

## 2. Course Structure:

Definition of L-T-P-C (Lecture-Tutorial-Practical-Credit) System

- **L (Lecture Hours per Week)** – The number of hours spent in classroom lectures.
- **T (Tutorial Hours per Week)** – The number of hours dedicated to discussion sessions, problem-solving, or conceptual clarifications.
- **P (Practical/Lab Hours per Week)** – The number of hours spent in hands-on practical sessions or lab work.
- **C (Total Credits Earned)** – The total credits assigned to the course, generally

$$C = L + T + \frac{P}{2}$$

determined as:

(Where lab/practical hours contribute half of their duration to the credit count.)

### Course and Credit Break Up

Credit Distribution table	No.of Courses	Credits
Core- Major	8	32
Core- Minor	2	8
Elective- Core	4	16
Project work/Research & Dissertation work	2	24
<b>Total Credits</b>		<b>80</b>

### Year 1:

Semester	Course Code	Category	Course Title	L-T-P-C	Credits
I	EMCY101	Core-Major	Foundations of Cyber Security	3-1-0-4	4
	EMCY102	Core-Major	Computer Networks & Communication Protocols	3-0-2-4	4
	EMCY103	Core-Major	Network Security & Firewalls	3-0-2-4	4
	EMCY104	Core-Major	Secure Programming & Code Analysis	2-0-4-4	4
	EMCY105	Core-Minor	Cyber Laws, Ethics & Compliance	3-1-0-4	4
	<b>Total Credits</b>				<b>20</b>
	<b>Total Number of Hour/Week</b>			<b>13-2-8-20</b>	<b>23</b>

Semester	Course Code	Category	Course Title	L-T-P-C	Credits
II	EMCY201	Core-Major	Applied Cryptography	3-0-2-4	4
	EMCY202	Core-Major	Operating System & Endpoint Security	3-0-2-4	4
	EMCY203	Core-Major	Vulnerability Assessment and Penetration Testing (VAPT)	2-0-4-4	4
	EMCY204	Core-Major	AI & ML for Cyber Security	3-0-2-4	4
	EMCY205	Core-Minor	Data Science for Security Analytics	3-1-0-4	4
<b>Total Credits</b>					<b>20</b>
<b>Total Number of Hour/Week</b>				<b>14-1-10-20</b>	<b>25</b>

**Year 2:**

Semester	Course Code	Category	Category	L-T-P-C	Credits
III	EMCY301	Core-Elective	Elective-1	3-1-0-4	4
	EMCY302	Core-Elective	Elective-2	3-1-0-4	4
	EMCY303	Project Work	Project Work / Research + Dissertation	0-0-24-12	12
<b>Total Credits</b>					<b>20</b>
<b>Total Number of Hour/Week</b>				<b>6-2-24-20</b>	<b>32</b>

Semester	Course Code	Category	Course Title	L-T-P-C	Credits
IV	EMCY401	Core-Elective	Elective-3	3-1-0-4	4
	EMCY402	Core-Elective	Elective-4	3-1-0-4	4
	EMCY403	Project Work	Project Work / Research + Dissertation	0-0-24-12	12
<b>Total Credits</b>					<b>20</b>
<b>Total Number of Hour/Week</b>				<b>6-2-24-20</b>	<b>32</b>