1.1.1: Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution

In the Programme curriculum all the POs, PSOs are mapped with local, national, regional and global developmental needs.

PROGRAM OUTCOMES ((For B.tech in Information Technology)

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identity, formulates, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

PROGRAM SPECIFIC OUTCOMES (PSO)

- PSO 1: Ability to plan and design information systems to standard specifications using efficient algorithms in the relevant programming language(s).
- PSO 2: Ability to use knowledge in diverse domains to recognize research gaps and thus to offer solutions to innovative ideas.

Matrix for mapping of course with program outcome with Local/ Regional / National/ Global (For B.tech in Information Technology)

Course Name	Programme Outcome	Local Relevance	Regional Relevance	National Relevance	Global Releva nce
Environme ntal Sciences(M C-401)	PO5 :Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.	Yes	Yes	Yes	Yes
Constitutio n of India/ Essence of Indian Knowledge Tradition(M C-IT501)	PO6: The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.	Yes	Yes	Yes	No
IT Workshop (Sci Lab/MATLA	PO 5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern	Yes	Yes	Yes	Yes

B/Python/R)	engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations				
Soft Skill & Interperson al Communica tion(OEC-IT 701)	P10: Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.	Yes	Yes	Yes	Yes

Sample PO Attainment : (For B.tech in Information Technology)

All the POs, PSOs have been attained for the programme of B.tech IT

Indirect Attainment(2019-20)

Survey	P01	P02	P03	P04	PO5	P06	P07	P08	P09	P010	P011	P012
Graduate Survey	3	3	3	3	3	3	3	3	3	3	3	3

Table: 3.3.2b

Program Outcome and Program Specific Outcome Attainment Matrix(2020-21)

			Maulana A		lamAza t Of Info					ology							
					Attaini												
SI N O	Semeste	Course Code	Course Title	PO1	P02	PO 3	PO4	PO5	P0 6	PO 7	PO 8	PO 9	PO1 0	P01	PO1 2	PSO 1	PSO 2
1	3	BSC-302	Biology	1.4	1.4	1.4	1.83										
2	3	PCCIT301	Data Structure & Algorithms	3	2.83	2.8 3	2.66		0	0	0	0	0	0	2	3	3
3	3	ESC301	Digital Electronics	2.25	3	3	2.25								1.6		
4	3	BSC301	Mathematics-III (Differential Calculus)	3	2.6	3	3									1.4	1.8
5	3	ESC 302	Signals & System	2.4	3										1	1	1
7	3	PCC- IT391	Data Structure & Algorithms Lab	3	2.8	2.4	2.8	2							2	3	3
8	3																
9	3	PCC- IT392	IT Workshop (SciLab/MATLAB/Pytho n/R	3	3	3	2	2	1.5			1.5					
-	-	PCC-	1,						1								
10	4	IT401	Discrete Mathematics	3	3	3									1	2.5	2
12	4	PCC- IT403	Formal Language & Automata Theory	1.5	2	2.7 5	2									1	2
13	4	PCC- IT404	Communication Engineering	3	2	2	2	3							3		
14	4	HSMC- 401	Economics For Engineers	2.67	2.67	2.3 3	2.5	2.66									
			Environmental														

		PEC-					1.33										
35	6	IT601B	Distributed Systems	3	2.2	2	3	2							2		
			Database Management				1.33										
36	6	PCCCS601	Systems	3	3	3	3	2									
		PCC-	Database Management	_	_		4.00										
37	6	CS691	System Lab	3	3	3	1.33	1.33	0	0	0		0	0	0	3	3
39	6	PCC- CS692	Computer Networks Lab	3	3	2.5	3	3		0					2	3	2.5
		PCC-	dompater recevorito bas			210				U							210
40	6	CS602	Computer Networks	2.4	2.8	2.4	2.4	0		0	0	0			2,4	3	2.4
42	7	IT701	Internet Technology	3	3			3									
43	7	IT702	Multimedia	3		3		3							2	2.75	3
					2.333												
44	7	IT703A	E-Commerce	2	3	2	2	2		2	2.5						
45	7	IT703C	Image Processing	3	3	2	2.83	3	2	2					2.83	2.5	2.5
46	7	IT704E	Mobile Computing	2	2										2	2	
												2.2					
48	7	HU781	Group Discussion							2	2	5	2.4	2	2.2		2
49	7	IT791	Internet Technology Lab	3		3	3	3									
50	7	IT792	Multimedia Lab	3	3	3	2										
51	7	IT793A	E-Commerce Lab	2	2		2	1				1		1	1		
					_	2.8		_									
52	7	IT793C	Image Processing Lab	3	3	3	2.83	3				2.0			3	2.5	2.5
53	7	IT794	In directorial tracining	2	2	3	2.16	2.5	2	2.5	2	2.8	2.6	2	3	3	2
54	7	11794 1T795	Industrial training Project-1	3	3		2.16	3	3	3	3	3	2.6	3	3	3	
34	/	11/95	Design Lab / Industrial	3	3	3	3	3	3	3	3	3	3	3	3	3	3
			problem														
			related														
			practical									2.8					
		IT891	training	3	3	3	2.16	2.5	2	2.5	3	8	2.6	3	3	3	3
		IT892	Project-2	3	3			3		3	3	3	3	3	3	3	
		IT893	Grand Viva	3	3		3	3		3	3	3	2	2	2.33	3	3
						2.5			1.7	1.8	1.9	2.0					
			Direct Assesment	2.68	2.67		2.34		5	4	7	4	2.06	2	2.18		
			Indirect Assesment	3	3	3	3	3	3	3	3	3	3	3	3	3	3
			DA(000/)	2.14		2.0	4.05	4.00		1.4	1.5	1.6	4.65			4.00	
			DA(80%)	5	2.13		1.87		1.4	7	8		1.65		1.74		
			IA(20%)	0.6	0.6		0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
			Total	27	272	2.6	2.47	2 52	2	2.0	2.1	2.2	2.25	2.2	224	2 50	2 62
			Target Attanment Level	2.7	2.73	2	2.47	2.52	2	7 2	8	3	2.25	2.2	2.34	2.59	
			rarget Attanment Level	2		Z	2	Z			2	2	Z	Z	2	2	2

Sample CO Attainment :

Attainment for B.Tech in Information Technology

Course Code	Course Name	Inter	nal(C	Externa	I (C	0)							
IT503	Operating System	2	2	2	2	2		3	3	3	3	3	
IT60 1	Database Management System	3	3	3	3	3	3	3	3	3	3	3	
IT60 2	Computer Networking	3	3	3	3	3		3	3	3	3	3	
IT60 3	Software Engg	3	3	3	3	3	3	3	3	3	3	3	3
IT604 C	Pattern Recognition	3	3	3	3	3	3	3	3	3	3	3	3
IT605 C	Compiler Design (CSE)	3	3	3	3	3	3	3	3	3	3	3	3
IT605 D	Artificial Intelligence (CSE)	3	3	3	3	3		1	1	1	1	1	