

**School of Computational Intelligence**

**MCA (IoT & Blockchain)**

**Semester I**

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MCIB 1611	Computer Organization	3	0	0	3	3
2.	MCIB 1612	Mathematical Foundations of Computer Science	3	0	0	3	3
3.	MCIB 1613	Problem Solving and Programming	3	0	2	5	4
4.	MCIB 1614	Statistics and Queuing Theory	3	0	0	3	3
5.	MCIB 1615	Managerial Economics	3	0	0	3	3
6.	MCIB 2611	Computer Game Development and Animation	0	1	2	3	2
7.	MCIB 2612	R Programming Lab	0	1	2	3	2
		<b>TOTAL</b>	<b>15</b>	<b>2</b>	<b>6</b>	<b>23</b>	<b>20</b>

**Semester II**

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MCIB 1621	Database Systems	3	0	2	5	4
2.	MCIB 1622	Data Structures	3	0	2	5	4
3.	MCIB 1623	Web Technologies	3	0	2	5	4
4.	MCIB 1624	Object Oriented Programming	3	0	2	5	4
5.	MCIB 1625	Management Theory and Practice	3	0	0	3	3
		<b>TOTAL</b>	<b>15</b>	<b>0</b>	<b>8</b>	<b>23</b>	<b>19</b>

### Semester III

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MCIB 1631	Advanced Databases	3	0	2	5	4
2.	MCIB 1632	Advanced Data Structures	2	0	0	2	2
3.	MCIB 1633	Software Engineering Principles	3	0	2	5	4
4.	MCIB 1634	Operating System Concepts	3	0	2	5	4
5.	MCIB 1635	Computer Communications and Network	3	0	2	5	4
6.	MCIB 1636	Essentials of IoT & Blockchain	3	0	2	5	4
		<b>TOTAL</b>	<b>17</b>	<b>0</b>	<b>10</b>	<b>27</b>	<b>22</b>

### Semester IV

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MCIB 1641	Mobile Applications Development	2	0	2	4	3
2.	MCIB 1642	Software Testing	3	0	2	5	4
3.	MCIB 1643	Algorithm Analysis and Design	3	0	0	3	3
4.	MCIB 1644	Principles of Data Warehousing and Data Mining	3	0	0	3	3
5.	MCIB 1645	Python Programming	2	0	2	4	3
6.	MCIB 2641	Knowledge Engineering Lab	0	0	2	2	1
7.	PEIB 164#	PSE I	2	0	2	4	3
8.	PEIB 164#	PSE II	2	0	2	4	3
		<b>TOTAL</b>	<b>17</b>	<b>0</b>	<b>12</b>	<b>29</b>	<b>23</b>

Program Specific Electives (PSE) for Semester IV:

Sl. No	Course Code	Course Title
1.	PEIB 1641	Introduction to Security of Cyber-Physical Systems
2.	PEIB 1642	Smart Contracts & Solidity
3.	PEIB 1643	Blockchain Platforms and Use Cases
4.	PEIB 1644	Ubiquitous Sensing, Computing and Communication

**Semester V**

Sl. No	Course Code	Course Title	L	T	P	Contact Hrs / Wk	Credits
1.	MCIB 1651	Cryptography and Network Security	3	0	2	5	4
2.	MCIB 1652	Internet of Things	3	0	2	5	4
3.	MCIB 1653	Machine Learning	3	0	2	5	4
4.	MCIB 6651	Seminar & Comprehensive Viva-voce					3
5.	PEIB 165#	PSE IV	2	0	2	4	3
6.	PEIB 165#	PSE V	2	0	2	4	3
7.	PEIB 165#	PSE VI	2	0	2	4	3
		<b>TOTAL</b>	<b>15</b>	<b>0</b>	<b>12</b>	<b>27</b>	<b>24</b>

Program Specific Electives (PSE) for Semester IV:

Sl. No	Course Code	Course Title
1.	PEIB 1651	Database Security and Access Control
2.	PEIB 1652	Security Assessment and Risk Analysis
3.	PEIB 1653	Human Computer Interaction
4.	PEIB 1654	Computer Vision
5.	PEIB 1655	Blockchain in Cryptography
6.	PEIB 1656	Pattern Recognition & Scene Analysis

### Semester VI

<b>Sl. No</b>	<b>Course Code</b>	<b>Course Title</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Contact Hrs / Wk</b>	<b>Credits</b>
1.	MCIB 5661	Dissertation/Internship					12
		<b>TOTAL</b>					<b>22</b>

### Semester-wise Credit Load

<b>Semester</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
I	15	2	6	20
II	15	0	8	19
III	17	0	10	22
IV	17	0	12	23
V	15	0	12	24
VI				12
<b>Total</b>	<b>78</b>	<b>2</b>	<b>48</b>	<b>120</b>