

**RK University**  
**School of Engineering**  
**PROGRAM: B. Tech - Cyber Security**  
**Batch 2022-2026**

SEMESTER – I (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Mathematics-1 Linear Algebra and Calculus	3	1	0	4
2	Problem Solving and Algorithm Thinking	3	0	4	5
3	Fundamentals of Cybersecurity	3	0	1	4
4	Principles of Programming Languages	2	0	2	3
5	Applied Science	2	0	2	3
6	English as a Second Language – Intermediate Level 1	3	0	0	3
7	Seminar	0	0	2	1
8	University Elective – I NSS YOGA Professional Ethics	0	0	2	2
	<b>TOTAL</b>	<b>16</b>	<b>1</b>	<b>13</b>	<b>25</b>
	<b>Total Teaching Hours</b>	<b>30</b>			

SEMESTER – II (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Mathematics-2 Number Theory and Algebra	3	1	0	4
2	Classical Cryptography	3	0	0	3
3	Python Programming - 1	2	0	2	3
4	Human Behaviour and Psychology of the Criminals	3	0	0	3
5	Computer Hardware and System Essentials	2	0	2	3

6	Information and Communication Technology	3	0	2	4
7	Environmental Science	2	0	0	2
8	English as a Second Language – Intermediate Level 2	3	0	0	3
9	University Elective – II NSS YOGA Professional Ethics	0	0	2	
<b>TOTAL</b>		<b>21</b>	<b>1</b>	<b>8</b>	<b>25</b>
<b>Total Teaching Hours</b>		<b>30</b>			

SEMESTER – III (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Mathematics-3 Advanced Calculus	3	1	0	4
2	Python Programming-2	0	0	4	2
3	Operating Systems	2	0	4	4
4	Software Engineering and Project Management	3	0	2	5
5	Database Management System	3	0	4	5
6	Multimedia Processing	2	0	2	3
<b>TOTAL</b>		<b>13</b>	<b>1</b>	<b>16</b>	<b>23</b>
<b>Total Teaching Hours</b>		<b>30</b>			

SEMESTER – IV (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Probability and Statistics	3	1	0	4
2	Datastructures and Algorithm	2	0	4	4
3	Modern Cryptography - 1	3	0	2	4
4	Computer Networks and Network Vulnerabilities	3	0	2	4
5	Computer Organisation and Architecture	3	0	2	4
6	Machine Learning and Deep Learning Fundamentals for Cybersecurity	3	0	2	4

	<b>TOTAL</b>	<b>17</b>	<b>1</b>	<b>12</b>	<b>24</b>
	<b>Total Teaching Hours</b>	<b>30</b>			

SEMESTER – V (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Fundamentals of Web Technology	3	0	4	5
2	Java Programming and OOP	0	0	4	2
3	Modern Cryptography - 2	2	0	2	4
4	Artificial Intelligence and Neural Networks	3	0	4	5
5	Mobile Computing Security and Privacy	3	0	2	4
6	University Elective – III Entrepreneurship Basic Campus to Corporate Training	3	0	0	3
	<b>TOTAL</b>	<b>14</b>	<b>0</b>	<b>16</b>	<b>23</b>
	<b>Total Teaching Hours</b>	<b>30</b>			

SEMESTER – VI (Batch - 2022-26)					
TEACHING SCHEME					
Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Cyber Forensics	2	0	2	3
2	Web Technology and Vulnerabilities	3	0	2	4
3	Database Security	3	0	4	5
4	University Elective – IV AI in Cyber Security Security in Wireless AdHoC Network Constitution of India and Cyber Law	3	0	4	5
5	University Elective – V IoT Security Blockchain Security	3	0	4	5
6	Design Thinking and Technical Writing	2	1	0	3
	<b>TOTAL</b>	<b>16</b>	<b>1</b>	<b>16</b>	<b>25</b>
	<b>Total Teaching Hours</b>	<b>33</b>			

## SEMESTER – VII (Batch - 2022-26)

## TEACHING SCHEME

Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Android Application Development	3	0	4	5
2	Cyber Law and Ethics	3	1	0	4
3	University Elective – V Basics of Applied Cryptography Cloud Security Application Security	3	0	4	5
4	Information Security Management System	2	1	0	3
5	Ethical Hacking and Penetration Testing	1	0	4	3
6	Mini Project	4	0	0	4
	<b>TOTAL</b>	<b>16</b>	<b>2</b>	<b>12</b>	<b>24</b>
	<b>Total Teaching Hours</b>	<b>30</b>			

## SEMESTER – VIII (Batch - 2022-26)

## TEACHING SCHEME

Sr.No.	Course Name	Teaching Hours			Credits
		Theory	Tutorial	Practical	
1	Project and Internship	15	0	0	15
	<b>TOTAL</b>				
	<b>Total Teaching Hours</b>	<b>0</b>			<b>15</b>