

## MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WEST BENGAL NH-12 (Old NH-34), Simhat, Haringhata, Nadia -741249

Department of Information Technology (In-house)
B.Sc. in Information Technology (Internet of Things)
(Effective from academic session 2019-20)

#### **Curriculum Structure**

		Semester I						
Sl. No.	Course Code	Course Name	L	Т	P	Credits		
	Theory							
1	BITIOT101	Programming For Problem Solving	3	0	0	3		
2	BITIOT102	Electrical and Electronics Engineering	3	0	0	3		
3	BITIOT103	Soft Skills	3	0	0	3		
4	BITIOT104	Mathematics for Computer Science	3	1	0	4		
5	BITIOT105	Introduction to IoT Architecture	3	1	0	4		
6	BITIOT106	Computer Organization and Architecture	3	1	0	4		
	Practical							
1	BITIOT191	Programming For Problem Solving Lab	0	0	4	2		
2	BITIOT192	Electrical and Electronics Engineering Lab	0	0	4	2		
3	BITIOT193	Soft Skills Lab	0	0	2	1		
Total Credit					26			

	Semester II						
Sl.	Course	Course Name	L	T	P	Credits	
No.	Code						
	Theory						
1	BITIOT201	Data Structure and Algorithm with Python	3	0	0	3	
2	BITIOT202	IoT sensors device and components	3	0	0	3	
3	BITIOT203	Discrete Mathematics	3	1	0	4	
4	BITIOT204	Environmental Science	1	0	0	1	
	Practical						
1	BITIOT291	Data Structure and Algorithm with Python Lab	0	0	4	2	
2	BITIOT292	IoT sensors device and components Lab	0	0	4	2	
Sessional							
1	BITIOT281	Project -I	0	0	2	1	
Total Credit					16		



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	Semester III					
Sl.	Course	Course Name	L	T	P	Credits
No.	Code					
	Theory					
1	BITIOT301	Operating System	3	0	0	3
2	BITIOT302	Database Management System	3	0	0	3
3	BITIOT303	Digital System Design	3	1	0	4
4	BITIOT304	Introduction to Graph Theory and its Applications	3	1	0	4
5	BITIOT305	Value & Ethics in Data Science	3	0	0	3
	Practical					
1	BITIOT391	Operating System Lab	0	0	4	2
2	BITIOT392	Database Management System Lab	0	0	4	2
Total Credit					21	

	Semester IV						
Sl.	Course	Course Name	L	T	P	Credits	
No.	Code						
		Theory					
1	BITIOT401	Computer Networking	3	0	0	3	
2	BITIOT402	Elective I	3	0	0	3	
	A. Wireless Sensor Networks						
		B. Blockchain Technologies					
3	BITIOT403	Design and Analysis of Algorithm	3	1	0	4	
4	BITIOT404	Working with Raspberry Pi & Arduino Platform		1	0	4	
	Practical						
1	BITIOT491	Computer Networking Lab	0	0	4	2	
2	BITIOT492	Elective I		0	4	2	
	A. Wireless Sensor Networks Lab						
	B. Blockchain Technologies Lab						
Sessional							
1	BITIOT481	Technical Seminar and Communication Skill	0	0	2	1	
2	BITIOT482	Project -II	0	0	4	2	
	Total Credit				21		



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	Semester V					
Sl.	Course	Course Name	L	T	P	Credits
No.	Code					
		Theory				
1	BITIOT501	IoT Application Development	3	0	0	3
2	BITIOT502	Elective – II	3	0	0	3
		A. Embedded System				
		B. Cloud Computing				
3	BITIOT503	Threats in Mobile Application	3	1	0	4
4	BITIOT504	Data security and Privacy in IoT	3	1	0	4
	Practical					
1	BITIOT591	IoT Application Development Lab	0	0	4	2
2	BITIOT592	Elective – II	0	0	4	2
		A. Embedded System Lab				
		B. Cloud Computing Lab				
Sessional						
1	BITIOT581	Industrial Training and Presentation	0	0	4	2
2	BITIOT582	Major Project- I	0	0	4	2
Total Credit					22	

	Semester VI						
Sl. No.	Course Code	Course Name	L	Т	P	Credits	
		Theory					
1	BITIOT601	Big Data Analytics	3	0	0	3	
2	BITIOT602	Data Science in IoT	3	0	0	3	
3	BITIOT603	Elective -III	3	0	0	3	
		A. Machine Learning for Financial Modelling and Forecasting					
		B. Applied Machine Learning for IoT Applications					
		C. Data Warehousing					
4	BITIOT604	Natural Language Processing	3	1	0	4	
	Practical						
1	BITIOT691	Big Data Analytics Lab	0	0	4	2	
2	BITIOT692	Data Science in IoT Lab	0	0	4	2	
	Sessional						
5	BITIOT681	Grand Viva Voce	0	0	2	1	
6	BITIOT682	Major Project -II	0	0	4	2	
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Semester	Credit
I	26
II	16
III	21
IV	21
V	22
VI	20
TOTAL	126