

**Maulana Abul Kalam Azad University of Technology, WB**  
**(Formerly known as West Bengal University of Technology)**  
**Syllabus of B.Sc. in IT**  
**Effective from academic session 2023-24**

**Model curriculum structure for 4 year Non-AICTE UG programs for B.Sc. in IT**

Sem	Major (Offline)	Minor (Blended Mode)	Inter Disciplinary (Offline)	Ability Enhancement (Offline)	Skill Enhancement (Online /Sessional)	Common Valueadded Course (SESSIONAL)	Total credits
I	<b>Sub 1:</b> Fundamental of Programming using C Fundamental of Programming using C lab [3+2 credits]	<b>Sub 1:</b> Principles of Management [ 3credits]	Any one from GE baskets Basket A or D (3 credits)	English & Professional Communication [2 credits]	Life Skills & Personality Development [2 credits]	Yoga/ Health & Wellness/ Sports [2 credits]	22
	<b>Sub 2:</b> Introduction to Digital Electronics Digital Electronics Lab [3+2 credits]						
II	<b>Sub 1:</b> Programming with Python Programming with Python Lab [3+2 credits]	<b>Sub 1:</b> Organization Behavior [ 3credits]	Any one from GE baskets Basket B or E [3 credits]	Modern Indian Languages and Literature [2 credits]	IT Tools for Business [2 credits]	Critical Thinking/ NSS/ Mental Health [2 credits]	22
	<b>Sub 2:</b> Study of Computer Architecture and organization [5 credits]						
	<b>Sub 1:</b>						

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III	Study of Data structure and Algorithms Data structure lab Using C/Python [3+2 credits]	<b>Sub 1:</b> Principles of Marketing [4 credits]	Any one from GE baskets Basket C or F [3 credits]	The Constitution, Human Rights & Law [2 credits]	Understanding basics of Cyber Security [2 credits]		21	
	<b>Sub 2:</b> Database Management System Database management System Lab [3+2 credits]							
IV	<b>Sub 1:</b> Principles of Software Engineering [4 credits]	<b>Sub 1:</b> Human resource Management [ 4 credits]		Society Culture & Human Behaviour  [2 credits]			23	
	<b>Sub 2:</b> Operating System with UNIX UNIX lab [3+1 credits]							<b>Sub 2:</b> Sales and distribution management /E- Commerce [ 4 credits]
	<b>Sub 3:</b> OOPs with JAVA OOPs with JAVA lab [3+2 Credits]							
V	<b>Sub 1:</b> Computer Networking Computer Networking Lab [3+2 Credits]	<b>Sub 1:</b> Financial management [4 credits]			Internship to be started after exam of 4 <sup>th</sup> sem (sem break) and completed within 5 <sup>th</sup> sem(weekend) [ 4 credits]		22	
	<b>Sub 2:</b> Data Warehousing and Data Mining [5 Credits]							<b>Sub 2:</b> Entrepreneurship [4 credits]

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VI	<b>Sub 1:</b> Artificial Intelligence [5 Credits]	<b>Sub 1:</b> Customer relationship management [4 credits]  <b>Sub 2:</b> Career planning and management [4 credits]					22
	<b>Sub 2:</b> Information and Cyber security [4 credits]						
	<b>Sub 3:</b> Web Technology Web Technology Lab [3+2 Credits]						
VII	<b>Sub 1:</b> Computer Graphics Computer Graphics Lab [3+2 Credits]	<b>Sub 1:</b> Consumer behavior [4 credits]  <b>Sub 2:</b> Strategic management [ 4 credits]					22
	<b>Sub 2:</b> Research Methodology [4 credits]						
	<b>Sub 3:</b> Theory of Computation/ Cloud Computing (5 Credits)						
VIII	<b>Sub 1:</b> IOT and its Application [5 Credits]				Research Project [12credits]		22
	<b>Sub 2:</b> Distributed Database Management System [5 Credits]						
	19 sub – 91 credits	11 sub – 42 credits	3 sub – 09 credits	4 sub – 08 credits	3 sub & Int & Proj – 22 credits	2 sub – 4 credits	176

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Note:

1. Normally all 5 credit courses will be either theory (3) + practical (2) {100+100 marks] or theory (4) + tutorial (1) [100 marks]
2. Normally all 4 credit courses will be either theory (3) + tutorial (1) or theory (4) [100 marks]
3. Normally all 3 credit courses will be theory (3) – Inter disciplinary (5 to 6 baskets) [100 marks]
4. Normally all 2 credit courses AEC/SEC/CVA would be theory or online course
5. 7/8<sup>th</sup> semester Major subjects could include Projects in core, if required
6. 100/200/300/400 level should be maintained as per UGC document