

## Curriculum (Only Scheme)

Semester I					
Course Code	Course	L	T	P	C
MAS6121	Matrix and Linear Algebra	3	0	0	3
MAS6122	Discrete Mathematics and Its Applications	3	0	0	3
MAS6123	Advanced Differential Equation	3	0	0	3
MAS6124	Applied Statistics and Probability	3	0	0	3
MAS6125	Computer Programming with C	3	0	2	4
MAS6126	Foundation of Data Science with Python	3	0	2	4
<b>Total</b>		<b>18</b>	<b>0</b>	<b>4</b>	<b>20</b>
<b>Total Contact Hrs.</b>		<b>22</b>			

Semester II					
Course Code	Course	L	T	P	C
MAS6221	Real and Functional Analysis	3	0	0	3
MAS6222	Optimization Theory and Applications	3	0	0	3
MAS6223	Data Structures and Algorithms	3	0	2	4
MAS6224	Relational Database Management Systems	3	0	2	4
MAS6225	Object Oriented Programming	3	0	2	4
MAS6226	Seminar and Technical writing	0	0	0	2
<b>Total</b>		<b>15</b>	<b>0</b>	<b>6</b>	<b>20</b>
<b>Total Contact Hrs.</b>		<b>21</b>			

Semester III					
Course Code	Course	L	T	P	C
MAS7121	Numerical Methods with MATLAB	3	0	2	4
MAS7122	Mathematical Statistics with SPSS	3	0	2	4
	Program Elective* I	4	0	0	4
	Program Elective* II	4	0	0	4
MAS7170	Industry Internship	0	0	0	4
<b>Total</b>		<b>14</b>	<b>0</b>	<b>4</b>	<b>20</b>
<b>Total Contact Hrs.</b>		<b>18</b>			

Semester IV					
Course Code	Course	L	T	P	C
	Program Elective* III	4	0	0	4
MAS7270	Project	0	0	0	16
<b>Total</b>		<b>4</b>	<b>0</b>	<b>0</b>	<b>20</b>
<b>Total Contact Hrs.</b>		<b>4</b>			

### List for Program Elective\* I

- MAS7123 Financial Mathematics
- MAS7124 Introduction to Computational Fluid Dynamics
- MAS7125 Statistics in Decision Makings
- MAS7126 Algebraic Coding theory
- MAS7127 Time Series Analysis

### List for Program Elective\* II

- MAS7131 Applied Machine learning
- MAS7132 Data Visualization
- MAS7133 Soft Computing and Fuzzy Systems
- MAS7134 Computer Networks
- MAS7135 Operations Research and Supply Chain Analytics

### List for Program Elective\* III

- MAS7221 Cryptography and Network Security
- MAS7222 Image Processing
- MAS7223 Big Data Analytics
- MAS7224 Neural Networks
- MAS7225 Generative AI