

# Bachelor of Cybersecurity (B.Cyber.)

A new undergraduate program at IIT Madras  
Program run by the School of Interdisciplinary Studies (SIDiS), IIT Madras

Indian Institute of Technology Madras (IIT Madras) and Indian Institute of Technology Kanpur (IIT Kanpur) have joined hands to launch India's first practice-oriented four-year Bachelor of Cybersecurity programme, commencing in the academic year beginning July 2026. The programme addresses the nation's growing demand for highly skilled cybersecurity professionals and equips students to safeguard digital infrastructure, strategic sectors and the emerging cyber ecosystem.

Program Highlights	Admissions
<p><b>First 2 years:</b> Course work at IIT Madras.</p> <p><b>Next 2 years:</b> Field deployment in selected Government organizations, with possibility of fellowships.</p> <p><b>Degree:</b> IIT Madras bachelor degree and alumnus status for candidates completing the program successfully.</p>	<p>Admissions this year will be done along with IIT Kanpur, based on the selection process defined at: <a href="https://iitk.ac.in/wsais/b-cyber.php">https://iitk.ac.in/wsais/b-cyber.php</a></p> <p>Selected candidates would have an option to choose either IIT Madras or IIT Kanpur.</p>

## Course Curriculum

Semester 1 (July-Nov)	Cr.	Semester 2 (Jan-May)	Cr.
Introduction to Computer Systems for Cybersecurity	9	Computer Organization and Architecture for Cybersecurity	9
Problem Solving with Computers	12	Computer Organization and Architecture for Cybersecurity Lab	4
Linux System Administration	12	Ethical Hacking	12
Introduction to Cryptography	9	Introduction to Data Science	12
Recreation Course	2	Principles of Economics	9
Life Skills I	4	Life Skills 2	4
NCC / NSS / NSO	2	NCC /NSO/NSO	2
Posh Training I	0	<b>Total Credits</b>	<b>52</b>
Professional Ethics	2		
<b>Total Credits</b>	<b>52</b>		

Semester 3 (Jul-Nov)	Cr.	Semester 4 (Jan-May)	Cr.
Vulnerability Assessment and Penetration Testing	12	Elective from Bucket A	12
Web Technologies and Security	12	Elective from Bucket A	12
Operating Systems and Computer Networks	15	Course from predefined list	12
Elective from Bucket A	12	Course from predefined list	12
Posh Training 2	0	Course from predefined list	9
<b>Total Credits</b>	<b>51</b>	<b>Total Credits</b>	<b>57</b>

## Semesters 5 to 8: Field Deployments and NPTEL Electives

Field deployments involving projects in Security Operations, Offensive Security, Vulnerability Assessment and Pen Testing, Secure Systems, Malware Analysis, Firmware Reverse Engineering, Critical Infrastructure Security, Hardware Security and Cloud Security. Each semester carries 45 credits. NPTEL electives: minimum 12 and maximum 27 credits. Total: 192 credits.

Electives in Bucket A	Credits
Firmware Reverse Engineering	12
Digital Forensics	12
Cloud Security	12
Malware Analysis	12