

MS Bioinformatics									
YEAR 1									
Semester (I) – Fall					Semester (II) - Spring				Summer break
Course Code	Course	Credit Hours	Course Type		Course Code	Course	Credit Hours	Course Type	
BIF-711	Advances in OMICs studies	3(3+0)	C1	BIF-721	Advances in Bioinformatics	3(3+0)	C4		
BIF-712	Computer Aided Drug Design	3(2+1)	C2	BIF-722	Genome Informatics	3(3+0)	C5		
BIF-713	Object Oriented Programming	3(3+0)	C3		Elective-II	3	E2		
	Elective-I	3	E1		Elective-III	3	E3		
Total Credit Hours		12		Total Credit Hours		12			
YEAR 2									
Semester (III) – Fall					Semester (IV) - Spring				Summer break
Course Code	Course	Credit Hours	Course Type		Course Code	Course	Credit Hours	Course Type	
MBS-731	Seminar	2(2+0)	C6	BIF-799-2	MS Research Work	6(6+0)			
BIF-799-1	MS Research Work	4(4+0)							
Total Credit Hours		6		Total Credit Hours		6			

LIST OF ELECTIVES			
Course Code	Course	Credit Hours	Course Type
NMD-711	Introduction to Nanomedicine	3(3+0)	E
GEN-703	Human Disease Modeling	3(3+0)	E
BIF-701	Translational Bioinformatics	3(3+0)	E
BIF-702	Networks and Pathways	3(3+0)	E
BIF-703	Structural Bioinformatics	3(3+0)	E
BIF-704	Artificial Intelligence and Machine Learning	3(3+0)	E
BIF-705	Big Data Analysis and Management	3(2+1)	E