

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

# Syllabus of M. Tech in Information Technology (In-house) (Effective from academic session 2019-20)

#### **Curriculum Structure**

#### Semester-I

Code	Course Title	Hours per week			Credits
		L	T	P	7
PGIT-101	Program Core I- Mathematical foundations of Computer Science	3	0	0	3
PGIT-102	Program Core II- Advanced Data Structures	3	0	0	3
PGIT- 103A/103B/1 03C	Program Elective I- Advanced Web Technology/ Data Science/Mobile Communication	3	0	0	3
PGIT- 104A/104B/1 04C/104D	Program Elective II- Internet of Things/ Machine Learning/Social Network Analysis/Information Security	3	0	0	3
PGIT-105	Research Methodology and IPR	2	0	0	2
PGIT- 106A/106B/1 06C/106D	Audit Course	2	0	0	0
PGIT-192	Laboratory 1 (Advanced Data Structures)	0	0	4	2
PGIT- 193A/193B/1 93C	Laboratory 2 (Based on Elective 1)	0	0	4	2
PGIT- 194A/194B/1 94C	Laboratory 3 (Based on Elective II)	0	0	4	2
	Total Credits:	20			



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#### **Semester-II**

Code	Course Title	Hours per week			Credits
		L	T	P	
PGIT-201	Program Core III  - Advanced Computer Architecture	3	0	0	3
PGIT-202	Program Core IV – Advanced Operating System	3	0	0	3
PGIT- 203A/203B/20 3C/203D/203E	Program Elective III – Cloud Computing/ Image Processing/ Soft Computing/Data Warehousing and Data Mining/Wireless and Sensor Networks	3	0	0	3
PGIT- 204A/204B/20 4C	Program Elective IV— Distributed Systems / Big Data Analytics / Information Theory and Coding	3	0	0	3
PGIT- 205A/B/C/D	Audit Course-2	2	0	0	0
PGIT-292	Laboratory 1 (Advanced Operating System)	0	0	4	2
PGIT- 293A/B/C/D	Laboratory 2 (Based on Elective III)	0	0	4	2
PGIT-293	Term Paper with Seminar	0	0	4	2
	Total Credits:	18			

<sup>\*</sup>Students be encouraged to go to Industrial Training/Internship for at least 2-3 months during semester break.



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#### Semester-III\*

Code	Course Title	Hours per week			Credits
		L	Т	P	
PGIT- 301A/301B/3 01C/301D	Program Elective V – Bio-informatics/ Remote Sensing /Principles and Applications of GIS / Distributed Databases	3	0	0	03
PGIT-302	Open Elective A. Business Analytics B. Project Management & Entrepreneurship C. Industrial Safety D. Operations Research E. Cost Management of Engineering Projects F. Composite Materials G. Waste to Energy	3	0	0	03
PGIT-393	Dissertation-I /Industrial Project	0	0	20	10
Total Credits: 16					

<sup>\*</sup>Students going for Industrial Project/Thesis will complete these courses through MOOCs.

#### **Semester-IV**

	Course Title	Hours per week Credit			
		L	Т	P	
PGIT- 491	Dissertation II	0	0	32	16
Total Credits: 16					