B

Internal Quality Assurance Cell (IQAC)
Information required from 1st April 2023 to 30th May 2024
(The information sought below will be used for the preparation of University Annual Report and AQAR)

1	**a) Name of the School:**	School of Technology
	b) Name of the Department:	Computer Science and Information Technology
2	**Date of Establishment:**	2006
3	**Profile of the Department**	(Strengths,Weaknesess, Opportunuties and Challenges(SWOC) Ananlysis of the Department and Status of NEP implementation to be detailed in 500-1000 words): Department of Computer Science & Information Technology at Maulana Azad National Urdu University was established in 2006 with one year Post Graduate Diploma in Information Technology (PGDIT). The objective of the department is to impart quality education and achieve the vision of excellence in the field of Computer Science & IT. With rapidly evolving technology and continuous need for innovation, department is committed to produce quality professionals in both the academia and IT industry. The Department started Master of Computer Applications (MCA) in 2011 to develop core competency in computer applications and inculcate students with software development skills, as well as to take up challenges in the research. Department started B.Tech (Computer Science) in 2013 to imbibe entrepreneurship skills in the youth and develop quality professionals to tackle the problem of real life issues. All the program (B.Tech, M.Tech and MCA) are approved by All India Council for Technical Education (AICTE). To ignite the minds with quality research, Department of CS&IT started Ph.D. program in Computer Science with effective from 2013. Further to provide academic training and research expertise, the department started M.Tech (Computer Science) wef 2015. Strengths: • The core competence of the department is its adequate learned faculty members. • Sufficient number of laboratories with adequate technical support and help. Weakness: •To provide the training for diverse students with different backgrounds. Opportunities: •With an establishment around IT Hub in the city and prominent location to provide employable skilled manpower as per the local needs and the global standard. Challenges: •To establish strong bondage between the department and Industry.
4	**Name of Head of the Department:**	Dr. Pradeep Kumar
5	**Details of the Faculty:**	

Details of Faculties in the Department

Name	Designation	Highest Qualification	Nature of Appointment (Regular/Guest Faculty/Contractual)	Remarks
Prof. Abdul Wahid	Professor	P.hD	Permanent	
Prof. Pradeep Kumar	Professor	P.hD	Permanent	
Dr. Syed Imtiyaz Hassan	Associate Professor	P.hD	Permanent	
Mrs. Tunga Arundhati	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Dr Bonthu Kotaiah (On Lien)	Assistant Professor	P.hD	Permanent	
Dr. Khaleel Ahmad	Assistant Professor	P.hD	Permanent	
Mrs. Khaleda Afroaz	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Mrs.Afrah Fatima	Assistant Professor	P.hD	Permanent	
Mr. Ahmad Talha Siddiqui	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	

Mr. Mohd Omar	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Mr. Mohd Rafeeq	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Dr. Muqeem Ahmed	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Mr. Mohammad Islam	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Dr Jameel Ahamed	Assistant Professor	P.hD	Permanent	
Mrs. Geeta Pattun	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Mr.Mohatesham Pasha Quadri	Assistant Professor	M.Tech Ph.D(Pursuing)	Permanent	
Dr. Manorama Kumari Talla	Assistant Professor	P.hD	Permanent	
Mr. Mohammad Rashid	Assistant Professor (Contractual)	M.Tech	Contractual	
Dr. Fareeha Rasheed	Assistant Professor (Contractual)	P.hD	Contractual	
Dr. Naiyar Iqbal	Assistant Professor (Contractual)	P.hD	Contractual	
Mr.Kamran Siddiqui	Assistant Professor (Contractual)	M.Tech	Contractual	
Dr.Mohd Aslam	Assistant Professor (Contractual)	P.hD	Contractual	
Ms. Alisha Raza	Assistant Professor (Contractual)	M.Tech	Contractual	
Md Ahmad Raza	Assistant Professor (Contractual)	M.Tech	Contractual	
Md Nadeem Noori	Assistant Professor (Contractual)	M.Tech	Contractual	
Mrs. Syeda Imrana Fatima	Assistant Professor (Contractual)	M.E.	Contractual	

Note: Additional Rows may be added as required.

** If the faculty is on Deputation/Lien indicate the details (Duration and the name of the organization etc.)*

6 Details of the Programmes offered by the Department

a) Undergraduate Programmes

Programme (Please provide the name of the programme e.g: B.A, B.Voc.,B.Tech. etc)		Name of the Course(Subject opted)	Number of Students enrolled	Number of Students receiving Scholarship	Details of the Students recevied Scholarship
Level	Name				
UG	B.Tech (Computer Science)	Engineering Mathematics-I (BTCS101BST)	**(60+ (15 EWS)=75**		**https://docs.google.com/spreadsheets/d/11Yx9u7MLwaCEvjdSnMmsqAK6wDGCAULG/edit?usp=sharing&ouid=112305775229394695714&rtpof=true&sd=true**
		Engineering Physics (BTCS102BST)			
		Basic Electrical Engineering (BTCS101EST)			
		Engineering Graphics & Design (BTCS111EST)			
		Engineering Physics Lab (BTCS150BSP)			
		Basic Electrical Engineering Lab (BTCS150ESP)			
		Engineering Mathematics – II (BTCS201BST)			
		Engineering Chemistry (BTCS211BST)			
		Programming for Problem Solving (BTCS211EST)			
		English Communication (BTCS211HST)			
		Engineering Mechanics (BTCS212EST)			
		Engineering Chemistry Lab (BTCS260BSP)			
		Basic Programming Lab (BTCS260ESP)			
		Engineering Workshop (BTCS251ESP)			
		English Communication LAB (BTCS260HSP)			
		Analog Electronic Circuits (BTCS311EST)			
		Data structure & Algorithms (BTCS311PCT)			
		Digital Electronics (BTCS312PCT)			
		Engineering Mathematics-III (BTCS311BST)			
		Technology & Society (BTCS311HST)			

		Analog Electronic Circuits LAB (BTCS360ESP) Data structure & Algorithms LAB (BTCS360PCP) Digital Electronics LAB (BTCS361PCP) IT Workshop Python (BTCS362PCP) Environmental Sciences (BTCS312HST) Database Management Systems (BTCS402PCT) Operating Systems (BTCS403PCT) Object Oriented Programming (BTCS405PCT) Software Engineering (BTCS406PCT) Discrete Mathematics (BTCS407PCT) Database Management Systems LAB (BTCS451PCP) Operating Systems LAB (BTCS452PCP) Object Oriented Programming LAB (BTCS453PCP) Computer Organization (BTCS511PCT) Formal Language & Automata Theory (BTCS512PCT) Design & Analysis of Algorithms (BTCS513PCT) Organizational Behaviour (BTCS511HST) History of Sciences & Technology in India (BTCS512HST) Elective-I (BTCS51xPET) Design & Analysis of Algorithms LAB (BTCS560PCP) Constitution of India (BTCS511NCT) Complier Design (BTCS611PCT) Computer Networks (BTCS612PCT) Elective-II (BTCS61xPET) Elective-III (BTCS61xPET) Open Elective-I (UGCS61xGET) Complier Design LAB (BTCS660PCP) Computer Networks LAB (BTCS661PCP) Project-1 (BTCS662PCP) Elective-IV (BTCS71xPET) Elective-V (BTCS71xPET) Open Elective-II (UGCS71xGET) Project-II (BTCS760PCP) Elective-V (BTCS83xPET) Elective-VII (BTCS83xPET) Elective-VIII (BTCS83xPET) Project-III (BTCS860PCP)		**10**	
	B.Tech (Computer Science) Lateral Entry	Analog Electronic Circuits (BTCS311EST) Data structure & Algorithms (BTCS311PCT) Digital Electronics (BTCS312PCT) Engineering Mathematics-III (BTCS311BST) Technology & Society (BTCS311HST) Analog Electronic Circuits LAB (BTCS360ESP) Data structure & Algorithms LAB (BTCS360PCP) Digital Electronics LAB (BTCS361PCP)	**15**		

		IT Workshop Python (BTCS362PCP) Environmental Sciences (BTCS312HST) Database Management Systems (BTCS402PCT) Operating Systems (BTCS403PCT) Object Oriented Programming (BTCS405PCT) Software Engineering (BTCS406PCT) Discrete Mathematics (BTCS407PCT) Database Management Systems LAB (BTCS451PCP) Operating Systems LAB (BTCS452PCP) Object Oriented Programming LAB (BTCS453PCP) Computer Organization (BTCS511PCT) Formal Language & Automata Theory (BTCS512PCT) Design & Analysis of Algorithms (BTCS513PCT) Organizational Behaviour (BTCS511HST) History of Sciences & Technology in India (BTCS512HST) Elective-I (BTCS51xPET) Design & Analysis of Algorithms LAB (BTCS560PCP) Constitution of India (BTCS511NCT) Complier Design (BTCS611PCT) Computer Networks (BTCS612PCT) Elective-II (BTCS61xPET) Elective-III (BTCS61xPET) Open Elective-I (UGCS61xGET) Complier Design LAB (BTCS660PCP) Computer Networks LAB (BTCS661PCP) Project-I (BTCS662PCP) Elective-IV (BTCS71xPET) Elective-V (BTCS71xPET) Open Elective-II (UGCS71xGET) Project-II (BTCS760PCP) Elective-V (BTCS83xPET) Elective-VII (BTCS83xPET) Elective-VIII (BTCS83xPET) Project-III (BTCS860PCP)		**1**	
	M.Tech (Computer Science)	Advanced Algorithm (MTCS111PCT) Advanced Computer Architecture (MTCS112PCT) Research Methodology & IPR (MTCS111RMT) Program Elective-1 (MTCS11xPET) Program Elective-2 (MTCS12xPET) Generic Elective-1 (MTCS13xPET) Advanced Algorithm Lab (MTCS160PCP) Lab Based on Elective-1 (MTCS16xPEP) Machine Learning (MTCS211PCT) Internet of Things (MTCS212PCT) Program Elective-3 (MTCS23xPET)	**30+(8 EWS)=38**	**15**	

PG		Program Elective-4 (MTCS24xPET)			
		Generic Elective-2 (MTCS23xGET)			
		Machine Learning Lab (MTCS260PCP)			
		Internet of Things Lab (MTCS261PCP)			
		Mini Project with Seminar (MTCS270PCP)			
		Program Elective-5 (MTCS31xPET)			
		Dissertation-I (MTCS370PCP)			
		Dissertation-II (MTCS470PCP)			
	M.Tech (Computer Science & Engineering) Artificial Intelligence and Machine Learning Part-time under sponsored/self financed	Advanced Algorithm (MTCS111PCT)	**30**		
		Artificial Intelligence (MTCS112PCT)			
		Research Methodology & IPR (MTCS111RMT)			
		Advanced Algorithm Lab (MTCS160PCP)			
		Machine Learning with Python (MTCS211PCT)			
		Program Elective-1 (MTCS22XPET)			
		Program Elective-2 (MTCS23XPET)			
		Lab – II Python Lab (MTCS260PCP)			
		Audit Course (MTCS21XNGT)			
		Deep Learning (MTCS311PCT)			
		Program Elective -3 (MTCS34XPET)			
		Program Elective -4 (MTCS35XPET)			
		Lab – III Deep Learning Lab (MTCS360PCP)			
		Internet of Things (MTCS411PCT)			
		Program Elective -5 (MTCS46XPET)			
		Program Elective -6 (MTCS47XPET)			
		Lab – IV IoT Lab (MTCS460PCP)			
		Seminar Presentation & Comprehensive viva voce (MTCS511PCP)			
		Dissertation- Part 1 (Minor) (MTCS570PCP)			
		Dissertation- Part 2 (Major) (MTCS670PCP)			
	MCA (Master Computer Application)	Statistical Analysis(MMCA111FCT)	**30+(8 EWS)=38**	**8**	
		Software Engineering(MMCA111PCT)			
		Computer Network(MMCA112PCT)			
		Operating Systems(MMCA113PCT)			
		English Language & Communication Lab(MMCA160AEP)			
		Data Structure & Algorithms(MMCA211PCT)			
		Database Management System(MMCA212PCT)			
		Java Programming(MMCA213PCT)			
		Computer System Architecture(MMCA214PCT)			
		DSE – 1(MMCA211PET)			
		Data Structure & Algorithms Lab(MMCA260PCT)			
		Data Science(MMCA311PCT)			
		Formal Language & Automata Theory(MMCA312PCT)			
		Blockchain Technology(MMCA313PCT)			
		Machine Learning(MMCA314PCT)			
		Data Science Lab(MMCA360PCP)			
		Blockchain Technology Lab(MMCA361PCP)			

		Industrial/Major Project(MMCA470PCP)			
	MCA Bridge Course	Discrete Mathematics (MMBC121FCT)			
		Information & Communication Technology(MMBC122PCT)			
		Introduction to Computer System & Hardware(MMBC123PCT)			
		Problem Solving Using 'C' Language Lab(MMBC161PCP)			
P.hd	PhD (Computer Science)	Research Methodology (PHCS101CCT()	**8**		
		Software Engineering (PHCS102CCT)			
		Research and Publication Ethics (RPE) (PHCC104CCT) (Common to all Research Scholar at University			
		Machine Learning (PHCS105DST)			
		Blockchain Technology (PHCS118DST)			
	PhD (Computer Science)-Self Finance	Research Methodology (PHCS101CCT()	**6**		
		Software Engineering (PHCS102CCT)			
		Research and Publication Ethics (RPE) (PHCC104CCT) (Common to all Research Scholar at University			
		Machine Learning (PHCS105DST)			
		Blockchain Technology (PHCS118DST)			
	PhD (Computer Science)- Visvesvaraya Scheme	Research Methodology (PHCS101CCT()	**3**	**3**	
		Software Engineering (PHCS102CCT)			
		Research and Publication Ethics (RPE) (PHCC104CCT) (Common to all Research Scholar at University			
		Machine Learning (PHCS105DST)			
		Blockchain Technology (PHCS118DST)			
Total					

Note: Please provide the details of the Students recevied Scholarship (name of the student , roll number, Gender, Programme enrolled, Name of the Scholarship received and Amount)

b) B.Ed., PG and Ph.D. and Diploma Certificate programmes

Programme		**Number of seats available**	**Number of Students enrolled**	**Number of Students receiving Scholarship**
(Please provide the name of the programme e.g: M.Tech,M.Sc.,M.A.etc				
Level	**Name**			
UG	B.Tech (Computer Science)	**60+ (15 EWS)=75**	**66**	**10**
	B.Tech Lateral Entry (Computer Science)	**15**	**13**	**1**
PG	M.Tech (Computer Science)	**30+(8 EWS)=38**	**29**	**15**
	MCA (Master Computer Application)	**30**	**29**	**8**
	M.Tech (Computer Science & Engineering) Artificial Intelligence and Machine Learning Part-time under sponsored/self financed	**30+(8 EWS)=38**	**10**	
PG Diploma	**NIL**			
PhD	PhD (Computer Science) Full time	**8**	**8**	
	PhD (Computer Science)-Self Finance	**6**	**1**	
	PhD (Computer Science)- Visvesvaraya Scheme	**3**	**3**	**3**
Diploma	**NIL**			
Certificate	**NIL**			

Any Other(Specify the Programme Name)	**NIL**			
Total		**213**	**178**	**34**

Note: *Please provide the list of students enrolled and receiving scholarships*
Additional Rows may be added as required.

7 **Number of JRFs, SRFs, Post-doctoral Fellows, Research Associates and other fellows enrolled in the Department**

Name of the Scholar	Name of fellowship	Duration of fellowship	Funding agency	Name and Designation of the supervisor/co-supervisor	Award Copies of JRF/SRF
Sobiya Arsheen	MANF-JRF	2	UGC	Dr. Khaleel Ahmed	https://drive.google.com/file/d/1RgnCwwktZ4mKkWOkn2AIa4hfFemtJ9HG/view?usp=sharing
AQA MOHAMMAD ATAYEE	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Dr. Muqeem Ahmad	MANUU's Fellowship
MUJIBURAHMAN BAHAWI	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Dr. Syed Imtiaz Hassan	MANUU's Fellowship
ALISINA AHMADZAI	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Prof. Abdul Wahid	MANUU's Fellowship
ENAYATULLAH ZHAKFAR	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Prof. Pradeep Kumar	MANUU's Fellowship
NIAZ MOHMMAD DOOSTYAR	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Prof. Abdul Wahid	MANUU's Fellowship
JAWAD FALLAH RAJABI	Indian Council for Cultural Relation	5.5	Ministry of External Affairs,Government of India	Dr. Jameel Ahamed	MANUU's Fellowship
Shaik Moinuddin Ahmed	MANF-SRF	3	UGC	Prof.Abdul Wahid	https://drive.google.com/file/d/1sDgHL_6lN6Go-LQ8jE4EmiD_tRoeX6iQ/view?usp=sharing
Yasir Altaf	MANF-JRF	3	UGC	Prof.Abdul Wahid	NET(https://drive.google.com/file/d/1oXDsBNjO2C0zYYkIsaGqWJwUZW-uefJB/view?usp=sharing)
Amir Khan	JRF	2	UGC	Dr. Muqeem Ahmed	https://drive.google.com/file/d/1xabTzHGWcFbXSZZQYYNLEtt_bP-QjHHF/view?usp=sharing
Nadiya Zafar	Indian Council for Cultural Relation	5.5	UGC	Dr. Khaleel Ahmed	NET(https://drive.google.com/file/d/1KbGvb-GzOzNEXvbSDqV48tiYBogrPi8s/view?usp=sharing)

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Additional Rows may be added as required.
Note: *Please provide the award copies of JRF/SRF etc.*

8 **Details of the Scholars declared eligible for award of PhD degrees :(Provide separate list for PhD)**

Name of the Scholar	Title of the dissertation/thesis	Supervisor's name and designation	Date of the result declaration	Date of Registration of the Scholar	Degree Awarded
P.Salma Khatoon	Development of an Semantic Knowledge Wave for IoT in Agriculture	Dr. Muqeem Ahmed	15/06/2023	24/07/2018	Yes
Jeelani Ahmad	News Articles Aggregation using Machine Learning and Semantic Waves Technologies	Dr. Muqeem Ahmed	27/09/2024	July 2017	Yes

Additional Rows may be added as required.

9 Programme/Courses introduced or syllabus revised was carried out during the academic year :

Name of the Programme	Programme Code	Name of the Course	Course Code	Year of Revision	Year of Introduction	Date of BoS meeting	Date of AC meeting	web links *
B.Tech(CS)	BTCS	Data Science	BTCS514PET	2024	2024	27/02/2024		https://manuu.edu.in/sites/default/files/2024-03/18thBoSMeetingMinutescs-13324.pdf
		Object Oriented Programming (Revised)	BTCS405PCT					
		Object Oriented Programming LAB (Revised)	BTCS453PCP					
B.Tech(CS)-Lateral Entry		Compiler Design LAB (Revised)	BTCS66OPCP					
		Computer Networks (Revised)	BTCS612PCT					
		Machine Learning (Transfer from VII to VIII Semester)	BTCS84OPCT					
M.Tech (CS)	MTCS	Big Data Analytics	MTCS246PET	2023	06-02-2023			
		Intelligent Systems (Revised)	MTCS121PET					
M.Tech (Computer Science) Artificial Intelligence and Machine Learning Part-time under sponsored/self financed	MTCS	All Courses New Programme Introduced in 2023-24	All Courses	2023	06-02-2023			
MCA	MMCA	Java Programming (Revised)	MMCA213PCT	2023	06-02-2023			
MCA Bridge Course	MMBC	NIL						
PhD	PHCS	Blockchain Technology	PHCSI18DST	2023				

Note:

Additional Rows may be added as required.

Note: *Please provide the agenda and minutes of the BoS/Academic Council highlighting for each of the above mentioned programme/course*

10 Details of Departmental Research Committee (DRC): *(Office order of the constitution of the committee, agenda and minutes of the meetings held and major decisions taken)*

Date of DRC	web link of the DRC minutes
08-09-2023	https://manuu.edu.in/sites/default/files/2023-09/14th-DRC-MINUTES-SOT.pdf
09-02-2024	https://manuu.edu.in/sites/default/files/2024-03/15thDRCMeetingMinutes13324.pdf

Please provide minutes of DRC and order of the constitution of DRC

11 Learning Outcomes: (*Please provide the syllabus for each programme/course highlighting the program outcomes, program specific outcomes, and course outcomes)*

(a) Programme Outcomes:

Programme Name	Programme Code	List the programme outcome	Link to the programme
B.Tech (Computer Science)	BTCS	1. Design a system to meet the desired needs in real life. 2. Apply knowledge of Mathematics, Statistics and computer science in different domains 3. Understands the Legal, Professional and Ethical Problems. 4. Recognize the importance of continuous learning 5. Application of Technical skills in multidisciplinary areas.	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2024-25_B.Tech._(CS)_-_LOCF_Syllabus_%26_Curriculum_-_V1.3.pdf

M.Tech (Computer Science)	MTCS	1.Practice with an expertise in academics, entrepreneurship, design and development in computing technology, or research in a specialized area of computer science and Engineering to pursue higher studies. 2.Exhibit analytical, decision •making and problem solving skills by applying research principles for handling real life problems with realistic constraints. 3. Ability to communicate the findings or express innovative ideas in an effective manner with an awareness of professional, social and ethical responsibilities.	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2024-25_M.Tech._(CS)_-_LOCF_Syllabus_%26_Curriculum_-_V1.3.pdf
M.Tech (Computer Science & Engineering) Artificial Intelligence and Machine Learning Part-time under sponsored/self financed	MTCS	1. To create an ambiance for healthy teaching-learning process and attract the motivated students to the Department of Computer Science and Information Technology 2. Ensure that the curriculum followed is comparable to the relevance of local, national, regional and global development 3. To motivate the potential faculty members/educators who are constantly upgrading their pedagogical approaches to motivate students and to enhance learning among them 4. Provide opportunities to students for global exposure, industrial internships, project based and research-based learning	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2023-24MTechCSEAI%26MLPart-time-LOCFSyllabus%26Curriculum-V13.pdf
MCA(Master of Computer Application)	MMCA	1. Realize the uncertainty that is involved in a situation described 2. Select a suitable probability model 3. Estimate and test its parameters on the basis of real data 4. Compute probabilities of interesting events and other vital characteristics	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2024-25_MCA_-_LOCF_Syllabus_%26_Curriculum_-_V1.3.pdf
MCA(Master of Computer Application) Bridge Couirse	MMBC	1. Realize the uncertainty that is involved in a situation described 2. Select a suitable probability model 3. Estimate and test its parameters on the basis of real data 4. Compute probabilities of interesting events and other vital characteristics	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2022-23_MCA%20Bridge%20Courses%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2%20(1).pdf
PhD(Computer Science)	PHCS	1. Demonstrate knowledge of technological advances through active participation in life-long learning 2. Accept to take up responsibilities upon employment in the areas of teaching, research. 3. Independently carry out research/investigation and development work to solve practical problems. 4. Engage in life-long learning and professional development through self-study, continuing education, professional and doctoral level studies	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2024-25_Ph.D._(CS)_-_LOCF_Syllabus_%26_Curriculum_-_V1.3.pdf

Note: *1) The details of all the programmes listed at table No.6 need to be provided. 2) Additional rows may be added if required.*

(b) Course Outcomes:

Name of the Programme	Name of the Course	Course Code	List the Course Outcomes	Link to the syllabus
B.Tech(Computer Science)	Engineering Mathematics-I	BTCS101BST	**CO1** Apply differential and integral calculus to notions of curvature to improper integrals and various engineering problems. **CO2** Find the rank of matrices and linear algebra including linear transformations, eigenvalues, diagonalization and orthogonalization. **CO3** Evaluate the partial derivatives of first and higher orders. **CO4** Demonstrate various applications with basic understanding of Beta and Gamma functions.	Learning Outcomes based Curriculum Framework (LOCF) for Bachelor of Technology (Computer Science) B.Tech. (CS) (wef
	Engineering Physics	BTCS102BST	**CO1** Understand the Bragg's Law and the principles of lasers, types of lasers and applications. **CO2** Apply various terms related to properties of materials such as, permeability, polarization, etc. **CO3** Analyze some of the basic laws related to quantum mechanics as well as magnetic and dielectric properties of materials. **CO4** Analyze and evaluate and simple quantum mechanics calculations.	
	Basic Electrical Engineering	BTCS101EST	**CO1** Understanding of the basic knowledge of electrical quantities such as current, voltage, power, energy and frequency to understand the impact of technology in a global. **CO2** Illustrate an understanding of basic concepts of analysis of simple DC and AC circuits used in electrical and electronic devices. **CO3** Demonstrate an understanding of selection skill to identify the type of motors required for particular application. PO2, PO3 **CO4** Analyze and evaluate the effects of electric shock and precautionary measures	
	Engineering Graphics & Design	BTCS111EST	**CO1** Get acquainted with the knowledge of various lines, geometrical constructions and construction of various kinds of scales, and Ellipse. **CO2** Improve their imagination skills by gaining knowledge about points, lines and planes. **CO3** Become proficient in drawing the projections of various solids **CO4** Gain knowledge about orthographic and isometric projections	

Engineering Physics Lab	BTCS150BSP	**CO1** Learn basic properties and characteristics of light, Double slit and triple slit interference, Newton's rings, interference in thin films. **CO2** Apply the working principle of LASER, laser action, population inversion, Einstein coefficients, elementary laser types and applications of LASER. **CO3** Analyze magnetic field and forces, electric field and usage of quantum theory. **CO4** Evaluate Thermo electric effect – Seebeck effect and Peltier effect
Basic Electrical Engineering Lab	BTCS150ESP	**CO1** Explain the concept of circuit laws and network theorems and apply them to laboratory measurements. **CO2** Understand to systematically obtain the equations that characterize the performance of an electric circuit as well as solving both DC Machines and single-phase transformer. **CO3** Analyze the principles of operation and the main features of electric machines and their applications PO9 **CO4** Evaluate the skills in using electrical measuring devices
Engineering Mathematics – II	BTCS201BST	**CO1** Understand the ideas of probability and random variables and various discrete. **CO2** Apply continuous probability distributions and their properties. **CO3** Analyze the basic ideas of statistics including measures of central tendency, correlation and regression. **CO4** Evaluate the statistical methods of studying data samples.
Engineering Chemistry	BTCS211BST	**CO1** Understand the knowledge of atomic, molecular and electronic changes, band theory related to conductivity. **CO2** Apply the required principles and concepts of electrochemistry, corrosion and in understanding the problem of water and its treatments. **CO3** Analyze the knowledge of configurational and conformational analysis of molecules and reaction mechanisms. **CO4** Evaluate the required skills to get clear concepts on basic spectroscopy and application to medical and other fields.
Programming for Problem Solving	BTCS211EST	**CO1** Understand various problem-solving techniques and implement them in 'C' language. **CO2** Apply the basic terminology used in computer programming and write, compile and debug programs in C language. **CO3** Develop programs involving decision structures, loops and functions using different data types and data structures. **CO4** Apply and analyze logical skills to program in C language.

English Communication	BTCS211HST	**CO1** Read and write paragraphs in English confidently. **CO2** Differentiate among homonyms, homophones, synonyms and antonyms. **CO3** Read and write the specific details and information such as writing applications, formal letters, CVs, technical reports and project reports. **CO4** Communicate with more confident among students, teachers & other stakeholders of the society.
Engineering Mechanics	BTCS212EST	**CO1** Identify the significance of centroid/ centre of gravity and find centroids of composite figures and bodies. **CO2** Understand the moment of inertia and method of finding moment of inertia of areas and bodies. **CO3** Interpret the simple given dynamic problems and solve them for positions, velocities and accelerations, etc., **CO4** Understand the kinetics of the rigid bodies and solve simple problems using work-energy method.
Engineering Chemistry Lab	BTCS260BSP	**CO1** Outfitted with hands-on knowledge in the quantitative chemical analysis of water quality related parameters. **CO2** Conversant with hands-on knowledge in the quantitative chemical analysis of water quality related parameters, corrosion measurement and cement analysis. **CO3** Gain acquaintance in the determination the amount of hardness and chloride in the various samples of water for general purpose and their use its industries involving boilers. **CO4** Skills in estimating acidity/alkalinity in given water samples.
Basic Programming Lab	BTCS260ESP	**CO1** Understand various problem-solving techniques and will be able to implement them in 'C' language. **CO2** Apply the basic terminology used in computer programming and write, compile and debug programs in C language. **CO3** Develop programs involving decision structures, loops and functions using different data types and data structures. **CO4** Analyze and evaluate difference between call by value and call by reference
Engineering Workshop	BTCS251ESP	**CO1** Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiselling. **CO2** Apply to fabricate components with their own hands. **CO3** Analyze practical knowledge of the dimensional accuracies and dimensional tolerances possible with different manufacturing processes. **CO4** Ability to design and model different prototypes in the carpentry trade such as Cross lap joint, Dove tail joint
English Communication Lab	BTCS260HSP	**CO1** Student will be able to understand, comprehend. **CO2** Analyze the professional and soft communication skills. **CO3** Learn the perfection of understanding in English language. **CO4** Can read, write and communicate effectively in English.

Analog Electronic Circuits	BTCS311EST	**CO1** Understand the characteristics of transistors. **CO2** Design and analyze various rectifier and amplifier circuits. **CO3** Analyze the sinusoidal and non-sinusoidal oscillators. **CO4** Evaluate the functioning of OP-AMP and design OP-AMP based circuits.
Data structure & Algorithms	BTCS311PCT	CO1 **Analyze the algorithms to determine the time and** computation complexity and justify the correctness **CO2** Implement search problems such as Linear Search and Binary Search PO1, PO2, PO3 **CO3** Develop given problem of Stacks, Queues and linked list and analyze the same to determine the time and computation complexity. **CO4** To write an algorithm Selection Sort, Bubble Sort, Insertion Sort, Quick Sort, Merge Sort, Heap Sort and compare their performance in term of Space and Time complexity.
Digital Electronics	BTCS312PCT	**CO1** Implement working of logic families and logic gates. **CO2** Design and implement Combinational and Sequential logic circuits. **CO3** Understand the process of Analog to Digital conversion and Digital to Analog conversion. **CO4** Implement the given logical problem using PLDs.
Engineering MathematicsIII	BTCS311BST	**CO1** Demonstrate the ability to solve problems using Ordinary and Partial differential equations, Laplace transformation and Numerical analysis . **CO2** Learn the overview of differential equations. **CO3** Use of equations reducible to exact form using Integrating factors - Linear, Bernoulli 's equations. **CO4** Learn the applications to Newton's Law of Cooling – Law of natural growth and decay.
Technology & Society	BTCS311HST	**CO1** Understand the scientific debates and ethical concerns of such issues as global warming, biotechnology, GMO foods, healthcare, innovation, and economic competitiveness. **CO2** Articulate ways in which society is transformed by science and technology. **CO3** Able to integrate, synthesize, and apply knowledge of the relationship between science and technology and societal issues in both focused and broad interdisciplinary contexts. **CO4** Apply science and technology to real-world problems.
Environmental Sciences	BTCS312HST	**CO1** Demonstrate the importance of Natural resources. **CO2** Explain renewable and non – renewable energy sources. **CO3** Understand the mechanism to control and measures of air pollution, water pollution, soil pollution, noise pollution, thermal pollution and solid waste management. **CO4** Develop the working principles of disaster mitigation, disaster management cycle. Analyze disaster management with causes, effects and control measures

Analog Electronic Circuits LAB	BTCS360ESP	**CO1** Design and conduct experiments on amplifiers, oscillators and multivibrators. **CO2** Apply the techniques, skills and modern engineering tools of electronic circuits for engineering practice. **CO3** Analyze the operation of oscillators and power supplies. **CO4** Evaluate the knowledge of Monostable Multivariate, Bistable Multivibrator and Arduino and Raspberry Pi based experiments.
Data structure & Algorithms LAB	BTCS360PCP	**CO1** Design and analyze the time and space efficiency of the data structure and algorithms. **CO2** Implement the appropriate data structure for given problem and algorithms. **CO3** Design and analyze data structure and algorithms. **CO4** Conceptualize and build data structure based on application needs.
Digital Electronics LAB	BTCS361PCP	**CO1** Able to identify, configure and use off-the-shelf digital ICs. **CO2** Able to realize and troubleshoot combinational and sequential digital circuits. **CO3** Able to employ MSI ICs of appropriate configuration for realizing a digital system. **CO4** Able to design and implement simple digital system for a real-life problem.
IT Workshop Python	BTCS362PCP	**CO1** Implement scripting and the contributions of scripting languages. **CO2** Apply Python especially the object-oriented concepts. **CO3** Analyze and apply built-in objects of Python. **CO4** Apply Python standard library and Explore Python's object-oriented features
Environmental Sciences	BTCS312HST	CO1 Implement scripting and the contributions of scripting languages. PO1 CO2 Apply Python especially the object-oriented concepts. PO3 CO3 Analyze and apply built-in objects of Python. PO3 CO4 Apply Python standard library and Explore Python's object-oriented features

Database Management Systems	BTCS402PCT	CO1 Understand relational database theory, and be able to write relational algebra expressions for queries, logical design of databases, including the E-R method and normalization approach. CO2 Apply and analyze the database storage structures and access techniques like file and page organizations. CO3 Analyze and apply indexing methods including B-tree, hashing, query evaluation techniques and query optimization. CO4 Evaluate various issues of transaction processing and concurrency control by designing and development of a database application system as part of a team.
Operating Systems	BTCS403PCT	CO1 Demonstrate how to manage multiple tasks that execute at the same time and share resources including processes and threads, context switching, synchronization, schedule CPU time, and deadlock. CO2 Design, implement and evaluate a computer-based system, process, components, or program to meet desired needs in context of operating system. CO3 Identify the System calls, protection, interrupts and know Input/output, disk access, file systems facilities. CO4 Apply semaphores and monitors for classical and real-world synchronization scenarios.
Object Oriented Programming	BTCS405PCT	CO1 Understand the principles of object-oriented programming paradigm specifically including abstraction, encapsulation, inheritance and polymorphism. CO2 Demonstrate best practices in designing classes and class hierarchies from problem statements using sub-classing, abstract classes, and interfaces to achieve polymorphism in object-oriented software. CO3 Demonstrate informed use of encapsulation within and across software components and packages. CO4 Apply exception handling, generation and escalation mechanisms and practices in writing Java programs.
Software Engineering	BTCS406PCT	CO1 Understand software engineering theory, principles, tools and processes, as well as the theory and principles of computer science. CO2 Apply mathematics to the development and maintenance of complex software systems. CO3 Design and test specific software requirements through a productive working relationship with project stakeholders. CO4 Verify and validate various software prototypes and to develop quality software metrics.

Discrete Mathematics	BTCS407PCT	CO1 Understand Well-formed formulas, Truth Tables, tautology, equivalence implication, Normal forms, Quantifiers, universal quantifiers. CO2 Analyze operations on set theory, mathematical objects, operations, and resulting properties. CO3 Evaluate the application of logic to analyzing and writing proofs,techniques for counting, permutations and combinations CO4 Apply the concepts of Graphs, DFS, BFS, Spanning Trees, and Planar Graphs. Graph Theory and other engineering applications
Database Management Systems LAB	BTCS451PCP	CO1 Understand the relational database theory, and be able to write relational algebra expressions for queries, logical design of databases, including the E-R method and normalization approach. CO2 Illustrate commercial relational database system by writing SQL. CO3 Analyze the database storage structures. CO4 Build Access techniques like file and page organizations, indexing methods including B-tree, hashing, query evaluation techniques and query optimization
Operating Systems LAB	BTCS452PCP	CO1 Understand the concept of Linux environment. CO2 Develop application programs using system calls in UNIX. CO3 Implement inter-process communication between two processes. CO4 Design and solve synchronization problems
Object Oriented Programming LAB	BTCS453PCP	CO1 Understand the principles of object-oriented programming paradigm specifically including abstraction, encapsulation, inheritance and polymorphism. CO2 Demonstrate informed use of encapsulation within and across software components CO3 Apply exception handling, generation and escalation mechanisms and practices in writing Java programs. CO4 Describe and explain the factors that contribute to a good objectoriented solution, reflecting on your own experiences and drawing upon accepted good practices.
Computer Organization	BTCS511PCT	CO1 Apply and analyze computer organization, computer arithmetic, and CPU design. CO2 Understand I/O system and interconnection structures of computer. CO3 Design and analyze different interrupts, I/O techniques, PLDs and memory organization. CO4 Implement learning skills and be able to develop different hardware for computer organization.

Formal Language & Automata Theory	BTCS512PCT	CO1 Demonstrate the understanding of abstract models of computing, including deterministic (DFA), non-deterministic (NFA), and Turing (TM) machine models. CO2 Demonstrate an understanding of regular expressions and grammars, including context-free and context-sensitive grammars. CO3 Design and find the relationships between language classes, including regular, context-free, context-sensitive, recursive, and recursively enumerable languages. CO4 Gain proficiency with mathematical tools and formal methods
Design & Analysis of Algorithms	BTCS513PCT	CO1 Analyze a given algorithm and express its time and space complexities in asymptotic notations and Solve recurrence equations using Iteration Method, Recurrence Tree Method and Master's Theorem. CO2 Design algorithms using Divide and Conquer Strategy and Compare Dynamic Programming and Divide and Conquer Strategies. CO3 Solve Optimization problems using Greedy strategy and Design efficient algorithms using Back Tracking and Branch Bound Techniques for solving problems. CO4 Classify computational problems into P, NP, NP-Hard and NPComplete and to understanding about writing algorithms and step by step approach in solving problems with the help of data structures.
Organizational Behaviour	BTCS511HST	CO1 Understand the applicability of the concept of organizational behaviour CO2 Demonstrate the applicability of analyzing the complexities associated with management of individual behaviour in the organization. CO3 Analyze the complexities associated with management of the group behaviour in the organization. CO4 Evaluate how the organizational behaviour can integrate in understanding the motivation (why) behind behaviour of people in the organization.
History of Sciences & Technology in India	BTCS512HST	CO1 Recognize the development of Science Beginning and their achievement. CO2 Assess the growth of engineering in ancient India. CO3 Find the significance of metallurgy in ancient India. CO4 Gain the knowledge of history from ancient India to modern India.
Elective-I	BTCS51xPET	Course outcomes are with respect to the subject opted by the students.

Design & Analysis of Algorithms LAB	BTCS560PCP	CO1 Implement various data structures (viz. Stacks, Queues, Linked Lists, Trees, Graphs) and algorithms like Greedy, Dynamic, Divide & Conquer etc. CO2 Analyze step by step and develop algorithms to solve real world problems. CO3 Use and implement appropriate algorithms for the required problems using a programming language. CO4 Analyze the space and time complexity of a given problem.
Constitution of India	BTCS511NCT	CO1 Practice the moral values that ought to guide the Engineering profession. CO2 Know the definitions of risk and safety also discover different factors that affect the perception of risk. CO3 Appreciate the Ethical issues and know the code of ethics adopted in various professional bodies and industries. CO4 Justify the need for protection of human rights and to know about concept of women empowerment.
Complier Design	BTCS611PCT	CO1 Analyze given grammar specification develop the lexical analyzer. CO2 Apply given parser specification design top-down and bottom-up parsers. CO3 Develop syntax directed translation schemes. CO4 Implement algorithms to generate code for a target machine.
Computer Networks	BTCS612PCT	CO1 Demonstrate the different protocols layers of the OSI model &TCP/IP. CO2 Implement and configure the different types of Networks topologies and protocols. CO3 Understand the importance of network security in data communication. CO4 Apply the different Networking sub-systems and their functions in a telecommunication system.
Elective-II	BTCS61xPET	Course outcomes are with respect to the subject opted by the students.
Elective-III	BTCS61xPET	Course outcomes are with respect to the subject opted by the students.
Open Elective-I	UGCS61xGET	Course outcomes are with respect to the subject opted by the students.
Complier Design LAB	BTCS660PCP	CO1 Apply given grammar specification develop the program for lexical analyzer CO2 Implement given parser specification develop the program for topdown and bottom-up parsers. CO3 Develop program for syntax directed translation scheme. CO4 Develop algorithms to generate code for a target machine.

	Computer Networks LAB	BTCS661PCP	CO1 Apply the encryption and decryption concepts in Linux environment. CO2 Ability to apply appropriate algorithm for the finding of shortest route. CO3 Ability to configure the routing table. CO4 Able to apply essential protocols in network design and implementation.	
	Project-1	BTCS662PCP	CO1 Applying SRS, techniques. CO2 Apply Design methods for given SRS. CO3 Write the codes as per SRS and designed Framework. CO4 Able to implement real world problem into software solution.	
	Elective-IV	BTCS71xPET	Course outcomes are with respect to the subject opted by the students.	
	Elective-V	BTCS71xPET	Course outcomes are with respect to the subject opted by the students.	
	Open Elective-II	UGCS71xGET	Course outcomes are with respect to the subject opted by the students.	
	Project-II	BTCS760PCP	CO1 Applying SRS, techniques. CO2 Apply Design methods for given SRS. CO3 Write the codes as per SRS and designed Framework. CO4 Able to implement real world problem into software solution.	
	Elective-V	BTCS83xPET	Course outcomes are with respect to the subject opted by the students.	
	Elective-VII	BTCS83xPET	Course outcomes are with respect to the subject opted by the students.	
	Elective-VIII	BTCS83xPET	Course outcomes are with respect to the subject opted by the students.	
	Project-III	BTCS860PCP	CO1 Applying SRS, techniques. CO2 Apply Design methods for given SRS. CO3 Write the codes as per SRS and designed Framework. CO4 Able to implement real world problem into software solution.	
	Advanced Algorithm	MTCS111PCT	CO1 Understand the Programming Problem Statements for Algorithms. CO2 Understand the necessary mathematical abstraction to solve problems. CO3 Analyze the Efficiency and Proofs of Correctness in Algorithms. CO4 Comprehend and select algorithm design approaches in a problem specific manner	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/loc

M.Tech(Computer Science)	Advanced Computer Architecture	MTCS112PCT	CO1 Understand the concepts of parallel computer models, pipeline and its hazards. CO2 Explain the concepts of parallel computing and hardware technologies. CO3 Understand the concept and importance of Memory Hierarchy, mapping techniques. CO4 Comprehend Scalable Architectures, Pipelining,Superscalar processors, multiprocessors	f/2022-23_M.Tech.%20(CS)%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2.pdf
	Research Methodology & IPR	MTCS111RMT	CO1 Illustrate the research objectives and construct research problem scientifically. CO2 Apply the systematic approach to achieve research objectivesand analyses results. CO3 Explain the self-written research papers and defend in review committee. CO4 Develop Reports and files.	
	Program Elective-1	MTCS11xPET	Course outcomes are with respect to the subject opted by the students.	
	Program Elective-2	MTCS12xPET	Course outcomes are with respect to the subject opted by the students.	
	Generic Elective-1	MTCS13xPET	Course outcomes are with respect to the subject opted by the students.	
	Advanced Algorithm Lab	MTCS160PCP	CO1 Apply the Programming Problem Statements for Algorithms. CO2 Apply the necessary mathematical abstraction to solve problems. CO3 Analyze the Efficiency and Proofs of Correctness in Algorithms. CO4 Demonstrate algorithm design approaches in a problem specificmanner.	
	Lab Based on Elective-1	MTCS16xPEP	Course outcomes arewith respect to the subject opted by the students.	
	Machine Learning	MTCS211PCT	CO1 Understand the importance of data pre-processing before machine learning modeling. CO2 Ability to formulate machine learning techniques to respective problems. CO3 Performance and evaluation of learning algorithms and model selection. CO4 Apply machine learning algorithms to solve problems of various complexity.	

Internet of Things	MTCS212PCT	**CO1** Explain & demonstrate various components of IoT along with Issues and Challenges in IoT **CO2** Apply and analyze the role and importance of IoT in the modern world. **CO3** Investigate and propose of various requirements of IoT for real World applications. **CO4** Evaluate a variety of existing and developing architecture technologies for IoT and to describe and evaluate different applications of the IoT.
Program Elective-3	MTCS23xPET	Course outcomes are with respect to the subject opted by the students.
Program Elective-4	MTCS24xPET	Course outcomes are with respect to the subject opted by the students.
Generic Elective-2	MTCS23xGET	Course outcomes are with respect to the subject opted by the students.
Machine Learning with python-Lab	MTCS260PCP	**CO1** Able to demonstrate python packages. **CO2** Able to generate and analyze and interpret data using python. **CO3** Use Python to design and implement classifiers for machine learning applications. **CO4** Implement an end-to-end machine learning system.
Internet of Things Lab	MTCS261PCP	**CO1** Understand core concept of IoT development. **CO2** Understand the concept of Sensors, Actuators and Cloud. **CO3** Understand and create the data acquisition on cloud. **CO4** Create the IoT applications.
Mini Project with Seminar	MTCS270PCP	**CO1** Applying SRS, techniques. **CO2** Apply Design methods for given SRS. **CO3** Write the codes as per SRS and designed Framework. **CO4** Able to implement real world problem into software solution.
Program Elective-5	MTCS31xPET	Course outcomes are with respect to the subject opted by the students.
Dissertation-I	MTCS370PCP	**CO1** Understand the issues & challenges, goals, scientific methods in research. **CO2** Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and dissertation.
Dissertation-II	MTCS470PCP	**CO1** To understand the research issues & challenges, research goals, scientific methods. **CO2** To Review Literature and Research Papers; Writing Research Papers, Thesis, Reports and Project Proposals Plagiarism and Copyrights.

Master of Technology Computer Science and Engineering	Advanced Algorithm	MTCS111PCT	CO1 Understand the Programming Problem Statements for Algorithms. CO2 Understand the necessary mathematical abstraction to solve problems. CO3 Analyze the Efficiency and Proofs of Correctness in Algorithms. CO4 Comprehend and select algorithm design approaches in a problem specific manner.	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2023-24MTechCSEAI%26MLPart-time-LOCFSyllabus%26Curriculum-V13.pdf
	Artificial Intelligence	MTCS112PCT	CO1 Able to choose the appropriate representation for an AI Problem and construct in that representation. CO2 Selection of appropriate Algorithm and implementation. CO3 Design and Analyze the Performance of an AI System. CO4 To able to analyses research in artificial intelligence.	
	Research Methodology & IPR	MTCS111RMT	CO1 Illustrate the research objectives and construct research problem scientifically. CO2 Apply the systematic approach to achieve research objectives and analyses results. CO3 Explain the self-written research papers and defend in review committee. CO4 Develop Reports and files.	
	Advanced Algorithm Lab	MTCS160PCP	CO1 Apply the Programming Problem Statements for Algorithms. CO2 Apply the necessary mathematical abstraction to solve problems. CO3 Analyze the Efficiency and Proofs of Correctness in Algorithms. CO4 Demonstrate algorithm design approaches in a problem specific manner.	
	Machine Learning with Python	MTCS211PCT	CO1 Understand the importance of data pre-processing before machine learning modeling. CO2 Ability to formulate machine learning techniques to respective problems. CO3 Performance and evaluation of learning algorithms and model selection. CO4 Apply machine learning algorithms to solve problems of various complexity.	
	Program Elective-1	MTCS22XPET	Course outcomes are with respect to the subject opted by the students.	
	Program Elective-2	MTCS23XPET	Course outcomes are with respect to the subject opted by the students.	
	Machine Learning with Python - Lab	MTCS260PCP	CO1 Able to demonstrate python packages. CO2 Able to generate and analyze and interpret data using python. CO3 Use Python to design and implement classifiers for machine learning applications. CO4 Implement an end-to-end machine learning system.	

Engineering (Artificial Intelligence and Machine Learning) Part-time program under sponsored/self-finance mode (Duration 3 Years)	Audit Course	MTCS21XNGT	Course outcomes are with respect to the subject opted by the students.
	Deep Learning	MTCS311PCT	CO1 Understand the basics concepts of deep learning. CO2 Apply the knowledge of various deep learning algorithms. CO3 Understand and Apply CNN and RNN in simulation for real-world applications. CO4 Analyze the challenges inherent in developing deep learning algorithms for different uses.
	Program Elective -3	MTCS34XPET	Course outcomes are with respect to the subject opted by the students.
	Program Elective -4	MTCS35XPET	Course outcomes are with respect to the subject opted by the students.
	Lab – III Deep Learning Lab	MTCS360PCP	CO1 Able to demonstrate python packages. CO2 Able to generate and analyze and interpret data using python. CO3 Use Python to design and implement classifiers for machine learning applications. CO4 Implement an end-to-end machine learning system.
	Internet of Things	MTCS411PCT	CO1 Explain & demonstrate various components of IoT along with Issues and Challenges in IoT. CO2 Apply and analyze the role and importance of IoT in the modern world. CO3 Investigate and propose of various requirements of IoT for real World applications. CO4 Evaluate a variety of existing and developing architecture technologies for IoT and to describe and evaluate different applications of the IoT.
	Program Elective -5	MTCS46XPET	Course outcomes are with respect to the subject opted by the students.
	Program Elective -6	MTCS47XPET	Course outcomes are with respect to the subject opted by the students.
	Lab – IV IoT Lab	MTCS460PCP	CO1 Understand core concept of IoT development. CO2 Understand the concept of Sensors, Actuators and Cloud. CO3 Understand and create the data acquisition on cloud. CO4 Create the IoT applications.
	Seminar Presentation & Comprehensive viva voce	MTCS511PCP	CO1 Understand the issues & challenges, goals, scientific methods in research. CO2 Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and dissertation.
	Dissertation- Part 1 (Minor)	MTCS570PCP	CO1 Understand the issues & challenges, goals, scientific methods in research. PO1, PO2 CO2 Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and dissertation.

	Dissertation- Part 2 (Major)	MTCS670PCP	CO1 To understand the research issues & challenges, research goals, scientific methods. CO2 To Review Literature and Research Papers; Writing Research Papers, Thesis, Reports and Project Proposals Plagiarism and Copyrights.	
MCA(Master of Computer Application)	Statistical Analysis	MMCA111FCT	CO1 Apply different statistical measures on data. CO2 Analyze statistical tests in testing hypotheses on data. CO3 Apply concept of probability and statistics to translate and solve real world problems. CO4 Develop problem solving techniques needed to accurately calculate probabilities.	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2022-23_MCA%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2.pdf
	Software Engineering	MMCA111PCT	CO1 Understand the difference between software engineering discipline with the other engineering disciplines. CO2 Elaborate knowledge of various software models. CO3 Analyze about software requirements analysis and specification. CO4 Able to get the knowledge of various software design activities.	
	Computer Network	MMCA112PCT	CO1 Understanding of the OSI Reference Model and TCP/IP Model. CO2 Able to know about Physical Layer and Data Link Layer. CO3 Understand the concept of Network Layer. CO4 Demonstration of Transport and Application Layer.	
	Operating Systems	MMCA113PCT	CO1 Exhibit familiarity with the fundamental concepts of operating systems. CO2 Apply understanding of operating system design and its impacts on application systems design and performance. CO3 Exhibit competence in recognizing operating systems features and issues. CO4 Understanding the various concepts associated with memory management.	
	English Language & Communication Lab	MMCA160AEP	CO1 Understand, comprehend and analyze the professional and soft communication skills, Strengthen general comprehending skills and present lucid skills in free writing. CO2 Understand the basic grammar techniques and utilize it in enhancing language development. CO3 Proficiency in writing technical articles and presenting papers on any topic of any genre. CO4 Enable the development in sharing information about family and friends.	

Data Structure & Algorithms	MMCA211PCT	CO1 Understand and analyze the algorithms to determine the time and computation complexity and justify the correctness. CO2 Identify the alternative implementations of data structures with respect to its performance to solve a real-world problem. CO3 Ability to devise novel solutions to small scale programming challenges involving data structures and recursion. CO4 Examine the notations used to analyze the performance of algorithms.
Database Management System	MMCA212PCT	CO1 Learn to design a database for a given set of requirements. CO2 Demonstrate query processing in a database system. CO3 Apply normalization techniques on given database. CO4 Analyze the database storage structures and access techniques.
Java Programming	MMCA213PCT	CO1 Demonstrate object-oriented paradigms: abstraction, encapsulation, inheritance, and polymorphism. CO2 Elaborate java concepts like exception handling, interfaces, object classes and various libraries. CO3 Design object-oriented solutions for real world problems. CO4 Develop the applications using the learnt concepts.
Computer System Architecture	MMCA214PCT	CO1 Define the basic organization and design of a digital computer system and its operations CO2 Explain the design of Arithmetic & Logic design circuit and Illustrate the Control unit operations. CO3 Analyze the different ways of communication in Input-Output devices, Standard Interfaces and their functioning. CO4 Illustrate the hierarchical memory system, cache memory and virtual memory
DSE – 1	MMCA21xPET	Course outcomes are with respect to the subject opted by the students.
Data Structure & Algorithms Lab	MMCA260PCT	CO1 Write the code for a large program after overcoming the time and space complexity. CO2 Develop programs that use arrays, records, linked structures, stacks, queues, trees, and graphs. CO3 Compare alternative implementations of data structures with respect to performance. CO4 Implementation of various algorithms such as searching, sorting, Greedy, Dynamic, Back-Tracking and Branch & Bound.
Database Management Systems LAB	MMCA261PCP	CO1 Design a database for a given set of requirements. CO2 Create relational database system by writing SQL. CO3 Apply normalization techniques on given database. CO4 Analyze the database storage structures and access techniques.

Java Programming Lab	MMCA262PCP	CO1 Write programs using objects and inheritance in Java Language. CO2 Develop console application Using Java programming language. CO3 Design and implement GUI programs using components in Java Language. CO4 Develop real life applications using Java programming.
Data Science	MMCA311PCT	CO1 Understand the concepts of data science process, data science toolkit, Types of data, Data collection and management CO2 Demonstrate the concept and importance of Big Data, Big Data Architecture, Hadoop Ecosystem, Hadoop Distributed File System (HDFS) HBase, Hive and PIG, Map Reduce Framework and Machine Learning CO3 Apply the regression and classification problem and create the NoSQL Databases. CO4 Analyze the data, Applications of Data Science, Technologies for data visualization.
Formal Language & Automata Theory	MMCA312PCT	CO1 Understand the concept of abstract machines and their power to recognize the languages. CO2 Develop the finite state machines for modelling, write regular expressions for regular languages. And solving computing problems. CO3 Define, analyze, and design context free grammars for context free languages CO4 Design and analyze Turing machines and to distinguish between decidability and undecidability.
Blockchain Technology	MMCA313PCT	CO1 Understand the blockchain Technology in real life. CO2 Apply the smart contracts on Ethereum platform. CO3 Develop the use cases on Hyperledger. CO4 Analyze the major research challenges and technical gaps existing between theory and practice in Blockchain
Machine Learning	MMCA314PCT	CO1 Understand the concepts of computational intelligence like machine learning. CO2 Apply machine learning techniques to address the real time problems in different areas. CO3 Perform evaluation of learning algorithms and model selection. CO4 Analyze and appreciate the applications which can use Machine Learning Techniques.
Data Science Lab	MMCA360PCP	CO1 Make use of the python libraries, basic Statistical measures for data science. CO2 Perform descriptive analytics on the benchmark data sets. CO3 Perform correlation and regression analytics on standard data sets. CO4 Present and interpret data using visualization packages in Python.

	Blockchain Technology Lab	MMCA361PCP	CO1 Understand the functional or operational aspects of cryptocurrency ecosystem. CO2 Demonstrate the emerging abstract models for Blockchain Technology. CO3 Able to work with Web Wallets, Mobile Wallets, Desktop Wallets, Paper Wallets. CO4 Apply Blockchain in use cases like Real state, Supply chain, voting, ICO, etc	
	Industrial/Major Project	MMCA470PCP	CO1 Applying SRS, techniques. CO2 Apply Design methods for given SRS. CO3 Write the codes as per SRS and designed Framework. CO4 Able to implement real world problem into software solution.	
MCA(Master of Computer Application) Bridge Course	Discrete Mathematics	MMBC121FCT	CO1 Develop mathematical and logical thinking. CO2 Utilize the concepts of relations and functions to solve simple real-life problems. CO3 comprehend real life problems it in terms of predicates, quantifiers, and logical connectives and obtained its solution. CO4 Apply logical reasoning to solve a variety of problems.	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2022-23_MCA%20Bridge%20Courses%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2%20(1).pdf
	Information & Communication Technology	MMBC122PCT	CO1 Explain and demonstrate various components of Computer. CO2 Analyze the role and importance of ICT in the modern world. CO3 Investigate and propose various requirements of ICT for real world applications. CO4 Evaluate a variety of existing and developing architecture technologies for ICT.	
	Introduction to Computer System & Hardware	MMBC123PCT	CO1 Utilize the Internet Web resources and evaluate on-line e-business system. CO2 Solve common computer problems using appropriate Information Technology applications and systems. CO3 Identify categories of programs, system software and applications.Organize and work with files and folders. CO4 Evaluate a variety of existing and developing architecture technologies for hardware.	
	Problem Solving Using ‘C’ Language Lab	MMBC161PCP	CO1 Choose the loops and decision-making statements to solve the problem. CO2 Implement different Operations on arrays. CO3 Use functions to solve the given problem and Understand pointers, structures and unions. CO4 Implement file Operations in C programming for a given application.	

PhD (Computer Science)	Research Methodology	PHCS101CCT	CO1 Understand the issues & challenges, goals, scientific methods in research. CO2 Demonstrate various computer science research context and other scientific methods in computer science. CO3 Apply measurements on Sampling, External Validity, Levels of Measurement, Scaling and Qualitative Measures. Data Preparation, Descriptive Statistics and Correlation; and Inferential Statistics. CO4 Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and thesis	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2022-23_Ph.D.%20(CS)%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2.pdf
	Software Engineering	PHCS102CCT	CO1 Understand the fundamentals of software systems (including analysis, design, construction, maintenance, quality assurance and project management) using the appropriate theory, principles, tools and processes. CO2 Prepare SRS documents for a software system. CO3 Interpret the software design, ER-Diagram, DFD and CASE Tools in software systems. CO4 Apply the project management techniques for a case study, coding, testing and user Interface design with project stakeholders.	
	Research and Publication Ethics (RPE) (Common to all Research Scholar at University)	PHCS105DST	CO1 Understand the philosophy, scientific conduct, Scientific misconducts, Redundant Publications and salami slicing. CO2 Create awareness about the publication ethics, publication misconducts and Open Access Publishing. CO3 Apply high standards in achieving research outcomes and use of different plagiarism software CO4 Find and evaluate indexing and citation databases, research metrics (citations, h-index, impact Factor, etc.,).	
	Machine Learning	PHCS105DST	CO1 Demonstrate the basic building blocks and general principles that allows one to design machine learning algorithms. CO2 Understand the specific, widely used machine learning algorithms. CO3 Apply methodology and tools to apply machine learning.	
	Blockchain Technology	PHCS118DST	Course outcomes are with respect to the subject opted by the students.	
	Research Methodology	PHCS101CCT	CO1 Understand the issues & challenges, goals, scientific methods in research. CO2 Demonstrate various computer science research context and other scientific methods in computer science. CO3 Apply measurements on Sampling, External Validity, Levels of Measurement, Scaling and Qualitative Measures. Data Preparation, Descriptive Statistics and Correlation; and Inferential Statistics. CO4 Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and thesis	

PhD (Computer Science)-Self Finance	Software Engineering	PHCS102CCT	CO1 Understand the fundamentals of software systems (including analysis, design, construction, maintenance, quality assurance and project management) using the appropriate theory, principles, tools and processes. CO2 Prepare SRS documents for a software system. CO3 Interpret the software design, ER-Diagram, DFD and CASE Tools in software systems. CO4 Apply the project management techniques for a case study, coding, testing and user Interface design with project stakeholders.
	Research and Publication Ethics (RPE) (Common to all Research Scholar at University)	PHCS105DST	CO1 Understand the philosophy, scientific conduct, Scientific misconducts, Redundant Publications and salami slicing. CO2 Create awareness about the publication ethics, publication misconducts and Open Access Publishing. CO3 Apply high standards in achieving research outcomes and use of different plagiarism software CO4 Find and evaluate indexing and citation databases, research metrics (citations, h-index, impact Factor, etc.,).
	Machine Learning	PHCS105DST	CO1 Demonstrate the basic building blocks and general principles that allows one to design machine learning algorithms. CO2 Understand the specific, widely used machine learning algorithms. CO3 Apply methodology and tools to apply machine learning.
	Blockchain Technology	PHCS118DST	Course outcomes are with respect to the subject opted by the students.
PhD Vishwakarma	Research Methodology	PHCS101CCT	CO1 Understand the issues & challenges, goals, scientific methods in research. CO2 Demonstrate various computer science research context and other scientific methods in computer science. CO3 Apply measurements on Sampling, External Validity, Levels of Measurement, Scaling and Qualitative Measures. Data Preparation, Descriptive Statistics and Correlation; and Inferential Statistics. CO4 Prepare a project proposal (to undertake a project) and conduct research in a more appropriate manner, writing research report and thesis
	Software Engineering	PHCS102CCT	CO1 Understand the fundamentals of software systems (including analysis, design, construction, maintenance, quality assurance and project management) using the appropriate theory, principles, tools and processes. CO2 Prepare SRS documents for a software system. CO3 Interpret the software design, ER-Diagram, DFD and CASE Tools in software systems. CO4 Apply the project management techniques for a case study, coding, testing and user Interface design with project stakeholders.

PhD Vishwaraya	Research and Publication Ethics (RPE) (Common to all Research Scholar at University)	PHCS105DST	CO1 Understand the philosophy, scientific conduct, Scientific misconducts, Redundant Publications and salami slicing. CO2 Create awareness about the publication ethics, publication misconducts and Open Access Publishing. CO3 Apply high standards in achieving research outcomes and use of different plagiarism software CO4 Find and evaluate indexing and citation databases, research metrics (citations, h-index, impact Factor, etc.,).	
	Machine Learning	PHCS105DST	CO1 Demonstrate the basic building blocks and general principles that allows one to design machine learning algorithms. CO2 Understand the specific, widely used machine learning algorithms. CO3 Apply methodology and tools to apply machine learning.	
	Blockchain Technology	PHCS118DST	CO1 To be able to implement the blockchain CO2 To be able to implement the chaincodes on Hyperperledger Fabric platform. CO3 To be able to implement the use cases on Hyperledger Fabric. CO4 To be able to identify the major research challenges and technical gaps existing between theory and practice in Blockchain	

Note: *1) The details of all the programmes listed at table No.6 need to be provided. 2) Additional rows may be added if required.*

12	**Courses having focus on employability/ entrepreneurship/ skill development during the academic year :**

Name of the Course	**Course Code**	**Activities/Content with direct bearing on Employability/ Entrepreneurship/ Skill development**	**Link to the relevant document**
B.Tech	BTCS311PCT	Data Structure & Algorithms	https://manuu.edu.in/sites/default/files/CSIT/btech-locf-syllabus.pdf
	BTCS362PCP	IT Workshop Python	
	BTCS511PCT	Computer Organization	
	BTCS403PCT	Operating Systems	
	BTCS513PCT	Design & Analysis of Algorithms	
	BTCS402PCT	Database Management Systems	
	BTCS511PET	Principles of Programming Languages	
	BTCS711PET	Artificial Intelligence	
	BTCS512PET	Parallel and Distributed Algorithms	
	BTCS405PCT	Object Oriented Programming	
	BTCS712PET	Block Chain Technology	
	BTCS716PET	Machine Learning	
	BTCS715PET	Internet-of-Things	
	BTCS612PCT	Computer Networks	
	BTCS211EST	Programming for Problem Solving	
	BTCS406PCT	Software Engineering	
	MTCS111PCT	Advanced Algorithm	
	MTCS211PCT	Machine Learning	

M.Tech	MTCS212PCT	Internet of Things	https://manuu.edu.ian/sites/default/files/CSIT/Syllabus/locf/2023-24MTechCSEAI%26MLPart-time-LOCFSyllabus%26Curriculum-V13.pdf
	MTCS112PCT	Advanced Computer Architecture	
	MTCS113PET	Data Science	
	MTCS111PET	Advanced Network Security	
	MTCS211PET	Blockchain Technology	
	MTCS214PET	Natural Language Processing	
MCA	MMCA111PCT	Software Engineering	https://manuu.edu.in/sites/default/files/CSIT/Syllabus/locf/2022-23_MCA%20Bridge%20Courses%20-%20LOCF%20Syllabus%20%26%20Curriculum%20-%20V1.2%20(1).pdf
	MMCA112PCT	Computer Network	
	MMCA113PCT	Operating Systems	
	MMCA213PCT	Java Programming	
	MMCA211PCT	Data Structure & Algorithms	
	MMCA211PET	Digital Forensics	
	MMCA326PET	Deep Learning	
	MMCA327PET	Web Mining	
	MMCA313PCT	Blockchain Technology	
	MMCA328PET	Natural Language Processing	
	MMCA314PCT	Machine Learning	
	MMCA311PCT	Data Science	

Additional Rows may be added as required.

13 Value-added courses* imparting transferable and life skills offered :

Name of the Value-added course	Date of Introduction	Number of Students enrolled	Course and List of students with Name and enrollment number.
Fundamental of Information Technology	2023-2024	256	https://drive.google.com/file/d/1JXXNfMkspZMHVeiMig89t0zNoIk0vilf/view?usp=sharing
English Communication Lab	2023-2024	150	

Additional Rows may be added as required.

Note: *Non-CGPA Courses also may be considered for inclusion.*

**Provide the Brochures/Circular and detailed course structure along with resource persons if any, duration of the course and List of students with Name and enrollment number.*

14 Field Projects / Internship/Research Projects(dissertation) undertaken during the year :

Name of the students enrolled for Field Projects / Internship/Research Projects(dissertation)	Roll Number of the Student	Field Projects / Internship/Research Projects(dissertation) undertaken	Name of the organization where the Field Projects / Internship/Research Projects(dissertation) has been undertaken	Duration of the Field Projects / Internship/Research Projects(dissertation) undertaken	certificates of Field Projects / Internship/Research Projects(dissertation)
Adeeba Naseem	22BTCS043HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Zamima Batool	20BTCS006HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Darakhshan kausar	23MMCA002HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Akif Jawaid	20BTCS035HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Hibbanur Rahman	21BTCS026HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		

Md Merajul Haque	22BLCS005HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad	**6 Months**	https://drive.google.com/file/d/1zi8_7eOpVpFFkvF5CDaV0E9yD0MlMdeL/view?usp=sharing
Md Aatif Arsalan	22MMCA002HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Md Zahid	22BLCS012HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Mohd Rakhshan Khan	21BTCS023HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Md Mohibullah	21BTCS038HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Motiurrahman	21BTCS009HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Nahid Chaudhary	23MTCS003HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Yaqoob	21BTCS051HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Fahad Masroor	22BLCS010HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Saliq javeed dar	21BTCS066HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Mudasir Ahmad Bhat	21BTCS068HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Danish Hussain	22BLCS008HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Maroof Raman Ganie	22BLCS001HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
Ataliya Arfeen	23MTCS013HY	Internship(Ministry of Electronics and Information Technology (MeitY))	School of Technology, MANUU, Hyderabad		
B.Tech					**Field Projects**
Md. Shahim Yawar ali Ansari	21BLCS006HY	Project (Real Estate Price Analysis and Prediction)	School of Technology, MANUU, Hyderabad		
Faizan Equbal	21BTCS056HY		School of Technology, MANUU, Hyderabad		
Saquiba wasim	20BTCS016HY	Project (Crop Recommendation System using Machine Learning)	School of Technology, MANUU, Hyderabad		
Naheed Fatima	20BTCS012HY		School of Technology, MANUU, Hyderabad		
Afreen Afzal	20BTCS029HY		School of Technology, MANUU, Hyderabad		
Md Afroz Alam	20BTCS024HY	Project(Loan Amount Prediction)	School of Technology, MANUU, Hyderabad		
Istiyak Ahmad	20BTCS032HY		School of Technology, MANUU, Hyderabad		
Md Sarwar ahmad	20BTCS046HY	Project(Online Maid Booking System)	School of Technology, MANUU, Hyderabad		
sharique Jahangir	18BTCS054HY		School of Technology, MANUU, Hyderabad		
Mohd Saqib	20BTCS025HY		School of Technology, MANUU, Hyderabad		
Mohd Shahid	20BTCS020HY	Project (Research Advisory Committee (RAC) Management System)	School of Technology, MANUU, Hyderabad		
Nadra Parween	20BTCS026HY	Project(Online Blogging System)	School of Technology, MANUU, Hyderabad		
Khalda Nasreen	20BTCS028HY		School of Technology, MANUU, Hyderabad		
Sadaf Shaheen	20BTCS009HY	Project(Customer Segmentation Using Machine Learning)	School of Technology, MANUU, Hyderabad		
Julee Perween	20BTCS028HY		School of Technology, MANUU, Hyderabad		
Md Aurangzeb Imam	20BLCS007HY	Project(Room Finder Web Application)	School of Technology, MANUU, Hyderabad		

Md Asif Iqubal	20BLCS009HY	Project(Room Finder Web Application)	School of Technology, MANUU, Hyderabad		
Mohammad Ahmad	20BTCS007HY	Project(Apple Leaves Disease Prediction Using Deep Learning)	School of Technology, MANUU, Hyderabad		
Mohammad Asad	20BTCS053HY		School of Technology, MANUU, Hyderabad		
Farheen Fatima	20BTCS044HY	Project(Students Marks Prediction)	School of Technology, MANUU, Hyderabad		
Shagufta Parween	20BTCS001HY		School of Technology, MANUU, Hyderabad		
Md. Rashedin	20BTCS038HY	Project(CNN-based Indian Sign Language Gesture Recogntion)	School of Technology, MANUU, Hyderabad		
Rashad Jamal	20BTCS041HY		School of Technology, MANUU, Hyderabad		
Zamin Zehra	21BLCS002HY	Project(Diabetes Disease Prediction Using Machine Learning (Deployment Of Web based app)	School of Technology, MANUU, Hyderabad		
Adeela Shahid	21BTCS059HY		School of Technology, MANUU, Hyderabad		
Md Amanullah	20BTCS023HY	Project(Real Estate Management System (web app))	School of Technology, MANUU, Hyderabad		
MD Asif	20BTCS018HY		School of Technology, MANUU, Hyderabad		
Kareem Unnisa	20BTCS039HY	Project(Online Employee Leave Management System)	School of Technology, MANUU, Hyderabad		
Kishwar Afsana	20BTCS011HY		School of Technology, MANUU, Hyderabad		
Md Faizur Rahman	21BLCS001HY	Project(Customer chrun Prediction in E-Commerce Using Machine Learning)	School of Technology, MANUU, Hyderabad	**6 Month**	https://drive.google.com/file/d/155fCollS5Q_4MFTkSVOHwQua7lNb2-zb/view?usp=sharing
Md Tauqueer Rehan	20BTCS017HY		School of Technology, MANUU, Hyderabad		
Abdur Rahman	20BTCS022HY		School of Technology, MANUU, Hyderabad		
Nazrin Taibie	20BTCS031HY	Project(Parkinson Disease Prediction Using Machine Learning)	School of Technology, MANUU, Hyderabad		
Zamima Batool	20BTCS006HY		School of Technology, MANUU, Hyderabad		
Tausif Ahmad	20BTCS047HY	Project(Homestay explorer: Mapping your pathto Unique Journeys)	School of Technology, MANUU, Hyderabad		
Maeinuddin	20BTCS051HY		School of Technology, MANUU, Hyderabad		
Md. Yasar Arfat	20BTCS030HY		School of Technology, MANUU, Hyderabad		
Mehrun Nisa	21BLCS004HY	Project(Expense Tracker)	School of Technology, MANUU, Hyderabad		
Nusrat Parween	21BLCS005HY		School of Technology, MANUU, Hyderabad		
Muhammad Zaid	20BTCS057HY	Project(EduBot)	School of Technology, MANUU, Hyderabad		
Mohammad Haris	20BTCS061HY		School of Technology, MANUU, Hyderabad		
Shahab Musharraf	20BTCS043HY	Project(Gift-grove: Unleashing Creative Expressions)	School of Technology, MANUU, Hyderabad		
Akram Ansari	20BTCS021HY		School of Technology, MANUU, Hyderabad		
Ishan Ahmad Siddiqui	21BLCS011HY	Project(DSA Tracker)	School of Technology, MANUU, Hyderabad		
Md Najeeb Ansari	21BLCS010HY		School of Technology, MANUU, Hyderabad		
Ali Abu Bakr	20BTCS003HY	Project(Lung Cancer Prediction)	School of Technology, MANUU, Hyderabad		
Md Shakir Hussain	20BTCS033HY		School of Technology, MANUU, Hyderabad		
Mohd Shaban	20BTCS027HY		School of Technology, MANUU, Hyderabad		
Akif Jawaid	20BTCS035HY	Project(From Farm to Fridge: Tracking journey of dairy products with blockchain technology)	School of Technology, MANUU, Hyderabad		
Sabreen Koushar	20BTCS048HY	Project(From Field to Consumer: Tracing the journey of Food with Blockchain Technology)	School of Technology, MANUU, Hyderabad		
Meher Afrin	20BTCS049HY		School of Technology, MANUU, Hyderabad		
Tausif Alam	20BTCS055HY	Project(Resume Enhancer using Artificial Intelligence)	School of Technology, MANUU, Hyderabad		
Tauqeer Sayeed	20BTCS042HY		School of Technology, MANUU, Hyderabad		
Raushan Imam Ansari	20BTCS060HY		School of Technology, MANUU, Hyderabad		
Md Gulab	20BTCS013HY	Project(Predecting of Alzheimer's Diseases using Machine Learning Algorithms)	School of Technology, MANUU, Hyderabad		
Md Aquib Ezaz	20BTCS037HY		School of Technology, MANUU, Hyderabad		
Maryam Iqbal	20BTCS036HY	Project(Auto Attendence System using Deep Learninig Techniques)	School of Technology, MANUU, Hyderabad		
Shifa Raza	20BTCS034HY		School of Technology, MANUU, Hyderabad		
M.Tech					**Research Projects(dissertation)**

MD AFAQUE ALAM	22MTCS004HY	Dissertation(Enhanced Urdu Handwritten character and digit recognition using Deep Convolutional Neural Network)	School of Technology, MANUU, Hyderabad	**1 Year**	https://drive.google.com/file/d/1cEiDz8Lv0TIE62eVUvpErCrzljGZQJqr/view?usp=sharing
FALAK TUBA	22MTCS005HY	Dissertation(Heart Disease Predection using Machine Learning)	School of Technology, MANUU, Hyderabad		
SHAYAKA SIDDIQUI	22MTCS008HY	Dissertation(Predection of Parkinson's Disease using Boosting Algorithm over telemarkiting data)	School of Technology, MANUU, Hyderabad		
MD HAYATUL	22MTCS010HY	Dissertation(Climate change Indicator using Machine Learning)	School of Technology, MANUU, Hyderabad		
SAIF ALI	22MTCS012HY	Dissertation(Social Platform chat Analysis using Natural Language Processing Techniques)	School of Technology, MANUU, Hyderabad		
ZOYA TABASSUM	22MTCS014HY	Dissertation(EKYC using Blockchain technology)	School of Technology, MANUU, Hyderabad		
NADIM AHAMAD	22MTCS015HY	Dissertation(Predection of the Stock Market using Machine Learning)	School of Technology, MANUU, Hyderabad		
MD SHAMSHAD	22MTCS016HY	Dissertation(Machine Learning Based clustering of Lower Income Countaries using gender Development Index)	School of Technology, MANUU, Hyderabad		
MD MOHSIN	22MTCS018HY	Dissertation(Sentiment Surfing:Navigating emotions with transformers based model in Natural Language Processing)	School of Technology, MANUU, Hyderabad		
MUKHTAR UL ISLAM	22MTCS019HY	Dissertation(Improved Bone frecture Classification using Visual Transformers and CNN)	School of Technology, MANUU, Hyderabad		
SHAGUFTA IQBAL	22MTCS021HY	Dissertation(Fake News Predection)	School of Technology, MANUU, Hyderabad		
RAZIYA TABASSUM	22MTCS025HY	Dissertation(Mango leaf net)	School of Technology, MANUU, Hyderabad		
SHAFANA BAKSHI	22MTCS027HY	Dissertation(Decoding Facial emotions with deep convolutional neural networks)	School of Technology, MANUU, Hyderabad		
SAZIYA IQBAL	22MTCS028HY	Dissertation(Diagnosis of Liver Dease)	School of Technology, MANUU, Hyderabad		
MOHAMMAD ASIF	22MTCS029HY	Dissertation(Leveraging Machine Learning for Soil Predection and crop management in Agriculture)	School of Technology, MANUU, Hyderabad		
MCA					**Field Projects**
MD AATIF ARSALAN	22MMCA002HY	Central IU Connect	School of Technology, MANUU, Hyderabad	**6 Months**	https://drive.google.com/file/d/1A2tp-jCfohy2wdyU8JBfCxAQDczUptqG/view?usp=sharing
NAZIYA NAZMI	22MMCA003HY	Music Recommendation System	School of Technology, MANUU, Hyderabad		
FAHEEM KHAN	22MMCA004HY	Multifunctional NLP Application	School of Technology, MANUU, Hyderabad		
DANISH KAMAL	22MMCA005HY	PDF Interaction System Using Artificial Intelligence	School of Technology, MANUU, Hyderabad		
MO NAHEEM	22MMCA006HY	TVADI Web Application	School of Technology, MANUU, Hyderabad		
KAMRAN KHAN	22MMCA009HY	Crowd Funding Platform using Blockchain	School of Technology, MANUU, Hyderabad		
SHAQUIB KHAN	22MMCA010HY	Decentralized Chat Application on Ethereum	School of Technology, MANUU, Hyderabad		
MD SHAHID AFRIDI	22MMCA012HY	Diabetes prediction using Machine Learning	School of Technology, MANUU, Hyderabad		
SHADAB ANSARI	22MMCA014HY	Online Food Delivery System	School of Technology, MANUU, Hyderabad		
SHUBI KHALID	22MMCA015HY	Tomato Plant Disease Detection Using Deeplearning	School of Technology, MANUU, Hyderabad		
MOHD REHAN MANSOORI	22MMCA017HY	Laptop Price Predictor	School of Technology, MANUU, Hyderabad		
AMREEN JAHAN	22MMCA018HY	Deeplearning Approaches for Food Quality Assessment	School of Technology, MANUU, Hyderabad		
MARIYAM KHATOON	22MMCA019HY	Hair Loss Prediction	School of Technology, MANUU, Hyderabad		
JAMAL ASHRAF	22MMCA020HY	Hospital Management System	School of Technology, MANUU, Hyderabad		
ASHNA AFTAB	22MMCA021HY	Driver Drowiness Detection System	School of Technology, MANUU, Hyderabad		
ABDUL SAMAD	22MMCA022HY	Project	School of Technology, MANUU, Hyderabad		
ALTAMASH ANSARI	22MMCA023HY	Collaborative Code Editor	School of Technology, MANUU, Hyderabad		
MOHD AMIR	22MMCA024HY	Student Tracking System	School of Technology, MANUU, Hyderabad		
MD EKRAM	22MMCA025HY	Smart Face Identification Attendance	School of Technology, MANUU, Hyderabad		

HAMD SHAKEEL	22MMCA026HY	Analyzing Thyroid Conditions using Machine Learning Methods	School of Technology, MANUU, Hyderabad		
MD RAZA ASHRAF	22MMCA028HY	Doctor Appointment Booking System	School of Technology, MANUU, Hyderabad		

Additional Rows may be added as required.

Note: *Provide List of students with Name and enrollment numbers and certificates of Field Projects / Internship/Research Projects(dissertation)*

15 Feedback System

(Please provide a note on analysis and utilization of the feedback obtained for the overall development of the Department in 500-1000 words).

Action Taken Report on Student's Feedback – (Dec -2023) Total number of responses: 379
Question 1- Course and Objective: 95% responded positively.
Question 2- 95.5% responded positively.
Question 3- Easy access of materials-Positive responses (89.4%) (Course material should be made available)
Primary texts are provided. Bibliography/Reading List is given at the end of the Syllabi and a list of secondary sources is provided for supplementary reading. However in response to the student feedback, secondary material is being provided and students are instructed to make a copy and circulate among themselves. Due to lack of access to computers and printers, students are given a print out by the teacher concerned and the office Xerox machine is used to make minimum copies of the secondary course materials.
Question 4- Rating the teacher and instruction: - The overall response of student's to teacher's instruction was Excellent-74.9%, Good- 16.4%, for Average 20 students responsed and for Poor only 13 students responsed. Each teacher was individually directed to take the necessary self-corrective action for improvement after reading the students' rating in each teacher's IUMS portal.
Question 5-Open ended question: In any other comment, cognizance of the responses of the students was done and faculty requested to address the issues appropriately and directed to take necessary self-corrective action for resolution of the problem.

Action Taken Report on Student's Feedback- (May-2024) Total number of responses: 2174
Question 1- Course and Objective: 93.1% positive response
Question 2- Course and career progression: 94.7% positive response
Question 3- Easy access of materials: 92.1% positive response
Efforts are made to provide access to course material by augmenting the library stock by ordering and acquiring the required and relevant texts. Multiple copies are ordered so as to ensure their availability and circulation. Personally teachers give print outs and handouts of secondary material apart from a bibliography.
Question 4 - Rating the teacher and instruction: Action taken as approximately 54.6% of the total responses received rated the teacher's instruction as excellent while approximately 29.9% rated Good. Since approximately 11.7% responded average and 3.8% responded poor, teachers were individually directed to take necessary self-corrective action for improvement after reading the students' rating in each teacher's IUMS portal.
Question 5.-Open ended question: Any other comment: Teachers were individually directed to take necessary self-corrective action for improvement regarding specific remarks against them or overall improvement where necessary as mentioned by the students.

16 Give details of the mentoring system in the Department in 500 words and provide the circular issued at the begining of the Academic session and Indicate the mentor mentee list.

List out any specific issues encontured during mentoring process
Action taken
Mentor-Mentee Allocation

Mentors, typically faculty members with significant teaching and industry experience, are assigned to 10-15 students to ensure adequate attention. This manageable ratio allows mentors to provide personalized guidance tailored to individual student needs.

Mentoring Activities

Regular Meetings: One-on-one meetings between mentors and mentees to discuss academic progress, address concerns, and set goals.
Workshops and Seminars: Organized on various topics like time management, stress management, career planning, and research opportunities.
Group Activities: Group mentoring sessions to foster peer learning and collaboration.
Feedback Mechanism: Structured feedback from students to continuously improve the mentoring system.
Benefits for Students

Benefits for Students

Personalized Attention: Individualized guidance helps students achieve their academic and personal goals.
Enhanced Academic Performance: Early identification and addressing of academic challenges lead to improved performance.
Career Readiness: Valuable industry insights from mentors prepare students for future careers.
Emotional Support: Emotional support from mentors helps students manage stress and navigate personal challenges.
Role of Mentors

S.NO.	ROLL NO.	Enrollment	NAME OF THE STUDENTS	MOBILE NUMBER	MAIL ID	MENTOR NAME
1	A231542	23BTCS001HY	YAMEEN ROUF	7889661156	yameenroufbhat@gmail.com	
2	A231543	23BTCS002HY	MOHSIN MANZOOR	6005817959	riyazulhaq37@gmail.com	
3	A230090	23BTCS003HY	BASIM AHMAD KHAN	9525908392	basim004khan@gmail.com	**Prof. Abdul Wahid**
4	A230093	23BTCS005HY	YUSUF HANZALA	7309132627	yusufhanzala456@gmail.com	
5	A181061	23MTCS023HY	MOHAMMAD SHAHWAZ	9152520059	MSHAN2AC1@GMAIL.COM	
6	A231305	23MMCA001HY	SHADMAN KAUSAR	9643753792	shadman08082000@gmail.com	
1	A230094	23BTCS006HY	MD RIYAZ ALAM	7759854031	riyazrafique06@gmail.com	
2	A230095	23BTCS007HY	MOHD SAQIB	9045709192	saqibansari2011@gmail.com	
3	A230096	23BTCS008HY	UMAR HANZALA	7379411412	umar786hanzala@gmail.com	
4	A231608	23BTCS009HY	NOOR SABA	9097310484	noorsaba3020@gmail.com	**Dr. Pradeep Kumar**
5	A230091	23BTCS004HY	MAAZ HASAN	7032289638	maazk2414@gmail.ccom	
6	A191350	23MTCS003HY	Nahid Chaudhary	9000976740	nahide8297@gmail.com	
7	A191362	23MTCS008HY	Asfiya Siddiqui	7396256404	asfiya007.as@gmail.com	
8	A231306	23MMCA002HY	DARAKHSHAN KAUSAR	9643644804	darakhshankausar99@gmail.com	
1	A230098	23BTCS010HY	MOHD RIZWAN	9369513462	rizwan208023@gmail.com	
2	A230100	23BTCS011HY	TARANNUM PARVEEN	9122386413	akramnasim654@gmail.com	
3	A230092	23BTCS012HY	AFREEN ALIM	8804360602	tabassumreshma229@gmail.com	
4	A230104	23BTCS013HY	SAIFURRAHMAN	6392318942	saifur13233@gmail.com	**Dr. Syed Imtiyaz Hassan**
5	A230106	23BTCS014HY	MD KAIF AKHTAR	8434082780	akhtarkaif004@gmail.com	
6	A170097	23MTCS015HY	SAYYEDA SHAHNAZ	6205188686	sayyedashahnaz@gmail.com	
7	A165050	23MTCS020HY	MOHAMMAD HESHAM ASHRAF	8058737439	habtech50@gmail.com	
8	A231308	23MMCA003HY	MD IBRAHIM	9162093470	faiziibrahim321@gmail.com	
1	A230107	23BTCS015HY	SANA	9642612121	muqeemcsit@manuu.edu.in	
2	A230108	23BTCS016HY	SHAZIA SULTANA	7324885906	shaziaqd@gmail.com	
3	A230102	23BTCS017HY	UMME AIMAN	7488349679	ummeaiman4136@gmail.com	
4	A230103	23BTCS018HY	MD AQUIB HUSSAIN	8409654604	mdaquibalam12340@gmail.com	
5	A230109	23BTCS019HY	KAYNAT MAQSOOD	9170507923	kaynatmaqsood1@gmail.com	**Mrs. Tunga Arundhathi**
6	A230111	23BTCS020HY	NESAR AHMAD	6209166861	nesar7796@gmail.com	
7	A191328	23MTCS011HY	Shabnam Khatoon	8507398289	sshabnamkhatoon3@gmail.com	
8	A200242	23MTCS014HY	JAMSHED ALAM	7321934007	alam85318@gmail.com	
9	A231307	23MMCA004HY	MD DANISH	8709537500	danishmd11111@gmail.com	
10	A170949	23MMCA005HY	DILSHAD ANSARI	9120429683	17BSPC014HY@manuu.edu.in	
1	A230112	23BTCS021HY	SHAGUFTA PARWEEN	9514373502	fm7856564@gmail.com	
2	A190899	23BTCS022HY	GULABSHA PRAVEEN	7050553587	gulabhahcivil25@gmail.com	
3	A230114	23BTCS023HY	SAHIL HUSSAIN	8709164313	sahilhussain00746@gmail.com	
4	A230115	23BTCS024HY	FAIYAZ AHMAD	7667418068	ahmadfaiyaz2005@gmail.com	**Dr. Khaleel**

5	A230116	23BTCS025HY	MD ABDULLA	7352473321	iamabdullah73524@gmail.com	**Dr. Khaleel Ahmed**
6	A230117	23BTCS026HY	MD ZEESHAN	9128192419	thereisareasonbehindit@gmail.com	
7	A191330	23MTCS012HY	SYED MUZAKKIR REZA SABRI	7282996464	muzakkirr49@gmail.com	
8	A231335	23MTCS001HY	MOHAMMAD SHEIHAN JAVAID	7455858751	sheihanjd20@gmail.com	
9	A231310	23MMCA006HY	MOHD FAIZAN	9286157360	faizanali331@gmail.com	
1	A230113	23BTCS027HY	MAAZ RAQUIB	8789463237	maazraquib@yahoo.com	**Ms. Khaleda Afroaz**
2	A230118	23BTCS028HY	REHAN AFTAB KHAN	7643029755	rehanaftab512@gmail.com	
3	A230119	23BTCS029HY	MOBASHSHAR FAHIM	7370029085	mobasharfahim@gmail.com	
4	A230089	23BTCS030HY	MOHD HAMDAN	9473661783	mohdhamdan9919@gmail.com	
5	A230120	23BTCS031HY	FAIJ AHAMAD	7543931970	fzad7543@gmail.com	
6	A230105	23BTCS032HY	MOHAMMAD ISMAIL ZIA	8840559485	ismailzia890ad@gmail.com	
7	A191379	23MTCS018HY	MOHAMMAD HOZAIFA	9044296929	hozaifahanzala1111@gmail.com	
8	A212569	23MTCS019HY	MD ANAS	8409270173	anas35935@gamil.com	
9	A231311	23MMCA007HY	MD SAIF ALI	7549890511	saifalibgp62@gmail.com	
1	A191002	23BTCS033HY	MD AAYAN ASLAM	8207670454	mdaayanaslam@gmail.com	**Ms. Afrah Fathima**
2	A200676	23BTCS034HY	MD ADNAN ANSARI	8530406218	mdadnanansari851202@gmail.com	
3	A230101	23BTCS035HY	MOHAMMAD ARIF	8090586157	ali.shokat70@gmail.com	
4	A230123	23BTCS036HY	MD KAIF	9430805160	mdkaif3120@gmail.com	
5	A231609	23BTCS037HY	MOHD ZAID	9795606383	gm4272@myamu.ac.in	
6	A230124	23BTCS038HY	HAMID ALI	7370073856	hamid.aimt@gmail.com	
7	A191348	23MTCS013HY	ATALIYA AARFEEN	8210127200	ataliyaengg@gmail.com	
8	A210101	23MTCS010HY	RUKHSAR PARWEEN	9835660583	rukhsarparweenn91@gmail.com	
9	A231312	23MMCA008HY	UMME KULSOOM	9045272379	ukulsoom515@gmail.com	
10	A200910	23MMCA023HY	MOHD SULTAN	9795701669	mohdsultanf1391@gmail.com	
1	A230121	23BTCS039HY	APSANA PRAWEEN	9234069707	apsana4344@gmail.com	**Mr. Ahmed Talha Siddiqui**
2	A230122	23BTCS040HY	RASHID HUSSAIN	9060589036	rashid16072005@gmail.com	
3	A200580	23BTCS041HY	PAMMI KHATUN	8340703042	mohiuddinit4@gmail.com	
4	A231610	23BTCS042HY	MD MUJAMMIL	7352492583	mujammil7018@gmail.com	
5	A230127	23BTCS043HY	HABIBA MIRZA	9565103627	habibamirza21@gmail.com	
6	A230128	23BTCS044HY	TUBA FATIMA	8603690012	aliamohsin396@gmail.com	
7	A170810	23MTCS016HY	NAYAB GUL	6200607435	nayabgul258@gmail.com	
8	A191369	23MTCS024HY	MOHD SAJID KHAN	9369130172	sajidamu2000@gmail.com	
9	A231313	23MMCA009HY	MD WASHIM	7282023355	washim20032001@gmail.com	
10	A231315	23MMCA010HY	ISHRA MOSHARRAF	9507701709	misssubykhan@gmail.com	
1	A230129	23BTCS045HY	OSAMA	8869044324	OSAMAETOOS@GMAIL.COM	**Mr. Mohd Omar**
2	A230131	23BTCS046HY	MD RAYAN	7277258481	rayanmd641@gmail.com	
3	A230132	23BTCS047HY	SANA FATMA	7479895668	sanafatma9693@gmail.com	
4	A230134	23BTCS048HY	SABIHA KHATOON	7275737274	sabihakhatoonrasra@gmail.com	
5	A230097	23BTCS049HY	ABDUR RAHMAN	6201192900	abdurrahman51177@gmail.com	
6	A191354	23MTCS009HY	MD AHMAD REZA	7505532227	rezaahmadmd@gmail.com	
7	A231336	23MTCS007HY	ABID SERAJ	9661156847	abidseraj98@gmail.com	
8	A231309	23MMCA011HY	SALIHA TABASSUM	8102876661	salihatabassum092@gmail.com	
9	A211158	23MMCA022HY	Nausheen	9771998933	sweetiepieshin123@gmail.com	
1	A230110	23BTCS051HY	SANIYA SHAIKH FIRDAUS	8603018141	saniyasrj004@gmail.com	
2	A230130	23BTCS052HY	SADIQUE ANWAR	9334130424	sadiqueanwar54321@gmail.com	

3	A200518	23BTCS053HY	SADAF IMTEYAZ	9836021256	IMTIYAZAHMAD.MOHD6@GMAIL.COM	
4	A230125	23BTCS054HY	MOHAMMAD SAAD	8542929798	saadayinas9322@gmail.com	**Mr. Mohd Rafeeq**
5	A230137	23BTCS055HY	MD SHAHNAWAZ	9889428495	osp1csc@gmail.com	
6	A230099	23BTCS056HY	MD YAKIN ANSARI	6299520983	mdyakinansari123025@gmail.com	
7	A191326	23MTCS005HY	Md Asif	8279826362	asifkhan1234123412341234@gmail.com	
8	A231316	23MMCA012HY	SHADAN AHMAD	8470061402	shadan.ahmad247@gmail.com	
9	A231317	23MMCA013HY	TABASSUM FATIMA	9507408362	tfatima9499@gmail.com	
1	A230136	23BTCS057HY	ALFIYA MEHROOSH	7870834280	alfiyamehroosh@gmail.com	
2	A230139	23BTCS058HY	MOHAMMAD VAQQAS	9473803494	mohammadvaqqas5@gmail.com	
3	A230138	23BTCS059HY	MD FARHAN AZIZ	6206170414	msfarhanaziz786@gmail.com	**Dr. Muqeem Ahmed**
4	A230126	23BTCS060HY	MD SHAYAQUE PERWEZ	9508325122	shayaqueperwez@gmail.com	
5	A200504	23BTCS061HY	MD SHADAB GHAZI	7700854730	mdshadabghazi6@gmail.com	
6	A191353	23MTCS017HY	MOHD AZEEM	8604063920	azeema224143@gmail.com	
7	A200255	22MTCS017HY	MOHD SHAZWAN ALI	9140694304	shazwanali911081@gmail.com	
8	A231661	23MMCA014HY	MOHAMMAD SHAMS TABREZ	9523996604	shamsta125@gmail.com	
1	A231667	23BTCS063HY	NOORA MOHAMMED EJAZ RODDAM	6303258040	roddamnoora@gmail.com	
2	A231539	23BLCS001HY	TUSHARUL AMIN	6006889763	er.tushar07@gmail.com	
3	A231540	23BLCS002HY	MEHRAJ DIN BHAT	6006749709	Mehrajraja803@gmail.com	
4	A180363	23BLCS003HY	NAGENDRA KUMAR	6392637084	nk2687649@gmail.com	**Mr. Mohammad Islam**
5	A230141	23BLCS004HY	MD MUSTAQEEM	9661213047	mdmustaqeem820@gmail.com	
6	A210081	23MTCS004HY	Taskeen Nasim	8789228113	taskeen.nbgp@gmail.com	
7	A200246	23MTCS006HY	SALIM ANSARI	8002445141	salimansari19968@gmail.com	
8	A231662	23MMCA015HY	BASIT AHMAD ANSARI	8445124506	wasitahmad123@gmail.com	
9	A231319	23MMCA021HY	NADEEM KIDWAI	8081187436	nadeem.kidwai2016@gmail.com	
1	A230140	23BLCS006HY	HANZALA TAFZEEL	6203756460	hanzalatafzeel44@gmail.com	
2	A200566	23BLCS007HY	madiha nusrat	9431050964	iftekharahmad196918@gmail.com	
3	A200534	23BLCS008HY	TOUSIF TARIQUE	6204190723	tousiftarique@gmail.com	**Mr. Jameel Ahamed**
4	A200500	23BLCS009HY	Abdus Samad	9548962638	abdussamadmeerut@gmail.com	
5	A230142	23BLCS010HY	MOHAMMAD ANWAR	6391979932	mohdanwarwind@gmail.com	
6	A170136	23MTCS021HY	SUMAIYA QAISAR	8910181037	sumaiyaqaisar@gmail.com	
7	A231318	23MMCA016HY	ZEESHAN	8126844801	zeeshanmohd920@gmail.com	
1	A230143	23BLCS011HY	MD FARHAN ANWAR	8271635784	itsyourown07@gmail.com	
2	A230144	23BLCS012HY	MD FAIZAN HAMEED	9693454577	mdfaizanhameed019@gmail.com	
3	A180741	23BLCS013HY	NUSRAT ARA	8292952629	NUSRATARA421@GMAIL.COM	
4	A191192	23BLCS014HY	Neha Perween	8511564563	23BLCS014HY@manuu.edu.in	**Ms. Geeta Pattun**
5	A200943	23BLCS015HY	MD MERAJ KHAN	8864000860	merajkhan4km@gmail.com	
6	A191358	23MTCS002HY	TAHREEM TARIQUE	9334738798	tahreemtarique25@gmail.com	
7	A231314	23MMCA017HY	KHURRRAM KHAN	8279958315	khurramkhan3838@gmail.com	
8	A201829	23MMCA018HY	md ahad raza	8882404440	mdahadraza2000@gmail.com	
1	A212399	23BLCS016HY	MD GULFAM RAZA	7322082440	noorezamal5600@gmail.com	
2	A191401	23BLCS017HY	Suhail Akhtar	9760230418	SUHAILAKHTAR7669@gmail.com	
3	A191288	23BLCS005HY	MD NOOR ALAM	7970486434	nooralam3271@gmail.com	
4	A230135	23BTCS050HY	ZEESHAN AHMAD	8298020622	zeeshanahmad3282@gmail.com	**Mr. Mohtesham**

5	A230133	23BTCS062HY	MOHAMMAD UMAR	9354903260	mohdumar07186@gmail.com	**Pasha quadri**
6	A191370	23MTCS022HY	ADIL MASOOD	9122704196	adilmasood06@gmail.com	
7	A231320	23MMCA019HY	MD ZULFAQUAR	9560711423	zulfi.jmi@gmail.com	
8	A201278	23MMCA020HY	SHARIKA JAVED	8090382501	mohammadzaid565956@gmail.com	

17 **Using ICT for effective teaching and Learning along with details of the ICT enabled teaching learning process (500-1000 words).**

(a) ICT tools used for teaching learning process along with few examples

Google Meet,Google class rooms, Moocs
NDLI,NTPL,.SWAYAM, SWAYAM Prabha DTH Channels
National Digital Library, National Academic Depository
Spoken Tutorial,Talk-to-a-teacher, Ask a question, Digital Locker
eVidwan, Baadal, Campus Connect.

b) Percentage of cources (in the syllabus) which can be opted for Massive Open Online Courses MOOCs

C) Number of students who opted course through MOOCs (CSE,NPTL,Swayam,etc)

d) Provide list of training/orientation programs/workshops conducted or attended on ICT enabled teaching-learning process; content Development etc along with the list of participants attending such programs.

18 **Action Plan/Strategic plan of the department indicating the target set and outcomes achieved for the academic year (to be provided in enclosed template).**

Focus on Funded Project
To encourage consultancy by the department.
To motivate our teachers/Research Scholars for more number of patent.
To increase high number of journal Publications
Motivating students for doing real time project and Internship.

19 **Research funds sanctioned / received from industry and other organizations by the Department:**

Title of the Project	date of sanction	Duration (number of years)	Name of the funding Agency	Total grant sanctioned	Amount received during the year	Name of the P.I/Co P.I(s)	Number of Publications	Completed / Ongoing	link to the Publication
Adaptive Assistive System for Children with Moderate Intellectual Disability	Feb 2022-Feb 2025	Feb 2022-Feb 2025	Ministry of Electronics and Information Technology	104.23 Lakh	42.34 lakhs (sanction order recieved on 02.06.2023	**Prof.Abdul Wahid**	**Nil**	**Nil**	**Nil**
Adaptive Assistive System for Children with Moderate Intellectual Disability	Feb 2022-Feb 2025	Feb 2022-Feb 2025	Ministry of Electronics and Information Technology	104.23 Lakh	9.54 lakhs (Sanction order received on 14.05.2024)	**Prof.Abdul Wahid**	**Nil**	**Nil**	**Nil**
A Virtual Reality-Based Assistive System for Learning and Assessment of Persons with Intellectual Disabilities	Dec 2023-Dec 2027	Dec 2023-Dec 2027	Ministry of Electronics and Information Technology	9504.67 Lakh	1900 lakhs (Sanction Order received on 05.12.2023)	**Prof.Abdul Wahid**	**Nil**	**Nil**	**Nil**
A Virtual Reality-Based Assistive System for Learning and Assessment of Persons with Intellectual Disabilities	Dec 2023-Dec 2027	Dec 2023-Dec 2027	Ministry of Electronics and Information Technology	9504.67 Lakh	436.75 lakhs (Sanction Order received on 29.04.2024	**Prof.Abdul Wahid**	**Nil**	**Nil**	**Nil**

Additional Rows may be added as required. https://drive.google.com/drive/folders/1uRGrobJJqtYO89rTLHsJxS

Note: *Please enclose the sanction letters, details of the patents and copy of the publication.* On4LnjxCXF?usp=drive_link

20	**Funds / Grants received from alumni, non-government bodies, individuals, philanthropies by the Department:**

Name of the alumnus/alumna, non-government funding agency/ individual etc.	Funds/ Grants received in Rs.	Purpose	Facilities Directly Provided if any for academic/infrastructure development
NIL			

Additional Rows may be added as required.

Note: *Please enclose the copies of the grant letter/communications*

21	**Revenue generated by the Department from Consultancy :**

Name of the Consultant(s) /(Department/individual faculty)	Name/Type of Consultancy provided	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
NIL			

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant consultancy offer letters/communications*

22	**Corporate Training provided by the Department :**

Name of the faculty/experts	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of participants
NIL				

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant consultancy offer letters/communications and list of the participants*

23	**Awards for Patent/Innovation by Department/Teachers :**

Title of the Patent/ Innovation	Name of the Author(s)/Awardee	Status (Filed/Published/Awarded)	Date	Name of the Certifying/Awarding agency	Enclose the copies of the relevant certificates/award/photograph receiving the award/ News Paper clipping etc.
A STAIR-BASED ELECTRINIC RECORDS MANAGEMENT SYSTEM FOR SECURE HEALTHCARE INFORMATION	1. PROF. RAEES AHMAD KHAN 2. PROF. ABDUL WAHID 3.DR. SUHEL AHMAD KHAN 4. DR. ALKA	Granted	15/01/2024	Indian Patent	https://drive.google.com/file/d/1dVxvypFL2f_VxdzoO1gjiU7h1VXJW8qx/view?usp=sharing
MY-197138-A	1.KHAIROL AMALI BIN AHMAD 2.KHALEEL AHMAD 3.AHAMED SHAREEF	Granted	26 May 2023	Malaysian Patent	https://drive.google.com/file/d/1UkoGxmhDs1C8uvHWXuUGDuGjhL-DMlvS/view?usp=sharing

EFFECTIVE IOT MONITORING BY APPLYING ML TECHNOLOGIES TO REDUCE DIMENSIONS FOR TRAFFIC DATA AND THE DETECTION OF INTRUSIONS	1. Dr. Pandi. Chiranjeevi, 2. Hafsa Ihtesham Uddin Ahmed.. 3.Alisha Raza.	Published	12-12-2023	Indian Patent	https://drive.google.com/file/d/1JqKvWerXPAZ4xD2TJVL0M6O6_5ebsqnX/view?usp=sharing

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant certificates/award/photograph receiving the award/ News Paper clipping etc.*

24 Provide details of the Incubation centre/ startups /IIC established on campus and the contributions of the Department in terms of incubation :

Start-ups incubated on campus by the Department :

Name of the Start-up	Nature of the Start-up	Date of commencement
NIL		

Additional Rows may be added as required.

Note: Please provide the proof

25 Linkages and Collaboration with institutions/industries for internship, on-the-job training, project work, research, faculty exchange, student exchange etc. :

Nature of linkage/collaboration	Name of the Participant	Name of the partnering institution/ industry /research lab/NGO(s) with contact details	start date	end date	Remarks (Please provide details such as Amount recieved in case of Paid Internship/project report details/appriciation letters/paper published or any other outcome of collaborations)
NIL					

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant certificates/photograph/communications with collaborating organization and list of participants.*

26 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. :

Organisation	Date of MoU signed	Purpose and Activities	Number of students/teachers participated under MoUs
NIL			

Additional Rows may be added as required.

Note: Please enclose the list of teacher participated in MoUs and communications w.r.t. the activities organized as the outcome of each MoU

27 Extension and outreach programmes conducted in collaboration with Goverment and / or Non- Government Organisations, Community, NSS/NCC/Red cross/Youth Red Cross (YRC), Unnat Bharat Abhiyan (UBA) etc., :

Title of the Activity	Organising unit/ agency/ collaborating agency	Name(s) of the teacher(s) coordinating the activity	Names of the students participated in such activities	Date(s) of the activity	Photograph
			Mohd Rahil		

1 (T) ARTY BTY MANUU NCC SUB UNIT HYDERABAD GROUP	India G20	Abdul Mujeeb	Ather Ali Md Abdul Rab Barkat Hussain Mokarram Hussan Zamima Batool Shifa Raza Mohtasham Hussain Abdur Rakib Mushfique Alam Safiha Intekhab Mahejabeen Khatoon Shaista Parween Arfana Bakshi Sufiya Parween Shagufta Naz Yaqoob	13/05/2023	NCC IMJ.pdf

Note: *Please enclose the copies of the relevant circulars/certificates/photograph/communications/report of the event and list of participants.*

28 Awards and recognitions received for extension activities from Government and other Government recognized Agencies/Organizations :

Name of the Activity	Title of the Award/recognition	Awarding Agency	Award received for Students/Teacher/Institution	Name of the Student/Teacher
NIL				

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant certificates/award/photograph receiving the award.*

29 Number of capability enhancement and development Programs organised such as Soft skill development, Remedial coaching, Bridge courses, Yoga, Meditation, Professional/Career Counseling etc.

Name of the capability enhancement programs/activity	Date of implementation	Number of Students enrolled	Agencies involved (if any)/University Placement Cell
Bridge Course for MCA	2023-2024 Odd Semester	14	Department of CS&IT
Discoveria - 7 Days of Domain Discovery	15th - 21st May 2023	96 Registrations	Department of CS&IT
DSA & CP	15th May 2023	100+ Attended	Department of CS&IT
AI, ML & Data Science	16th May 2023	61	Department of CS&IT
Web Dev & UI/UX	17th May 2023	35	Department of CS&IT
DevOps, Cloud & Open Source	18th May 2023	20	Department of CS&IT
App Dev & AR/VR Dev	19th May 2023	25	Department of CS&IT
Blockchain and Web3.0	21st May 2023	30	Department of CS&IT
Meme Competition	Started from 22nd May 2023	Currently Open	Department of CS&IT

Additional Rows may be added as required.

Note: *Please enclose the copies of the relevant circulars/certificates/photograph/communications and list of participants.*

30	Provide details of redressal of grievances, prevention of sexual harassment and ragging etc. (Provide details in 500-1000 words covering grievance readressal committee constitution, Total grievances received, Total grievances redresed, Average number of days for grievance redressal etc.)

Total grievances received	Number of grievances redressed	Average number of days for grievance redressal
NIL		

Additional Rows may be added as required.

Note: Please attach the minutes of the redressal of grievances, prevention of sexual harassment and ragging committee.

31	Number of professional development / administrative training programmes organized by the Department for teaching and non-teaching staff :

Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from) (DD-MM-YYYY)	Dates (to) (DD-MM-YYYY)	Number of participants	Name of the resourse Person(s)
NIL					

Additional Rows may be added as required.

Note: *please provide the details of circular/certificates/photographs and list of participants.*

32	Provide Details of Technology up-gradation in the Department (number of Computers/Peripherals, Smart Boards, LCD, Projectors, Software procured, wifi bandwidth available etc.) :

Name of the Item	Total number of Quantity	Added during the year
Computer Monitors	14	2023-2024

Additional Rows may be added as required.

33	Students qualifying in state/ national/ international level examinations (e.g. NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services):

Name of Examination (NET/SET/SLET/GATE/GMAT/ CAT/GRE/TOFEL/Civil Services/State Government Services etc)	Name of the Student	selected/ qualifying	Registration number/roll number for the appreared examination	Documentary proof (e.g: admit card, score card etc.)
GATE 2024 CS & IT	Ali Abubakar	Qualified	CS24S51501129	https://drive.google.com/file/d/1Am_CfPP2haTNbWrvtAo8LuVY1SAbjrqF/view?usp=sharing
GATE 2024 CS & IT	Md Shakir Hussain	Qualified	CS24S61501137	https://drive.google.com/file/d/1kyYZ6yburuz5URJXCWQ-MTAScwVbqO-v/view?usp=sharing
GATE 2024 CS & IT	Mohd Ahmad	Qualified	CS24S51503724	https://drive.google.com/file/d/1N46XHRgcKm4eRDJ8D6_1aF2s2NCEMtf8/view?usp=sharing

GATE 2024 Data Science & Artificial Intelligence (DA)	Md Shakir Hussain	Qualified	DA24S11501331	**https://drive.google.com/file/d/1XmkyOY3mrn5m5q3KD8AY16pkt1pskemH/view?usp=sharing**
GATE 2024 CS & IT	Mohammad Arfeen	Qualified	TL01631328	**https://drive.google.com/file/d/1N88-QY0CiaoUkX7Sf_nHtHX6-a-NN2Ha/view?usp=sharing**
NET 2023 CS&IT	Nadiya Zafar	Qualified	TL01631329	**https://drive.google.com/file/d/13oKu8PgHJk7AAEiM_q-p-tUfpgYO5y_j/view?usp=sharing**
TOEFL	Alisha Raza	Qualified	1648409238937764	**https://drive.google.com/file/d/1KRNZRo0zXboaYXSfO0Sfw2pa6Ly79BaZ/view?usp=sharing**
GRE	Alisha Raza	Qualified	2478474	**https://drive.google.com/file/d/1NwiC4IB59B50FxlPpFtq8M7ACJvZWWy1/view?usp=sharing**
NET JRF	Amir Khan	Qualified	230510092183	**https://drive.google.com/file/d/1HBlNt7KG7aMAqwM0_sMrTslWIF4MC72u/view?usp=sharing**
NET 2024	Sobiya Arsheen	Qualified	MR18002063	**https://drive.google.com/file/d/1se6RTqITj5ubbRqzOZmkHN_Vvm3YbEYx/view?usp=sharing**

Additional Rows may be added as required.

Note: *Please provide documentary proof (e.g: admit card, score card etc.)*

34 **Student Progression to higher education (Vertical Mobility of Students from UG to PG, and from PG to PhD):**

Name of the Student	**Qualifying Programme (e.g: B.A., B.Sc., B.Ed, B.Tech, MBA,M.Sc,M.Ed., M.A. etc.)**	**Admited Programme(e.g: M.Tech.,MBA,M.Sc,M.Ed., M.A.,Ph.D. etc)**	**Name of the Institution/University in which the Student is admitted(Includes students admitted our own university)**	**Documentary proof student id card**
Gulam Mazid	B.Tech	M.Tech	M.Tech, JNU New Delhi	
Md Dilwar Alam	B.Tech	M.Tech	M.E(CSE) Panjab University Chandigarh	
MD AHSAN ASHFAQUE	B.Tech	M.Tech	M.E(CSE) Panjab University Chandigarh	
Tahreem Tarique	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1YIdluGHhEahQkFjgsWWVUQ311nuv5Cg6/view?usp=shari
Ataliya Arfeen	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1H10tIxrXE2CNbGWLQEBWYmTlo0hzHg1m/view?usp=sharing

Nayab Gul	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	
Nahid Chaudhary	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1Bt1-aVY_XDXbborLX0d9TLxEf9AaZLml/view?usp=sharing
Asfiya Siddiqui	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	
MD AHMAD REZA	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1HvPDbXLNPXVEvWCYtERgGmx2b5pU0YOO/view?usp=sharing
Shabnam Khatoon	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1HI7HLnPiutDAYeBbeN4ZzZHMfgQ70LUa/view?usp=sharing
Syed Muzakkir Reza Sabri	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1D5uIO9D8eVLEH6e1MS9nwGxeX3RXlqUS/view?usp=sharing
Sayyeda Shahnaz	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1YIdluGHhEahQkFjgsWWVUQ311nuv5Cg6/view?usp=sharing
Mohd Azeem	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	
Mohammad Hozaifa	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/1JASEgGfhJ_LyAUkLwFGKNSlkPbavzql_/view?usp=sharing
Sumaiya Qaisar	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	
Adil Masood	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	https://drive.google.com/file/d/15hkkUFPdx-S2Ycbmc3mgH3ZJe451XDHc/view?usp=sharing
Mohd Sajid Khan	B.Tech	M.Tech	M.Tech, MANUU Hyderabad	

Additional Rows may be added as required.

Note: *Please provide documentary proof (student id card, admission slip, certificate etc.)*

35	**Details of the Placements of Students during 2023-24 academic year**

Name of the Scholar/Student	**Highest Programme pursued in MANUU**	**Name and address of the Institution/Company joined**	**Salary Package per Annam (**INR)	**Placement through Campus or Off- Campus mode**
Abdul Malik	B.Tech in CS	Winfo Solutions	4,00,000	Off Campus
Md Asif	B.Tech in CS	Celebal Technology	5,00,000	Off Campus
Mo Juned	B.Tech in CS	AVI Software	4,00,000	Off Campus
Mohamad Faridul Hassan	B.Tech in CS	Deloitte	4,50,000	Off Campus
Khan Imran	B.Tech in CS	TCS	4,00,000	Off Campus
Mohammad Anas	B.Tech in CS	GOOGLE OPERATION CENTRE	5,31,000	Off Campus
Md Azam Ali	B.Tech in CS	TCS	4,00,000	Off Campus
Saud Aslam	B.Tech in CS	Deloitte	4,50,000	Off Campus

Mohamed Anas VT	M.Tech in CS	Highlevel	6,00,000	Off Campus
Md Ahteshamul Haque	B.Tech in CS	BPSC HIGH SCHOOL TEACHER	6,00,000	Off Campus
MOHD KASIM	B.Tech in CS	Innovantage	4,50,000	Off Campus
Lal Mohammad	B.Tech in CS	Tech Mahindra	6,00,000	Off Campus
Muhammad Zaid	B.Tech in CS	TCS	3,36,877	Off Campus
MD RASHEDIN	B.Tech in CS	Master Works Software Pvt Ltd and Tru Projects Hyderabad based Company	4,00,000	On Campus
Md Shahab Musharaf	B.Tech in CS	Master Works Software Pvt Ltd and Tru Projects Hyderabad based Company	4,00,000	On Campus
Md Abdul Rahman	B.Tech in CS	Master Works Software Pvt Ltd	4,00,000	On Campus
TAUQEER SAYEED	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MD FAIZUR RAHMAN	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MOHAMMAD ASAD	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MEHRUN NISA	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MOHD SHAHID	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MD GULAB	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MD FAIZUR RAHMAN	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
MD SHAHIM YAWAR ALI ANSA	B.Tech in CS	Tru Projects Hyderabad based Company	2,00,000-300,000	On Campus
Tarique Khan	M.Tech in CS	Lords Institute of Engineering and Technology	4,20,000	Off Campus
Md Dilshad	M.Tech in CS	Mallareddy Institute of Technology and Science	4,20,000	Off Campus
Md Naushad	M.Tech in CS	CMR college of Engineering and Technology	4,20,000	Off Campus
Saheen Fatma	M.Tech in CS	CMR college of Engineering and Technology	4,20,000	Off Campus
Aqeel Haider Shams	M.Tech in CS	Lords Institute of Engineering and Technology	4,00,000	Off Campus
Ashiquee Hussain	M.Tech in CS	Lords Institute of Engineering and Technology	4,00,000	Off Campus
Md Ahmad Raza	M.Tech in CS	MANUU	6,00,000	Off Campus
Md Nadeem Noori	M.Tech in CS	MANUU	6,00,000	Off Campus
MD AATIF ARSALAN	MCA	Genpact	2,50,000	Off Campus
Additional Rows may be added as required.				
Note: Please provide some evidence of joining, such as, Offer Letter/Appointment Order/ copy of Employer ID Card etc.		**https://drive.google.com/drive/folders/17POf7c6na3wGFfeZ0OYhI0g5OFDYNtfE?usp=drive_link**		

36 **Details of participation in Sports/Extracurricular/Outreach activities by Scholars/Students :**

Name of the Scholar/ Student	**Roll Number of the Student**	**Programme Pursuing**	**Name of the Sport / Cultural/ Outreach Activity**	**Level: International/ National/ State/ University**	**Name of the Award/Recognition & Awarding Organisation**	
2K RUN 2023						
Fatma siddique		B.tech	Kabaddi, cricket, throw ball, running, drama ,kho kho	University	Trophy and Medal	
Neda Praween		Btech	Running	University	MANUU	
KHO-KHO						
Rafiya Sanowar	22BTCS034HY	B.tech	Kabaddi, cricket, throw ball, running, drama ,kho kho	University	Trophy and Medal	
KABADDI						
Taskeen Nasim		M.Tech	Kabaddi	University	University	
Fatma siddique		B.tech	Kabaddi	University	Trophy and Medal	

CRICKET					
Ashad Jamal	21BTCS059HY	B.Tech	Cricket	University	Inter Boys hostel sports competition 2024
Md Mudassir Raza	22btcs053hy	B.tech	Cricket	University	Trophy and Medal
MD TABREJ QUMAR	23BTCS061HY	M.Tech	Cricket	University	University
MD HASSAN	22BTCS012HY	B.TECH. (Computer Science)	Cricket	1. University Level, 2. District Level	1. Association of Indian University, 2. Government of Bihar
Md Shadab Ghazi	23BTCS061HY	Btech	Cricket	University	MANUU
Md Mohibullah	21btcs038hy	Btech computer science	Cricket	University	Runner
BATMINTON					
Shot-Put					
Table Tennis					
Taskeen Nasim		M.Tech	Volleyball	University	University
Chess					
Javelin Throw					
Neda Praween		Btech	Throwball	University	MANUU
Fatma siddique		B.tech	Throwball	University	Trophy and Medal
Volleyball					
Umme Kulsoom	23MMCA008HY	MCA	Volleyball	University	Inter- Girls Hostels competiton 2024
Taskeen Nasim		M.Tech	Volleyball	University	University
Mohd Rahil	21BTCS048HY	B.tech	Volleyball University & (South zone)	University level (South zone)	State level participation cirtificate
Mohd Sameer	22BTCS021HY	B.TECH(CS)	VOLLEYBALL	UNIVERSITY	Provost of Boys Hostel's
Football					
Wight Lifting					
Ali Abu Bakar		B.Tech		University	
Md Gulab		B.Tech		University	

Additional Rows may be added as required.
***Note:** please provide the details of circular and list of participants/photographs/certificate of the event /award/recognition recieved.*

https://drive.google.com/drive/folders/1dq6aSdzukvyGD-EIAJihoLTeYOX3Z_nU?usp=drive_link

Deatils of the Publications

37 Details of Research Publication of the Teachers/Scholars/Students the last Academic year based on average citation index in UGC-CARE list/ Scopus/ Web of Science or PubMed/ Indian Citation Index

Name of the Author(s)	Title of the paper	Name of the journal	volume	issue no	Publication date	Name of the Publisher	Citation Index	Institutional affiliation as mentioned in the publication	Number of Citations excluding self citations	h-index	Is the Publication in the UGC CARE Listed Journals	Provide Link to the Journal

Yasir Altaf, Abdul Wahid	Evaluation of Dilated CNN for Hand Gesture Classification	2023 International Conference on Advances in Intelligent Computing and Applications (AICAPS)	NIL	NIL	2023/2/1	IEEE					IEEE	https://ieeexplore.ieee.org/document/10074389/authors#authors
Geeta Pattun, Pradeep Kumar	Emotion Classification using Generative Pre-trained Embedding and Machine Learning	2023 IEEE International Conference on Machine Learning and Applied Network Technologies (ICMLANT).	NIL	NIL	2023/12/14	IEEE					IEEE	https://ieeexplore.ieee.org/document/10372980
Mohd Aquib, Mohd Aslam, Mohammad Hasan Shahid	Bounds on Ricci curvature for doubly warped products pointwise bi-slant submanifolds and applications to Physics	Filomat	37	2	30/06/2023	Filomat	0.988	Jamia Millia Islamia			Yes	https://doi.org/10.2298/FIL2302505A
Naiyar Iqbal, Pradeep Kumar	Recent developments in soft computing based feature selection and disease classification	Suranaree Journal of Science and Technology	30	2	13/04/2023			Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India	0		Yes	https://jrd.sut.ac.th/journal/sjst/#/los/manuscript/25386
Faroza Shamsheem, Arundhathi Tunga, Khaleda Afroaz	Prediction of ncRNA from RNA-Seq Data using Machine Learning Techniques	International journal of bioinformatics research and applications			2023 and Inderscience Publishers	Inderscience Publishers	0.7	Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijbra
Syed Immamul Ansarullah, Syed Mohsin Saif, Syed Abdul Basit Andrabi, Sajadul Hassan Kumhar, Mudasir M Kirmani, Pradeep Kumar	An Intelligent and Reliable Hyperparameter Optimization Machine Learning Model for Early Heart Disease Assessment Using Imperative Risk Attributes.	Journal of healthcare engineering			12/04/2022, Vol-2022			Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India	13		Yes	https://doi.org/10.1155/2022/9882288
Khaleel Ahmad, Halimjon Khujamatov, Amir Lazarev, Nargiza Usmanova, Mona Alduailij, Mai Alduailij	Internet of Things-Aided Intelligent Transport Systems in Smart Cities: Challenges, Opportunities, and Future	Wireless Communications and Mobile Computing			13/04/2023, Wiley & Hindawi	Wiley & Hindawi		Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://www.hindawi.com/journals/wcmc/2023/7989079/
Ahmed, J., Ahmed, Muqeem.	MAPNEWS: A Framework for Aggregating and Organizing Online News Articles	nternational Arab Journal of Information Technologythis link is disabled, 2023, 20(3), pp. 376–386						Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://iajit.org/paper/4806/MAPNEWS-A-Framework-for-Aggregating-and-Organizing-Online-News-Articles
Ahmed, J., Ahmed, Muqeem.	Classification, detection and sentiment analysis using machine learning over next generation communication platforms	Microprocessors and Microsystemsthis link is disabled, 2023, 98, 104795						Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://www.sciencedirect.com/science/article/abs/pii/S0141933123000418
Khatoon, P.S., Ahmed, Muqeem	Design and development of dynamic Agri-ontology for IoT interoperability	International Journal of Communication Systemsthis link is disabled, 2023						Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.5516
Khatoon, P.S., Ahmed, M.	Importance of semantic interoperability in smart agriculture systems	Volume 3 and issue 5						Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India	2		Yes	https://onlinelibrary.wiley.com/doi/abs/10.1002/ett.4448
Syed Imtiyaz Hassan	Maadri Zaban Urdu-Kal Aaj aur Kal: Ek Shumaryaati Tazjiya	Urdu Duniya, National Council for Promotion of Urdu Language, vol. 25			5/5/2023						Yes	https://www.urducouncil.nic.in/readbook
Iqbal, N., & Kumar, P.	Recent developments in soft computing based feature selection and disease classification.	Recent developments in soft computing based feature selection and disease classification.			2023 30(2). (e-ISSN: 0858-849X) (Web of Science- ESCI, Scopus, UGC-CARE)							https://openurl.ebsco.com/EPDB%3Agcd%3A5%3A19039093/detailv2?sid=ebsco%3Aplink%3Ascholar&id=ebsco%3Agcd%3A163357607&crl=f

Sobiya Arsheen	Hyperledger Fabric Enabled Vaccine Intelligent Network To Implement Immunization Program	2023 IEEE 12th International Conference on Communication Systems and Network Technologies (CSNT)			08.03.2023 IEEE				23			https://ieeexplore.ieee.org/abstract/document/10134692
Sobiya Arsheen	ImmuneChain: A Blockchain-Based Secured Immunization Framework	TRANSACTIONS ON INTERNET AND INFORMATION SYSTEMS VOL. 3, NO. 6			KSII (Communicated)							Communicated
Sobiya Arsheen	BLOCKCHAIN-BASED VACCINE SUPPLY CHAIN: A SECURED AND TRACEABLE SOLUTION	International Journal of Information Technology			(Communicated)							Communicated
Sobiya Arsheen	ImmuneChain: A blockchain-based immunization framework with robust security and reliability	SN Computer Science			Communicated							https://link.springer.com/journal/42979
Mohamed Anas VT, Mohd Omar, Jameel Ahamad, Khaleel Ahmad, Mohd Anas Khan	Deep Learning-Based Speed Breaker Detection	SN Computer Science, 5			2024/5/22, Springer		849	Maulana Azad National Urdu University			Yes	https://link.springer.com/article/10.1007/s42979-024-02891-5
Tayyab Khan, Karan Singh, Mohd Shariq, Khaleel Ahmad, KS Savita, Ali Ahmadian, Soheil Salahshour, Mauro Conti	An efficient trust-based decision-making approach for WSNs: Machine learning oriented approach	Computer Communications, 209			September 2023, Elsevier		849	Maulana Azad National Urdu University			Yes	https://doi.org/10.1016/j.comcom.2023.06.014
Khaleel Ahmad, Muneera Fathima, Md Sharif Hossen, Jameel Ahamed, Khairol Amali Bin Ahmad	Opportunistic Networks: An Empirical Research of Routing Protocols and Mobility Models	SN Computer Science, 4			28 August 2023, Springer		849	Maulana Azad National Urdu University			Yes	https://link.springer.com/article/10.1007/s42979-023-02054-y
Khaleel Ahmad, Halimjon Khujamatov, Amir Lazarev, Nargiza Usmanova, Mona Alduailij, Mai Alduailij	Internet of Things-Aided Intelligent Transport Systems in Smart Cities: Challenges, Opportunities, and Future	Wireless Communications and Mobile Computing			2023/4/13, wiley & Hindawi		849	Maulana Azad National Urdu University			Yes	https://onlinelibrary.wiley.com/doi/full/10.1155/2023/7989079
Khaleel Ahmad, Laura Emilia Maria Ricci, Fabrizio Baiardi, Sobiya Arsheen	Hyperledger Fabric Enabled Vaccine Intelligent Network to Implement Immunization Program	2023 IEEE 12th International Conference on Communication Systems and Network Technologies (CSNT)			2023/4/8, IEEE		849	Department of Computer Science and Information Technology, Maulana Azad National Urdu University, India				https://ieeexplore.ieee.org/abstract/document/10134692
Mohd Omar	Evaluating the Efficacy of Computer Vision in Predicting and Detecting Road Damage for Intelligent Transport Systems	International Journal of Intelligent Systems and Applications in Engineering, IJISAE, 2024, 12(3), 2553–2562			13/03/2024		1.3	Department of Computer Science and Information Technology, Maulana Azad National Urdu University			Yes	https://ijisae.org/index.php/IJISAE
Mohd Omar	PD-ITS: Pothole Detection Using YOLO Variants for Intelligent Transport System	SN Computer Science, 5:552			16th May 2024, SN Computer Science		5.6	Department of Computer Science and Information Technology, Maulana Azad National Urdu University, Hyderabad, India			Yes	https://link.springer.com/journal/42979
Nusrath Fathima, Pradeep Kumar	Multi-Class Classification of Brain Tumours: Leveraging VGG, InceptionV3, and DenseNet201 Transfer Learning	2024 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS)			April 2024		-	Department of Computer Science & Information Technology, Maulana Azad National Urdu University				https://ieeexplore.ieee.org/xpl/conhome/10481805/proceeding
Mohammad Islam, Danish Quamar	Machine Learning for Cardiovascular Disease Risk Assessment: A Systematic Review	International Journal on Recent and Innovation Trends in Computing and Communication			May 2023		5854	Department of Computer Science & Information Technology, Maulana Azad National Urdu University			Yes	https://doi.org/10.17762/ijritcc.v11i5s.7112
Jameel Ahamed, Md Nadeem Noori, Mumtaz Ahmed	Matrix Factorization and Cosine Similarity based Recommendation system for cold start Problem in e-commerce Industries	International Journal of Computing and Digital Systems , 14/1			2024/2/1			Department of Computer Science & Information Technology, Maulana Azad National Urdu University			Yes	http://dx.doi.org/10.12785/ijeds/150156

Khaleel Ahmad, Muneera Fathima, Md Sharif Hossen, Jameel Ahamed, Khairol Amali Bin Ahmad	Opportunistic Networks: An Empirical Research of Routing Protocols and Mobility Models	SN Computer Science , 4/5			2023/8/28			Department of Computer Science & Information Technology, Maulana Azad National Urdu University			Yes	https://doi.org/10.21203/rs.3.rs-1902761/v1
Shaheen Fatima, Jameel Ahamed	Data Aggregation Techniques and Challenges in the Internet of Things: A Comprehensive Review	Proceedings of the Eighth International Conference on Research in Intelligent Computing in Engineering , 38			Dec 2023			Department of Computer Science & Information Technology, Maulana Azad National Urdu University				10.15439/2023R20
Nadiya Zafar, Ashish Khanna, Shaily Jain, Zeeshan Ali, Jameel Ahamed	Safeguarding IoT: Harnessing Practical Byzantine Fault Tolerance for Robust Security	International Conference on Data Analytics & Management , 1			2024/2/14			Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India				https://www.researchgate.net/publication/377393285_Safeguarding_IoT_Harnessing_Practical_Byzantine_Fault_Tolerance_for_Robust_Security
Jameel Ahamed, Roohie Naaz Mir, Mohammad Ahsan Chishti	Towards unification of IoT and ML for diseases diagnosis and predictive analytics	AIP Conference Proceedings , Volume 2919, Issue 1			25 March 2024			Department of Computer Science & Information Technology, Maulana Azad National Urdu University				https://doi.org/10.1063/5.0184360
Imtiaz Ahmed, Gousia Habib, Jameel Ahamed, Pramod Kumar	Developing a Smart Device for the Manufacture of Healthcare Products for Patients Using the Internet of Things	Exploration of Artificial Intelligence and Blockchain Technology in Smart and Secure Healthcare , Volume 7/ 127-151			2024/3/27			Department of CSE, NIT Srinagar, India				https://www.researchgate.net/publication/379397599_Developing_a_Smart_Device_for_the_Manufacture_of_Healthcare_Products_for_Patients_Using_the_Internet_of_Things
Gousia Habib, Ishfaq Ahmed Malik, Jameel Ahmad, Imtiaz Ahmed, Shaima Qureshi	Exploring the Efficacy of Group-Normalization in Deep Learning Models for Alzheimer's Disease Classification	arXiv preprint arXiv:2404.00946			2024/4/1			MANNU University Hyderabad, India				https://arxiv.org/abs/2404.00946
Yasir Altaf, Abdul Wahid, Mudasir Manzoor Kirmani	Deep Learning Approach for Sign Language Recognition Using DenseNet201 with Transfer Learning	2023 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS)			2023/2/18							https://ieeexplore.ieee.org/document/10063044
Mohammad Islam, Abdul Wahid, Pradeep Kumar	Understanding Intellectual Disability and Genetics with AI Perspective: A Text Mining Approach	2023 IEEE International Conference on Machine Learning and Applied Network Technologies (ICMLANT)			2023/12/14							https://www.researchgate.net/publication/377073072_Understanding_Intellectual_Disability_and_Genetics_with_AI_Perspective_A_Text_Mining_Approach
Md Asif Jamal, Pradeep Kumar	Spam Email Image Detection Using Convolution Neural Network and Convolutional Block Attention Module	International Conference on Artificial Intelligence on Textile and Apparel			2023/8/11							https://link.springer.com/chapter/10.1007/978-981-99-8479-4_1
Pradeep Kumar*, Abdul Wahid, Venkatesh Naganathan	Machine Learning Approaches for Text Mining and Spam E-mail Filtering: Industry 4.0 Perspective	10.2174/978981513674612301000 5			2023/8							https://www.researchgate.net/publication/373204132_Machine_Learning_Approaches_for_Text_Mining_and_Spam_E-mail_Filtering_Industry_40_Perspective

Naiyar Iqbal, Pradeep Kumar	From Data Science to Bioscience: Emerging era of bioinformatics applications, tools and challenges	Procedia Computer Science			2023/1/1							https://www.researchgate.net/publication/367595209_From_Data_Science_to_Bioscience_Emerging_era_of_bioinformatics_applications_tools_and_challenges
Khushter Kaifi, Nafisur Rahman, Md Tabrez Nafis, Syed Imtiyaz Hassan	Early spotting of Parkinson's illness using machine learning techniques	AIP Conference Proceedings , Volume 2919, Issue 1			2024/5/2							https://pubs.aip.org/aip/acp/article-abstract/3107/1/050019/3287915/Early-spotting-of-Parkinson-s-illness-using?redirectedFrom=PDF
S Idrees, MA Adnan, T Khan, U Khalil, S Hassan, H Shahid	IMPACT OF NASOALVEOLAR MOLDING ON MAXILLARY ARCH DIMENSIONS AND MALOCCLUSION CHARACTERISTICS IN PEDIATRIC PATIENTS WITH CLEFT LIP AND PALATE DURING PRIMARY DENTITION	Biological and Clinical Sciences Research Journal			2023							https://www.researchgate.net/publication/373213470_IMPACT_OF_NASOALVEOLAR_MOLDING_ON_MAXILLARY_ARCH_DIMENSIONS_AND_MALOCCLUSION_CHARACTERISTICS_IN_PEDIATRIC_PATIENTS_WITH_CLEFT_LIP_AND_PALATE_DURING_PRIMARY_DENTITION
Khushter Kaifi, Nafisur Rahman, Md Tabrez Nafis, Syed Imtiyaz Hassan	Early spotting of Parkinson's illness using machine learning techniques	AIP Conference Proceedings , Volume 2919, Issue 1										https://pubs.aip.org/aip/acp/article-abstract/3107/1/050019/3287915/Early-spotting-of-Parkinson-s-illness-using?redirectedFrom=PDF
Tayyab Khan, Karan Singh, Khaleel Ahmad, Khairol Amali Bin Ahmad	A secure and dependable trust assessment (SDTS) scheme for industrial communication networks	Scientific Reports, Nature			2023/2/2							https://www.researchgate.net/publication/362935899_A_Secure_and_Dependable_Trust_Assessment_SDTS_Scheme_for_Industrial_Communication_Networks_Analytical_Approach
Fayaz Naikoo, Khaleel Ahmad, Khairol Amali Bin Ahmad	Anonymity-Enabled Mix Network: Owing to Techniques and Proof of correctness	IEEE			2023/2							https://www.researchgate.net/publication/368403344_Anonymity-Enabled_Mix_Network_Owing_to_Techniques_and_Proof_of_correctness
Md Anjar Ahsan, Khaleel Ahmad, Jameel Ahamed, Mohd Omar, Khairol Amali Bin Ahmad	PAPQ: Predictive analytics of product quality in industry 4.0	Sustainable Operations and Computers			2023/1/1							https://www.sciencedirect.com/science/article/pii/S2666412723000016
Singh Damandeep, Habib Dr. Gausia, Ahamed Dr. Jameel, Lall Prof. Brejesh	Low cost UAV Detection using Visual Modality with Android Devices or Surveillance Cameras				2024/7/5							https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=0DhTHaEAAAAJ&citation_for_view=0DhTHaEAAAAJ:L8Ckcad2t8MC

Jameel Ahamed, Roohie Naaz Mir, Mohammad Ahsan Chishti	Towards unification of IoT and ML for diseases diagnosis and predictive analytics	AIP Conference Proceedings			2024/3/25							https://pubs.aip.org/aip/acp/article-abstract/2919/1/100001/3278982/Towards-unification-of-IoT-and-ML-for-diseases?redirectedFrom=fulltext
Mumtaz Ahmed, Neda Afreen, Muneeb Ahmed, Mustafa Sameer, Jameel Ahamed	An inception V3 approach for malware classification using machine learning and transfer learning	International Journal of Intelligent Networks			2023/1/1							https://www.sciencedirect.com/science/article/pii/S2666603022000252
Md Gulzar, Muqeem Ahmed	Chronic Disease Management using Semantic Web Technologies	2023 10th International Conference on Computing for Sustainable Global Development (INDIACom)			2023/3/15							https://ieeexplore.ieee.org/document/10112436
Naushad Alam, Muqeem Ahmed	Zero-day Network Intrusion Detection using Machine Learning Approach				2023							https://www.researchgate.net/publication/374128048_Zero-day_Network_Intrusion_Detection_using_Machine_Learning_Approach
Naiyar Iqbal, Aditya Bhardwaj	Decoding SARS-CoV-2 Variants: An in-silico approach to RNA-Seq feature extraction using K-mers and N-grams	2024 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS).			2024/4/2							https://www.researchgate.net/publication/379523579_Decoding_SARS-CoV-2_Variants_An_in-silico_approach_to_RNA-Seq_feature_extraction_using_K-mers_and_N-grams
Aatif Jamal, Mohatesham Pasha Quadri, Mohd Rafeeq	Data Quality Optimization for Decision Making using Ataccama Toolkit: A Sustainable Perspective	2023 International Journal on Recent and Innovation Trends in Computing and Communication (IJRITCC)	11	8	2023/8/1	Auricle Global Society of Education and Research		Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			Scopus Indexed	https://ijritcc.org/index.php/ijritcc/article/view/7947/6472
Mohd Rafeeq, Mohatesham Pasha Quadri	انڈسٹری 4.0 ٹیکنالوجیز کی تعیین: نظریہ استحکام	Tahzeeb-ul-Akhlaq, Aligarh Muslim University	42	7	2023/7/1	Tahzeeb-ul-Akhlaq, Aligarh Muslim University		Department of CS&IT, Maulana Azad National Urdu University, Hyderabad, India			YES	https://api.amu.ac.in/storage//file/10164/file_management/1690864481.pdf

Additional Rows may be added as required.

Note: Provide copies of the publication if access is only to print copies. For those having online access may provide the link to the Journal/publication

38 Books and Chapters in edited Volumes / Books published / papers in National/International Conference Proceedings by the Teachers/scholars/students :

Name of the Author(s)/Editor(s)	Title of the book/edited book	Title of the chapter	Title of the paper published in *Conference Proceeding*	Title and details of the translated work published	ISBN/ISSN No.	Provide the Link of publication
Mohd. Yousuf, Abdul Wahid, Mohammed Yousuf Khan			Enhancing E-learning Interactivity with Haar Cascade User Detection.	NIL		
Naiyar Iqbal, Pradeep Kumar			From Data Science to Bioscience: Emerging era of bioinformatics applications, tools and challenges	NIL	1877-0509	https://doi.org/10.1016/j.procs.2023.01.130
Tunga Arundhathi			Ensemble approach for the genome study and analysis of the genetic data using Machine Learning. International Science Conference-2023 at MANUU	NIL		https://drive.google.com/file/d/1f-KW8n6KGxPBjz84ghk8OZgUV1z3pV1e/view?usp=sharing
Khaleel Ahmad, Laura Emilia Maria Ricci, Fabrizio Baiardi, Sobiya Arsheen			Hyperledger Fabric Enabled Vaccine Intelligent Network to Implement Immunization Program. 2023 IEEE 12th International Conference on Communication Systems and Network Technologies (CSNT)	NIL	978-1-6654-6261-7	https://ieeexplore.ieee.org/document/10134692

Gulzar, M., Ahmed, Muqeem.			Chronic Disease Management using Semantic Web Technologies Proceedings of the 17th INDIACom; 2023 10th International Conference on Computing for Sustainable Global Development, INDIACom 2023, 2023, pp. 1629–1633	NIL	978-93-80544-47-2	https://ieeexplore.ieee.org/abstract/document/10112436
Dr. Manorama Kumari Talla	Book Publication on "Construction Quality Management" , Issue date: 06/06/2023			NIL	978-93-95944-74-8	https://drive.google.com/file/d/1DajKPtr81FwemobXPzCKQ0BKGusm_jOs/view?usp=sharing
Md Nadeem Ahmed, Gurpeet Singh, Parveen Badoni,Ranjan Walia, Parvez Rahi, Ahmad Talha Siddiqui			Computing for Sustainable Global Development. 17th INDIACom; 2023 10th International Conference on Computing for Sustainable Global Development, INDIACom 2023, 2023, pp.244-250	NIL	978-1-6654-7703-1	https://www.proceedings.com/content/068/068812webtoc.pdf
Prof. Abdul Wahid			Deep Learning Approach for Sign Language Recognition using DenseNet201 with Transfer Learning. IEEE International Conference on Advances in Intelligent Computing and Applications (AICAPS-2023)	NIL	979-8-3503-9874-8	https://ieeexplore.ieee.org/document/10063044
Prof. Abdul Wahid			Evaluation of Dilated CNN for Hand Gestures Classification 8th IEEE International Students Conference on Electrical, Electronics and Computer Sciences 2023,	NIL	979-8-3503-3381-7	https://ieeexplore.ieee.org/document/10074389
Iqbal, N., & Kumar, P.			Recent developments in soft computing based feature selection and disease classification. 2023 30(2). (e-ISSN: 0858-849X) (Web of Science- ESCI, Scopus, UGC-CARE)	NIL	0858-849X	https://ird.sut.ac.th/journal/sjst/#/los/manuscript/25386

Additional Rows may be added as required.

Note: Please provide documentary proof (e.g.: copy of the index page, cover page or link to the confrence proceedings/e-books/e-resources etc.)

39 Details of Participation of the Teachers/Scholars/Students in Conferences, Seminars, Workshops etc. :

Name of the Participant	Programme pursuing (In case of student/Scholar)	Name of the Conference/ Seminar/ Workshop attended	Organiser and Date & Venue	Participated as paper presenter/poster presenter/participant/others(specify)	Title of the Paper/Poster presented	Details of Sponsership/funding/grant recieved (if any)
Dr. Syed Imtiyaz Hassan	Faculty	National Conference on Sustainable Solutions for Community Services through Engineering	KL Deemed to be University	Presenter	Contextualizing sustainable solutions for rural development	No Funding
Dr. Khaleel Ahmad	Faculty	12 IEEE International Conference on Communication Systems and Network Technologies (CSNT-2023)	Technocrats Institute of Technology (Excellence) Bhopal, 8-9 April 2024	Presenter	Hyperledger Fabric Enabled Vaccine Intelligent Network to Implement Immunization Program	No Funding
Dr. Muqeem Ahmed	Faculty	4th International Conference on ICT for Digital, Smart and Sustainable Development	Department of Computer Science and Engineering, School of Engineering Science and Technology, Jamia Hamdard, New Delhi and April 23-24 , 2024	Presenter	Ensemble Learning for the Prediction of Parkinson's Disease: A Comprehensive Approach	No Funding
Dr. Muqeem Ahmed	Faculty	International Conference on Computation of Artificial Intelligence and Machine Learning	Department of AI & ML , School of Computer Science and Engineering, Manipal University, Jaipur and January 18-19, 2024	Presenter	An Efficient Ontology Based Chronic Disease Diagnosis Model	No Funding
Dr Jameel Ahamed	Faculty	4th International Conference on Data Analytics & Management	London Metropolitan University, London, UK	Presenter	Safeguarding IoT: Harnessing Practical Byzantine Fault Tolerance for Robust Security	

Dr Jameel Ahamed	Faculty	Information System Design & Intelligent Applications	HIVE Pro, Dubai UAE	Presenter	Machine Learning Algorithms for Early Detection of Diabetes: An Indian Perspective	Funding by MANUU
Mr. Mohammad Islam	Faculty	IEEE International Conference on Machine learning and Applied Network Technologies (ICMLANT 2023)	San Salvador, El Salvado, 14-15 December 2023	Presenter	Understanding Intellectual Disability and Genetics with AI Perspective: A Text Mining Approach	
Mr. Mohammad Islam	Faculty	Springer 4th International Conference on Intelligent Systems & Networks	Swinburne Vietnam, Hanoi Location, Vietnam, held on March 23, 2024	Presenter	Machine Learning driven Framework to predict the Intellectual Disability	
Ms. Geeta Pattun	Faculty	IEEE International Conference on Machine learning and Applied Network Technologies (ICMLANT 2023)	San Salvador, El Salvado, 14-15 December 2023	Presenter	Understanding Intellectual Disability and Genetics with AI Perspective: A Text Mining Approach	
Mr. Mohd Omar	Faculty	8th International Conference on Research in Computing in Engineering (RICE 2023)	Department of Computer Science and Information Technology School of Technology Maulana Azad National Urdu University, Hyderabad, India jointly Co-organized by Universidad Don Bosco, El Salvador, CA, and 1 - 2 December 2023	Presenter	Deep Learning-Based Road Potholes Detection using YOLOv8	
Mr. Mohatesham Pasha Quadri	Faculty	8th International Conference on Research in Computing in Engineering (RICE 2023)	Department of Computer Science and Information Technology School of Technology Maulana Azad National Urdu University, Hyderabad, India jointly Co-organized by Universidad Don Bosco, El Salvador, CA, and 1 - 2 December 2023	Presenter/Contributed	Social Platform Chat Analysis - A Review on Tools, Techniques, Challenges and Future Direction	No Funding
Mr. Mohatesham Pasha Quadri	Faculty	International Conference on Innovative Computing and Communication (ICICC-2024)	Shaheed Sukhdev College of Business Studies, University of Delhi, New Delhi, India in association with the NIT Patna, India and the University of Valladolid, Spain 16th -17th February 2024	Presented	Corpus Based Machine Translation for English to Low Resource Language using OpenNMT	No Funding
Mr. Mohatesham Pasha Quadri	Faculty	International Urdu Science Conference-2024 at MANUU organized by School of Sciences, MANUU	School of Sciences, MANUU Maulana Azad National Urdu University, Hyderabad, India 4th - 5th March 2024	Presenter/Contributed	Progress in Sentiment Analysis on Social Platform	No Funding

Additional Rows may be added as required.

Note: please provide the sanction letter/permission for attending the confrence/seminar/workshop and participation certificate (if any)/registration details.

40 **Patents published/awarded :**

Date of filling the patent	Status of the Patent (Published/awarded Date)	Patent Number	Name of the Applicant(s)
8/23/2019	Grant, 26 May 2023	MY-197138-A	KHAIROL AMALI BIN AHMAD, KHALEEL AHMAD, AHAMED SHAREEF
09/09/2022	Granted, 15 January 2024	499176	1. PROF. RAEES AHMAD KHAN 2. PROF. ABDUL WAHID 3.DR. SUHEL AHMAD KHAN 4. DR. ALKA
12-12-2022	Published 12-1-2024	202341084819 A	Dr. Pandi. Chiranjeevi, Hafsa Ihtesham Uddin Ahmed, Alisha Raza.

Additional Rows may be added as required.

Note: *Please provide documentary proof (e.g: copy the patent filed/published and screenshot of the patent status on IPR website etc.)*

41	Participation of Faculty (Online/face to face) in Training Programmes/Refresher Courses/Orientation Programmes/Workshops/short courses/FDP/PDP etc.

Name of the Faculty	Name of the Programme	Venue	Date of the Programme	duration of the Programme	Level: International/ National/ State/ University	Institutional Support recieved for participation (Financial and /duty leaves)	Link
Dr. Syed Imtiyaz Hassan	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad	4/3/2024 to 13/03/2024	Two Weeks	National	Got Permission	https://drive.google.com/drive/folders/1VYXg71WD1bzsyLla3xS2iOBNMpodf2S-?usp=drive_link
Dr. Khaleel Ahmad	INDUSTRIAL TRAINING FOR FACULTY for Three Weeks conducted from 3rd April, 2023 to 21st April 2023 by Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL), Hyderabad.	Regional Telecom Training Centre, BSNL, Hyderabad. 03 April 2023 to 21 April 2023 Three weeks	03 April 2023 to 21 April 2023	Three Weeks	National	Duty Leave only	
mohd rafeeq	Faculty Development Program on Artificial Intelligence and Quantum Machine Learning (AI & QML)	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY	20/11/2023 to 25/11/2023	one weeks	National	Got Permission	
mohd rafeeq	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 16-20 January, 2024.	16-20 January, 2024.	5 Days	National	Got Permission	
mohd rafeeq	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad	1/2/2024 to 12/02/2024	Two Weeks	National	Got Permission	
Ahmad Talha Siddiqui	INDUSTRIAL TRAINING FOR FACULTY for Three Weeks conducted from 3rd April, 2023 to 21st April 2023 by Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL), Hyderabad.	Regional Telecom Training Centre, BSNL, Hyderabad. 03 April 2023 to 21 April 2023 Three weeks	03 April 2023 to 21 April 2023	Three Weeks	National	Got Permission	
Ahmad Talha Siddiqui	Faculty Development Program on Artifi	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONA	20/11/2023 to 25/11/2023	one weeks	National	Got Permission	
Ahmad Talha Siddiqui	Faculty Development Program on Emer	Department of CS&IT, MANUU	16/01/2024 to 20/01/2024	one weeks	National	Got Permission	
Ahmad Talha Siddiqui	NEP 2020 Orientation & Sensitization Malaviya Mission Teacher Training Pr	UGC - MMTTC, Maulana Azad National Urdu University, Hyd	1/2/2024 to 12/02/2024	Two Weeks	National	Got Permission	
Dr. Khaleel Ahmad	Faculty Development Program on Artificial Intelligence and Quantum Machine Learning (AI & QML)	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 20/11/2023 to 25/11/2023	20/11/2023 to 25/11/2023	One week	National	Got Permission	
Dr. Khaleel Ahmad	Faculty Development Program on Emerging Research Trends in Computer Science	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 16/01/2024 to 20/01/2024	16/01/2024 to 20/01/2024	5 Days	National	Got Permission	

Dr. Khaleel Ahmad	NPTEL-AICTE Faculty Development Program on Blockchain and its Applications (MOOCS)	IIT Kharagpur, Jan-April 2024, 12 Weeks	Jan-April 2024	12 Weeks	National	
Dr. Muqeem Ahmed	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 16-20 January, 2024.	16-20 January, 2024.	5 Days	National	Got Permission
Dr. Muqeem Ahmed	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad from 19th to 28th February, 2024.	19th to 28th February, 2024	10 Days	National	Got Permission
Dr. Muqeem Ahmed	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Dr Jameel Ahamed	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Dr Jameel Ahamed	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 16-20 January, 2024.	16-20 January, 2024.	5 Days	National	Got Permission
Dr Jameel Ahamed	Nurturing Future Leadership Programme	IIT Delhi, 18-22 March 2024	18-22 March 2024	5 Days	National	Nominated
Mr. Mohammad Islam	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 16-20 January, 2024.	16-20 January, 2024.	6 Days	National	Got Permission
Mr. Mohammad islam	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad from 18th to 28th December, 2023.	18th to 28th December, 2023.	10 Days	National	Got Permission
Mr. Mohammad islam	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Mr. Mohd Omar	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Mr. Mohd Omar	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 16-20 January, 2024.	16-20 January, 2024.	5 Days	National	Got Permission
Ms. Geeta Pattun	Emerging Research Trends in Computer science	Department of CS&IT, MANUU 1620 January, 2024.	16-20 January, 2024.	6 Days	National	Got Permission
Ms. Geeta Pattun	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad from 18th to 28th December, 2023.	18th to 28th December, 2023	10 Days	National	Got Permission
Ms. Geeta Pattun	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Ms. Geeta Pattun	INDUSTRIAL TRAINING FOR FACULTY for Three Weeks conducted from 3rd April, 2023 to 21st April 2023 by Regional Telecom Training Centre (RTTC), Bharat Sanchar Nigam Limited (BSNL), Hyderabad.	Regional Telecom Training Centre, BSNL, Hyderabad. 03 April 2023 to 21 April 2023 Three weeks	03 April 2023 to 21 April 2023	Three Weeks	National	Duty Leave only
Mr. Mohatesham Pasha Quadri	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission

Mr. Mohatesham Pasha Quadri	FDP on Inculcating Universal Human Values in Technical Education	AICTE & 11-15, September	11-15, September, 2023	5 Days	National	Got Permission
Mr. Mohatesham Pasha Quadri	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad from 18th to 28th December, 2023.	18th to 28th December, 2023.	10 Days	National	Got Permission
Mr. Mohatesham Pasha Quadri	FDP on Harnessing Python for Data Science: Mastering Libraries and Frameworks for Advanced Analysis	E & ICT Academy, National Institute of Technology, Warangal (Sponsored by Ministry of Electronics and Information Technology (MeitY), GOI)	13th May – 23rd May 2024	11 Days	National	Got Permission
Mrs. Khaleda Afroaz	Faculty Development Program on Emerging Research Trends in Computer Science	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 16/01/2024 to 20/01/2025	16/01/2024 to 20/01/2025	5 Days	National	Got Permission
Mrs. Khaleda Afroaz	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Ms. Afrah Fathima	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2024	20-25 November, 2024	One week	National	Got Permission
Ms. Afrah Fathima	Faculty Development Program on Emerging Research Trends in Computer Science	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 16/01/2024 to 20/01/2025	16/01/2024 to 20/01/2025	5 Days	National	Got Permission
Mr. Mohammad Rashid	Faculty Development Program on Emerging Research Trends in Computer Science	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 16/01/2024 to 20/01/2025	16/01/2024 to 20/01/2025	5 Days	National	
Mr. Mohammad Rashid	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Mrs. Tunga Arundhathi	NEP 2020 Orientation & Sensitization Programme under Malaviya Mission Teacher Training Programme	UGC - MMTTC, Maulana Azad National Urdu University, Hyderabad Hyderabad from 18th to 27th March, 2024.	18th to 27th March, 2024.	10 Days	National	Got Permission
Mrs. Tunga Arundhathi	Faculty Development Program on Emerging Research Trends in Computer Science	SCHOOL OF TECHNOLOGY, MAULANA AZAD NATIONAL URDU UNIVERSITY from 16/01/2024 to 20/01/2025	16/01/2024 to 20/01/2025	5 Days	National	Got Permission
Mrs. Tunga Arundhathi	Attended a one week FDP on AI & QML .	Department of CS&IT, MANUU and AICTE ATAL- 20-25 November, 2023	20-25 November, 2023	One week	National	Got Permission
Mrs. Tunga Arundhathi	Internaltional Summer School On Research Methods and Data Science 2023: A Six-weeks Training Cum Internship Programme during 24th July to 1st September 2023.	Shaheed Sukhdev Collage of Business Studies, University of Delhi, Director Adroid Connectz Pvt Ltd	24th July to 1st September 2023.	6- Weeks	International	

Additional Rows may be added as required.

Note: *Please provide documentary proof (e.g: Sanction/Approval letter for attending the programme/certificate of attendence/completion etc.)*

42	**E-content developed by Teachers for e-PG-Pathshala, CEC (under e-PG-Pathshala, CEC (Under Graduate), SWAYAM, other MOOCs platform, NPTEL/NMEICT/any other Government initiatives & institutional Learning Management System (LMS) etc.**

Name of the Teacher	Details of the module/Content Developed	Platform on which module/Content is developed	Date of launching e - content	Web Link

NIL				

Additional Rows may be added as required.

Note: *Please provide documentary proof/communication recieved/contracts signed/screeshots of the content.*

43 **Teachers awarded National/International fellowship for advanced studies/research :**

Name of the Teacher awarded the fellowship	Details of the fellowship awarded	Awarding Agency	Duration of the Fellowship	Remarks
NIL				

Additional Rows may be added as required.

Note: *Please provide documentary proof of Award letter of Fellowship/Communation Recieved*

44 **Teachers receiving financial support to attend conferences / workshops and towards membership fee of professional bodies from the University:**

Year	Name of the Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2023	Prof. Pradeep Kumar	Faculty Development Programme (FDP) on Artificial Intelligence and Quantum Machine Learning (AI & QML)	AICTE	2,50,000
2024	Mr. Mohatesham Pasha Quadri and Mrs. Khaleda Afroaz	Faculty Development Program on Emerging Research Trends in Computer Science	MANUU	88,325
2023	Prof. Pradeep Kumar	8th International Conference on Research in Computing in Engineering (RICE 2023)	MANUU	300,000
2024	Prof. Pradeep Kumar	The International Conference on Intelligent System and Networks	Hanoi University of Industry, Hanoi, Vietnam	No Funding
2024	Dr. Jameel Ahamed	8th International Conference on Information System Design and Intelligent Applications ISDIA 2024	Malla Reddy University	1,06,000
2024	Prof. Abdul Wahid	8th International Conference on Information System Design and Intelligent Applications ISDIA 2024	Malla Reddy University	1,06,001
2024	Mrs. Afrah Fathima	Industrial Visit Report: Regional Telecom Training Centre (RTTC) at Hyderabad	BSNL Erragadda Hyderabad	50000

Additional Rows may be added as required.

Note: *Please provide Sanction/Approval Letter of the University*

45 **Describe at least two best practices of the Department in the format given below:**

1.1.Title of the Practice	Display and Discussion of the Answer Scripts
1.2. Objectives of the Practice What are the objectives / intended outcomes of this “best practice” and what are the underlying principles or concepts of this practice ?	Showing the answer scripts to the students and holding discussion on answer scripts with them is a practice aimed at one hand, to improve and strengthen the learning experience of the st

1.3. The Context What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice ?	The Academic Council of MANUU in its 32ndMeeting held on 4th October 2018, on the request of student community to make the answer booklet available to them after evaluation, discussed the matter at length and resolved to constitute a Committee to examine the feasibility of making the answer scripts available to students, as part of the examination reforms. (https://manuu.edu.in/sites/default/files/2020-01/32nd%20AC%20Minutes_0.pdf) The Committee held a meeting on 30th January 2019 in the office of the Controller of the Examination and discussed various issues involved in making the the answer scripts available to the students after the evaluation. The Committee evolved a procedure in this regard, and submitted the minutes of the meeting to the Vice Chancellor on 15th February 2019. The minutes of the meeting were placed in the 34th Academic Council meeting held on 7thMarch 2019, wherein they were approved and the practice was ready to be implemented for the semester examination scheduled in May 2019. (https://manuu.edu.in/sites/default/files/2019-10/Minutes_of_34th_AC_Meeting.pdf) Further, the Committeedecided to discuss the initiative with all the stakeholders of MANUU, particularly with the teaching faculty. Subsequently, a workshop was conducted jointly by Examination Branch, Internal Quality Assurance Cell (IQAC) and Centre for Information Technology (CIT), with the theme, Examination Reforms on 16th April 2019, and its webcast was made live all across MANUU campuses and Colleges of Teacher Education (CTEs) in India. This is followed by a lengthy session of discussion with the faculty (YouTube: https://youtu.be/nlYdanLWalE). After the workshop, the issues raised by the teaching faculty of MANUU, were clarified by Examination Branch and IQAC in an orderly way. (https://manuu.edu.in/sites/default/files/MANUU-IC/2021-03/Clarifications.PDF) MANUU had issued a press release of the workshop and implementation of the system of display of answer scripts to the students. A wide coverage in the press had been given of MANUU's Examination Reforms. (https://manuu.edu.in/Best-Practices)
1.4. The Practice Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced ?	The general dissatisfaction of the students in respect of the marks and the grades that they score is addressed through this practice of showing the answer scripts to them and holding discussion thereof with them. This initiative provides students the opportunity to see what they have written, and how have they been evaluated, and where is the scope for their improvement. After conducting the examination, the Examination Branch had sent the answer scripts to the Heads of the Departments for distribution of the answer scripts to the respective teachers who taught the courses. After evaluation, scrutiny and moderation, the teachers were allowed to show the answer scripts to the students and hold discussion with them. The students had been asked to visit the teachers who taught any course to them and see their answer script and seek clarification or suggestion if any. Since one to four days had been allocated for the display and discussion on the answer scripts, the teachers stayed back during the allocated period from morning till evening to show the answer scripts to their students, and discuss and counsel them academically about their performance in the examination and the level of their learning. After seeing the answer scripts and discussing about their performance, the students were required to sign the attendance proforma of display of the answer scripts. When the display and discussion period was over, the teachers entered the marks in their respective iUMS portal, and the answer scripts and the attendance proformas were sent to the Examination Branch. Consequent upon receiving these, the Examination Branch declared the results. The moderation boards of all the departments and colleges had taken care to address the issues of scrutiny, and over or under awarding of marks, before the answer scripts made available for the students. It has been made clear to all the students that if any of them is not satisfied with the marks awarded to him/her, he/she can approach the Examination Grievance Redressal Committee (EGRC) in the Department which comprises Head, a senior teacher, and the course teacher. Whatever decision the EGRC makes, it is final. Yet again, if the student is not satisfied, then he/she can apply for re-evaluation on payment of prescribed fee after the declaration of routine results.

1.5. Evidence of Success Provide evidence of success such as performance against targets and benchmarks, review/results. What do these results indicate? Describe in about 200 words.	The practice had been appreciated by the students. A good number of students showed up to see their answer scripts, as it is evident from the attendance proforma of answer script display As the practice of displaying and discussing of the answer scripts commenced from the even/end semester examinations, that is, May 2019, a large number of students had returned to the (https://manuu.edu.in/sites/default/files/MANUU-IC/2021-03/Circulars-regarding-answer-script-display.pdf) With the Odd semester examinations held in December 2019, the practice had been more strengthened. (https://manuu.edu.in/sites/default/files/MANUU-IC/2021-03/FINAL-UG-LIST.pd One of the biggest gains of this practice is the assessment of the students in terms of learning outcomes. A paper setter is required to set the paper strictly in accordance with the course ob
1.6. Problems Encountered and Resources Required Please identify the problems encountered and resources required to implement the practice .	Though the practice has been conceived and implemented successfully, there were some problems and issues which were required to be addressed for the successful implementation of th Apprehensions raised by the teaching faculty before the implementation of the practice: 1) The teachers initially had reservations about the practice. Their apprehension concerned mainly the security of the teachers, in a sense that if a student fails or is not satisfied with the m (https://manuu.edu.in/sites/default/files/MANUU-IC/2021-03/Clarifications.PDF) However, when the practice was implemented this apprehension did not come true. 2) Another issue that was raised by the teachers was the evaluation deviation in terms of awarding marks. This is because, MANUU has several campuses and colleges of teacher educatio 3) The mechanism of displaying of the answer script and discussion itself had been raised as an issue by the teacher. For example, the question was, 'Is it compulsory for every student to 4) With respect to the issue whether the discussion should be done individually or in class? It was suggested, that if all the students showed up together, it may be done in class. However, Nevertheless, the experience suggests after the implementation of the practice that most of the students turned up individually or in twos or threes. Therefore, the teacher discussed the stu 5) After the implementation of the practice, very few teachers reported the cases of the dissatisfaction of the students. The students had been asked in such cases to go for reevaluation. By No financial or other wise resources, other than the available resources in the University are required for the implementation of this practice.
1.7. Notes Please add any other information that may be relevant for adopting/ implementing the Best Practice in other Institutions.	Circulars regarding answer script display https://www.manuu.edu.in/sites/default/files/MANUU-IC/2021-03/Circulars-regarding-answer-script-display.pdf
2.1.Title of the Practice	Dissemination of Academic and Knowledge Content through Social Media and Digital Platforms
2.2. Objectives of the Practice What are the objectives / intended outcomes of this "best practice" and what are the underlying principles or concepts of this practice ?	The objectives of this practice are: 1) to disseminate academic and knowledge content in Urdu by enriching it through social media and digital platforms, and 2) to provide global accessibility to the academic and knowledge content in Urdu free of cost.

2.3. The Context What were the contextual features or challenging issues that needed to be addressed in designing and implementing this practice ?	This practice is conceived bearing in mind the objects of Maulana Azad National Urdu University (MANUU), which are to promote the Urdu language in higher education. It is felt that the quickest way to promote any language and its culture, at present, is to advance it through digital means. Therefore, MANUU has entrusted the responsibility to its Instructional Media Centre (IMC) to produce in-house educational programmes which help MANUU achieve its objects and mandate. Accordingly, IMC began producing in-house multimedia educational programmes and then started disseminating these through IMC MANUU YouTube Channel. MANUU now boasts of a large repository of curriculum based audio-visual programmes of various streams like arts, languages, education and training, sciences, social sciences, and so on. All these programmes are available to all the masses free of cost all across the globe. These audio-visual programmes can be accessed by the students and the teachers as per their convenience. Further, a large chunk of Indian Urdu diaspora is deprived of quality content in Urdu. It is believed that the dissemination of knowledge enriching programmes through digital platforms is accomplished through this practice. MANUU is probably the only University in India which has been producing higher education digital content in Urdu in a structured way.
2.4. The Practice Describe the practice and its uniqueness in the context of India higher education. What were the constraints / limitations, if any, faced ?	IMC MANUU YouTube Channel was formally launched in December 2017 after proper designing of its cover page and content. The Channel's logo was created; categories were created for different departments/centers etc. so that surfing becomes easy for students. This categorization was developed on the basis of research, subjects and genre & nature of programmes. The Channel was launched with a proper programming for a week so that audience are retained and added over a period of time. For the uploading of the programmes, the viewing habits of the general viewers and the target audience was considered. With sustained efforts, this higher education audio-visual platform of MANUU now has a subscription of over 35000 Users. The IMC MANUU YouTube Channel (www.youtube.com/imcmanuu) has all the curriculum-based A/V programmes uploaded at the channel. Additionally, the e-content platform has also been created https://manuu.edu.in/University/manuu-e-content). Besides providing curriculum based programmes, IMC MANUU YouTube Channel also caters to the general audience with a wide array of documentaries of general interest on the Urdu language and culture as well. Students can also have access to important academic events, seminars, workshops, symposiums etc.(www.youtube.com/imcmanuu and https://www.youtube.com/imcmanuu) Besides providing educational content at IMC MANUU YouTube Channel, IMC has also created social media platforms of the University and Facebook pages for most of the departments. The relevant audio-visual lectures/material from IMC MANUU archive are being uploaded on respective pages. This is one of the unique experiments wherein most of the departments have their Facebook pages along with relevant audio-visual educational resources. The teaching faculty at MANUU are being sensitized to make best use of various social media platforms for disseminating academic content, and reflecting the achievements and educational activities of MANUU, and share MANUU's initiatives on social media platforms with other Institutions as well. Facebook provides opportunities to create a focused group for a particular subject where the group can connect with best teachers in the subject all across the world. Teachers-Students may share resources for a pre-class/post-class discussion on a topic. Since students are already using social media away from the classroom, integrating it into the classroom helps students learn best practices in the subject as it offers an interesting new twist on lessons for pre-class and post-class discussions (https://manuu.edu.in/University/Centre/IMC/best-practices-imc).

2.5. Evidence of Success Provide evidence of success such as performance against targets and benchmarks, review/results. What do these results indicate? Describe in about 200 words.	The practice of disseminating knowledge and academic content to the students through IMC MANUU Youtube Channel, and other social media platforms by MANUU has been very successful. At present , it has a subscription of about 35000. The viewership is building gradually but steadily. MANUU Knowledge Series was launched, as an important digital initiative to enrich the learning experience of student community and general audience by providing them knowledge and information on wide array of topics. This Knowledge Series was introduced as a part of digital initiatives in December 2017 under which short duration audio-visual capsules on a variety of topics were produced and uploaded at IMC MANUU YouTube Channel. Some of these are: 100 Most influential persons/leaders in the History 100 Famous Urdu Literature personalities 100 Great Indians 100 Great Discoveries of all times 100 Common Health/Nutritional issues 100 common Socio-Economic and Environmental Issues 100 Great Scientists of this century etc. This Series is intended not only to provide factual content to students but to the general audience irrespective of their educational background. As the audio-visual medium has the power to communicate even with the illiterate audience. The audio visual programmes produced under this Series have been selected in National and International Film Festivals. The Instructional Media Centre had three nominations in Competitive Category all across India in the National Science Film Festival 2019. The three movies shortlisted were: 1) Prof. U.R. Rao directed by Mr. Mohammed Mujahid Ali. 2) Stephen Hawking directed by Mr. Omar Azmi and 3) Bharat Ratna Dr A.P.J. Abdul Kalam directed by Mr. Obaidullah Raihan. https://manuu.edu.in/University/Centre/IMC/laurels). https://www.youtube.com/watch?v=mQ5IpDm84ys&list=PLK4auiSRQ36a0cpLtYPrrPPyXjEJj8ZUC and at https://manuu.edu.in/University/Centre/IMC/manuu-knowledge-series
2.6. Problems Encountered and Resources Required Please identify the problems encountered and resources required to implement the practice .	Since Audio-Visual production technology is fast changing, an immediate upgrade of the facilities is required to enhance the quality of production. The production crew faces regular issues of the compatibility of various devices and soft wares required in production.

46	**Provide details of impactful and most important initiatives of the department addressing the locational advantages and disadvantages in 500-1000 words covering the issue listed below:**

a) Initiatives to address locational advantages and disadvantages	Hyderabad, has emerged as a major IT hub with several advantages, such as a favorable business environment, skilled workforce, and supportive government policies. However, it also faces certain disadvantages that need to be addressed. Here are some initiatives that can be taken to address both the advantages and disadvantages of Hyderabad as an IT hub: Skill development and education: To maintain its advantage of a skilled workforce, initiatives should focus on strengthening the education system and promoting skill development programs. Collaborations between IT companies, educational institutions, and government bodies can be established to design specialized courses and training programs aligned with industry needs. Entrepreneurship support: Encouraging entrepreneurship and startup culture can help leverage the advantages of Hyderabad. Initiatives like incubation centers, mentorship programs, and access to funding can be established to support the growth of startups and promote innovation within the IT sector. Collaboration with research institutions: Collaborating with research institutions and fostering a culture of research and development can enhance the competitiveness of the IT hub. Partnerships between IT companies and research institutions can facilitate knowledge exchange, technological advancements, and the development of cutting-edge solutions. Addressing environmental concerns: Hyderabad faces challenges related to environmental sustainability, such as air pollution and water scarcity. Initiatives to address these concerns can include promoting green practices within IT companies, investing in renewable energy sources, and implementing water conservation measures. Work-life balance and employee well-being: To attract and retain talent, initiatives should focus on promoting work-life balance and employee well-being. Encouraging flexible work arrangements, creating recreational spaces, and organizing wellness programs can contribute to a healthier and happier workforce. Strengthening cybersecurity measures: With the increasing reliance on technology, cybersecurity has become a critical concern. Establishing robust cybersecurity measures and promoting awareness about cyber threats can help protect the IT infrastructure and maintain the trust of businesses and individuals.
b) Initiatives taken to engage with and contribute to local community	Partnerships with local organizations: Collaborating with local nonprofit organizations, community centers can lead to mutually beneficial partnerships. This could involve providing resources, expertise, or funding to support specific projects or programs. Employee skill-sharing and mentoring: Companies can offer opportunities for their employees to share their skills and knowledge with the local community. This could include mentoring programs for students, hosting workshops or training sessions, or providing pro bono consulting services to local nonprofits. Environmental initiatives: Engaging in environmentally friendly practices and sustainability initiatives can benefit both the company and the community. This may involve participating in local clean-up campaigns, implementing eco-friendly business practices, or supporting local conservation efforts. Community engagement events: Hosting events that are open to the public can help build relationships with the local community. This could include organizing job fairs, educational workshops, health and wellness initiatives, or cultural celebrations. Educational partnerships: Collaborating with local educational institutions is a valuable way to engage with the community. Businesses can offer internships, scholarships, or career development opportunities for students, or participate in educational initiatives such as guest lectures or mentoring programs.
c) Date and duration of the initiative	1st April 2023 to 30th May 2024
d) Issues addressed and outcomes/impact	**Skill Development & Education:** Addressed the gap between academic learning and industry needs. Students gained relevant skills, improving their job prospects and confidence in entering the workforce. **Internship Projects:** Provided exposure to real-world business challenges. Students gained valuable insights and hands-on experience by working on actual projects, improving problem-solving skills and understanding of industry practices. **Environmental Concerns:** Raised awareness of sustainability issues. Students became more environmentally conscious and actively participated in green initiatives. **Work-Life Balance:** Highlighted the importance of well-being alongside academic performance. Students experienced better stress management and a more balanced approach to studies and life. **Cybersecurity:** Emphasized the importance of digital safety. Students became more vigilant and knowledgeable about cybersecurity practices, enhancing their online safety.
e) Details of participating students, faculty and staff	Students and Faculty members of Department of CS & IT, MANUU