## Atal Bihari Vajpayee Indian Institute of Information Technology and Management Gwalior

## M. Tech in Information Technology Department of Information Technology

## Track 1-Smart Mobility Systems Engineering

	Semester - I					
SN	Subject Code Course Title		L-T-P	Credits		
1	IT-601	Machine Learning Techniques	3-0-2	4		
2	IT-602	Mathematical Foundations for Data Science	3-0-2	4		
3	IT-603	Advanced Data Structures and Algorithms	3-0-2	4		
4	IT-604	Introduction to Robotics	3-0-2	4		
5	IT-605	Design for Reliability: Information and Computer Based Systems	3-0-2	4 .		
			Credits	20		

	Semester – II				
SN	Subject Code	Course Title	L-T-P	Credits	
1	IT-612	Deep Learning	3-0-2	4	
2	IT-613	Cyber Physical Systems	3-0-2	4	
3	IT-614	Secure System Design	3-0-0	3	
4	IT-6XX	Elective I	3-0-0	3	
5	IT-6XX	Mini Project	0-0-6	3	
6	IT-624	Engineering Research Methodology	2-1-0	3	
			Credits	20	

EXIT AFTER 1 YEAR: Post Graduate Diploma in Information Technology

	70-	Semester - III		
SN	Subject Code	Course Title	L-T-P	Credits
1	IT-6XX	Elective II/MOOC	3-0-0	3
2		Dissertation Part - I		12
			Credits	15

		Semester - IV		
SN	Subject Code	Course Title	L-T-P	Credits
1		Dissertation Part - II		15
			Credits	15

Track 2- Intelligent Information Systems Engineering

	Semester – I					
SN	Subject Code	Course Title	L-T-P	Credits		
1	IT-601	Machine Learning Techniques	3-0-2	4		
2	IT-602	Mathematical Foundations for Data Science	3-0-2	4		
3	IT-603	Advanced Data Structures and Algorithms	3-0-2	4		
4	IT-604	Introduction to Natural Language Processing	3-0-2	4		
5	IT-605	Design for Reliability: Information and Computer Based Systems	3-0-2	4		
7		*	Credits	20		

	Semester - II				
SN	Subject Code	Course Title	L-T-P	Credit	
1	IT-612	Deep Learning	3-0-2	4	
2	IT-613	Advanced Natural Language Processing	3-0-2	4	
3	IT-6XX	Social Networks Analysis	3-0-0	3	
4	IT-6XX	Elective I	3-0-0	3	
5	IT-6XX	Mini Project	0-0-6	3	
6	IT-624	Engineering Research Methodology	2-1-0	3	
			Credits	20	

EXIT AFTER 1 YEAR: Post Graduate Diploma in Information Technology

	Semester – III				
SN	Subject Code	Course Title	L-T-P	Credit s	
1	IT-6XX	Elective II/MOOC	3-0-0	3	
2		Dissertation Part - I		12	
			Credits	15	

		Semester - IV		
SN	Subject Code	Course Title	L-T-P	Credit
1		Dissertation Part - II		15
			Credits	15

Distribution of Credits for both tracks 1 & 2:

1st Semester	2 <sup>nd</sup> Semester	3rd Semester	4th Semester
20	20	15	15