

**DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY**  
**MTECH in Computer Science and Engineering (ARTIFICIAL INTELLIGENCE AND DECISION SCIENCE)**  
**Program Structure (Applicable to 2023 admission onwards)**

YEAR	FIRST SEMESTER						SECOND SEMESTER					
	SUB CODE	SUBJECT NAME	L	T	P	C	SUB CODE	SUBJECT NAME	L	T	P	C
<b>I</b>	ICT 5118	Mathematical Foundations of Computational Intelligence	3	1	0	4	ICT 5215	Convex Optimization and Applications	3	1	0	4
	ICT ****	Generative Artificial Intelligence	4	0	0	4	ICT 5216	Data Mining and Knowledge Discovery	4	0	0	4
	ICT 5120	Statistical Machine Learning	4	0	0	4	ICT ****	Program Elective-I	3	0	0	3
	ICT 5125	Probabilistic Graphical Models	4	0	0	4	ICT ****	Program Elective-II	3	0	0	3
	ICT 5126	Fairness And Machine Learning	3	0	0	3	ICT ****	Program Elective-III	4	0	0	4
	<b>HUM 5071</b>	Research Methodology and Technical Communication*	1	0	3	-	*** ****	Open Elective	3	0	0	3
	ICT 5143	Algorithmic Fairness and Graphical Models Lab**	0	0	3	2	HUM 5071	Research Methodology and Technical Communication*	1	0	3	2
	ICT 5144	Machine Intelligence Capstone Project**	0	0	3	2	ICT 5245	Knowledge Engineering Lab**	0	0	3	2
							ICT 5246	Decision Science Capstone Project**	0	0	3	2
		<b>Total</b>		<b>19</b>	<b>1</b>	<b>6</b>	<b>23</b>			<b>21</b>	<b>1</b>	<b>9</b>
	<b>THIRD AND FOURTH SEMESTER</b>											
<b>II</b>	ICT 6091	Project Work and Industrial Training							<b>0</b>	<b>0</b>	<b>0</b>	<b>25</b>

\*TAUGHT IN BOTH SEMESTERS AND EVALUATED AND CREDITED IN THE SECOND SEMESTER

\*\*3 Hrs/WEEK WITH A PROVISION FOR MINI PROJECT/ASSIGNMENTS

PROGRAM ELECTIVES		OPEN ELECTIVES	
COURSE CODE	COURSE TITLE	COURSE CODE	COURSE TITLE
ICT 5411	Algorithmic Game Theory	ICT 5301	Applied Game Theory
ICT 5402	Applied Natural Language Processing	ICT 5302	Block Chain Technologies
ICT 5412	Computational Social Science	ICT 5303	Cyber Security and Cyber Laws
ICT 5413	Computer Vision and Applications	ICT 5304	Real Time Systems
ICT 5414	Decision Intelligence		
ICT 5405	Federated Learning		
ICT 5415	Full Stack Machine Learning		
ICT 5416	Reinforcement Learning		
ICT 5409	Semantic Web Technologies		
ICT 5410	Time Series Analysis and Forecasting		