloud architectures tailored to diverse business needs.
- Hands-On Skills in Programming for Cloud

  Learn programming techniques for cloud and distributed systems,
  enhancing the ability to develop, deploy, and optimize cloud-native
  applications.
- Mastery in Cloud Security and Compliance Understand critical principles of cloud security, data privacy, and regulatory compliance to ensure secure and reliable cloud operations.
- Specialization in Cloud and Emerging Technologies Explore advanced electives such as Multi-Cloud Strategy, DevOps, or Quantum Computing to customize expertise and stay ahead in technology trends.
- Integration of Emerging Technologies with Cloud
  Acquire skills to integrate emerging technologies like Blockchain, IoT, and AR/VR into cloud ecosystems for innovative applications.
- Strategic Decision-Making with Digital Transformation Learn to develop and execute strategies for cloud adoption, multi-cloud operations, and emerging tech integration to drive organizational innovation.



# PROGRAM STRUCTURE

Sem	Course Code	Course Name	L-T-P-C	Credits	Course Category
I	CT601	Foundations of Cloud Computing	3-0-0-3	3	Core
T	CT602	Networking and Virtualization Essentials	3-0-0-3	3	Core
1	CT603	Advanced Cloud Architecture	3-0-0-3	3	Core
П	CT604	Programming for Cloud and Distributed Systems	3-0-0-3	3	Core
П	CT605	Cloud Security and Compliance	3-0-0-3	3	Core
П	СТ6ХХ	Elective 1 (Cloud)	3-0-0-3	3	Elective
П	CT700	Capstone Project	0-0-8-4	4	Project (P)
III	CT6XX	Elective 2 (Emerging Technologies )	3-0-0-3	3	Elective
Ш	CT606	Minor Project	0-0-4-2	2	Project
Ш	СТ6ХХ	Elective 3 -(any group)	4-0-0-4	4	Elective
IV	CT607	Major Project	0-0-12-6	6	Project
IV	СТ6ХХ	Elective 4 -(any group)	3-0-0-3	3	Elective
		Campus immersion program / Elective	0-1-6-4	4	

Category	Course Code	Elective Courses	L-T-P-C	Credits
	СТ6ХХ	Cloud Infrastructure Management	3-0-0-3	3
Cloud Electives	CT6XX	Multi-Cloud Strategy and Operations	3-0-0-3	3
	СТ6ХХ	Cloud-Native Development	4-0-0-4	4
	СТ6ХХ	DevOps and Continuous Integration	4-0-0-4	4
	СТ6ХХ	Blockchain for Enterprises	3-0-0-3	3
	СТ6ХХ	Internet of Things (IoT)	3-0-0-3	3
Emorging Toch	СТ6ХХ	Digital Twin Technology	4-0-0-4	4
Emerging Tech Electives	CT6XX	Augmented and Virtual Reality (AR/VR)	3-0-0-3	3
	СТ6ХХ	Quantum Computing	3-0-0-3	3
	CT6XX	Edge Computing and Al	4-0-0-4	4

Program Elective and Open Elective courses, along with their credits, are tentative and subject to change



# **PROGRAM ADMISSION JOURNEY**



### STEP 1:

Fill up an online application form, upload the required documents and submit application

# **STEP 2:**

Make the application payment





### **STEP 3:**

Shortlisting based on work, and education profile

### **STEP 4:**

If shortlisted, you will receive an offer letter from IIT Bhilai





### STEP 5:

Pay admission confirmation fee within 7 days of receiving the offer letter

Note: The application fee once paid is not refundable. IIT Bhilai reserves the right to conduct the admissions process. By submitting the application, the students agree that any decision regarding Admissions from IIT Bhilai will be final and binding.

# **Fee Structure**

# Executive MTech in Cloud and Emerging Technologies

Application Fee (Non-Refundable)	₹ 5,000/-			
Fees	Instalment 1	Instalment 2	Instalment 3	Instalment 4
rees	₹ 1,00,000/-	₹ 1,00,000/-	₹ 1,00,000/-	₹ 1,00,000/-
Total Fees	Total Fees ₹ 4,05,000/-			

# **Cancellation & Fee Refund Policy:**

Application Fee: Non-refundable.

Course Fee Refund:

A refund of 90% of the paid course fee will be issued if a request is raised before the Batch commencement date.

No refund will be provided on or after the batch commencement date



### INDIAN INSTITUTE OF TECHNOLOGY BHILAI

upon the recommendation of the Senate hereby confers

XYZ Sharma

With the degree of

**Executive MTech in** 

### Cloud and Emerging Technologies

for successfully completing the prescribed program study and presenting the thesis.

Given this day the Eighteenth of June, Two Thousand Twenty Two under the seal of the Institute.

Digitally Signed by Dr., Jayesh Chandra S. Pal Registrar of IIT Brillai

कुलसचिव Registrar Digitally Signed by Prod. Rajest Moores Director, IT Brisks
अध्यक्ष, शिक्षा परिषद
Chairman, Senate

Digitally Signed by K, Verikasaramanan Director, IIT Brillai

अध्यक्ष, संचालक मंडल Chairman, Board of Governors





# **Get In Touch With Us**

For registration and any other information please get in touch with us at admission.iitbhilai@digivarsity.com

Contact us: 033-4058-6356