

Date wise- Session Plan & Evaluative Scheme for “Cyber Security Risk Management”

Session	Date & Time	Faculty	Topic	Sub-topics
1	23/11/2019	SJD	Introduction to security and privacy concepts - 01	The need for security; Key Security Concepts: CIA Triad; Common security breaches
2	30/11/2019	SJD	Introduction to security and privacy concepts - 02	What is privacy?; Why does privacy matter?; Personal data; Common privacy risks
3	07/12/2019	SJD	Opportunities in the Risky World	Privacy, Security as Competitive Advantage; New Business Opportunities
4	14/12/2019	SJD	Security and Privacy Risk Management - 01	Security Management Models; Security Management Practices; Risk Assessment
5	21/12/2019	SJD	Security and Privacy Risk Management - 02	Privacy Impact Assessments/ Privacy Risk Analysis
6	28/12/2019	SJD	Vulnerability and Threat Finding	Definitions, Attackers, Vulnerabilities
Quiz/Assignment 1				
7	04/01/2019	SJD	Prevention/Control/Countermeasures (Non-Technical) - 01	Policies, standards and guidelines; Information security planning, governance and information security management system
8	11/01/2020	SJD	Prevention/Control/Countermeasures (Non-Technical) - 02	Legal Perspectives
9	18/01/2020	SJD	Prevention/Control/Countermeasures (Technical) - 01	Private key encryption; Key management; Message integrity and message authentication
10	25/01/2020	SJD/MC	Prevention/Control/Countermeasures (Technical) - 02	Public key encryption; Digital signatures
11	01/02/2020	MC	Prevention/Control/Countermeasures (Technical) - 03	Network security I
12	08/02/2020	MC	Prevention/Control/Countermeasures (Technical) - 04	Network security II
13	15/02/2020	MC	Prevention/Control/Countermeasures (Technical) - 05	Network security III
Quiz / Assignment 2				
14	22/02/2020	SJD	Managing a Security Crisis and Planning for Contingencies	Incident Response and Management; Business Continuity
15	29/02/2020	SJD	Case Study Session - 01	Analyzing cyber-security preparedness and incident response; Security in online banking; Challenges faced by a CISO
16	07/03/2020	SJD	Case Study Session – 02	Privacy, security and ethics; Privacy vs. national security
17	14/03/2020	SJD	Economics of Privacy and Security	Why information security is hard; Personal data markets; Targeted advertising; Utility vs.

				Privacy/Security
18	21/03/2020	MC	Campus Visit: Hot Topics in Security and Privacy	Privacy and security dimensions of crypto-currencies, blockchain technology, IoT, big data; Surveillance society; Profiling and automated decision-making
19	22/03/2020	SJD	Campus Visit	Project Presentation, Wrap up session and valedictory

Evaluation Scheme: Total Marks = 100, weightage 100%

Quiz 1= 30 (30%)

Quiz 2= 30 (30%)

Project= 40 (40%)

Sessions	Articles/Readings
1	a. "They Burned the House Down" An Interview with Michael Lynton by Adi Ignatius, HBR, Available at: https://hbr.org/2015/07/they-burned-the-house-down b. Dutta, A., & McCrohan, K. (2002). Management's role in information security in a cyber economy. <i>California Management Review</i> , 45(1), 67-87.
2	a. What was Privacy?, HBR, Available at: https://hbr.org/2008/10/what-was-privacy
3	a. Privacy is a Business Opportunity, HBR, Available at: https://hbr.org/2014/04/privacy-is-a-business-opportunity
4	a. Chapter 8 from Management of Information Security by Whitman and Mattord (4 th Edition), CENGAGE Learning. c. Von Solms, B., & Von Solms, R. (2004). The 10 deadly sins of information security management. <i>Computers & Security</i> , 23(5), 371-376.
5	a. CNIL PIA Guidelines, Available at: https://www.cnil.fr/en/privacy-impact-assessment-pia
6	a. Are You the Weak Link?, HBR, Available at: https://hbr.org/2003/04/are-you-the-weak-link b. To improve cybersecurity, think like a hacker, Available at: https://sloanreview.mit.edu/article/to-improve-cybersecurity-think-like-a-hacker/ c. The Danger from Within, HBR, Available at: https://hbr.org/2014/09/the-danger-from-within d. Chapters 3-6 from Threat Modeling: Designing for Security by Shostack, Wiley.
7	a. Research: A Strong Privacy Policy Can Save Your Company Millions, HBR. Available at: https://hbr.org/2018/02/research-a-strong-privacy-policy-can-save-your-company-millions b. Kayworth, T., & Whitten, D. (2010). Effective information security requires a balance of social and technology factors. <i>MIS Quarterly executive</i> , 9(3), 2012-52. c. Hooper, V., & McKissack, J. (2016). The emerging role of the CISO. <i>Business Horizons</i> , 59(6), 585-591. d. Chief Privacy Officer, HBR, Available at: https://hbr.org/2000/11/chief-privacy-officer
8	a. New Laws on Data Privacy and Security Are Coming. Is Your Company Ready? HBR. Available at: https://hbr.org/2019/07/new-laws-on-data-privacy-and-security-are-coming-is-your-company-ready b. Business Implications of the EU-US Privacy Shield, HBR, Available at: https://hbr.org/2016/02/the-business-implications-of-the-eu-u-s-privacy-shield
9	a. Chapters 1-4, 9 from Introduction to Modern Cryptography by Katz and Lindell, CRC Press. b. Tankard, C. (2017). Encryption as the cornerstone of big data security. <i>Network Security</i> , 2017(3), 5-7.

10	a. Chapters 10, 12 from Introduction to Modern Cryptography by Katz and Lindell, CRC Press.
11	a. Chapters 16-18 from Cryptography and Network Security by Forouzan and Mukhopadhyay (3 rd Edition), McGraw Hill Education. b. Chapter 10 from Management of Information Security by Whitman and Mattord (4 th Edition), CENGAGE Learning.
12	a. Chapters 16-18 from Cryptography and Network Security by Forouzan and Mukhopadhyay (3 rd Edition), McGraw Hill Education. b. Chapter 10 from Management of Information Security by Whitman and Mattord (4 th Edition), CENGAGE Learning.
13	a. Chapters 16-18 from Cryptography and Network Security by Forouzan and Mukhopadhyay (3 rd Edition), McGraw Hill Education. b. Chapter 10 from Management of Information Security by Whitman and Mattord (4 th Edition), CENGAGE Learning.
14	a. Who Should Take the Fall?, HBR, Available at: https://hbr.org/2015/05/case-study-after-a-crisis-who-should-take-the-fall b. Chapter 3 from Management of Information Security, Whitman and Mattord (4 th Edition), CENGAGE Learning. c. Shackelford, S. J. (2012). Should your firm invest in cyber risk insurance?. <i>Business Horizons</i> , 55(4), 349-356.
15	a. Case: Data Breach at Equifax, HBS b. Case: HDFC Bank: Securing Online Banking, Asia Case Research Centre
16	a. Case: Apple: Privacy vs. Safety (A) and (B), HBS b. Allen, A. M., & Peloza, J. (2015). Someone to watch over me: The integration of privacy and corporate social responsibility. <i>Business Horizons</i> , 58(6), 635-642.
17	a. The Behavioral Economics of Why Executives Underinvest in Cybersecurity, HBR, Available at: https://hbr.org/2017/06/the-behavioral-economics-of-why-executives-underinvest-in-cybersecurity b. Economic Aspects of Personal Privacy by Hal Varian, Available at: http://people.ischool.berkeley.edu/~hal/Papers/privacy/
18	a. With Big Data Comes Big Responsibility, HBR. Available at: https://hbr.org/2014/11/with-big-data-comes-big-responsibility b. Plangger, K., & Watson, R. T. (2015). Balancing customer privacy, secrets, and surveillance: Insights and management. <i>Business Horizons</i> , 58(6), 625-633. c. Ads that Don't Overstep, HBR, Available at: https://hbr.org/2018/01/ads-that-dont-overstep

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MC: Dr. Manojit Chattopadhyay, Associate Professor, IT & Systems, IIM Raipur

Suggested reference books:

- 1) Management of Information Security by Whitman and Mattord (4th Edition), CENGAGE Learning
- 2) Introduction to Modern Cryptography by Katz and Lindell, CRC Press.
- 3) Cryptography and Network Security by Forouzan and Mukhopadhyay (3rd Edition), McGraw Hill Education
- 4) Threat Modeling: Designing for Security by Shostack, Wiley.

Note: Reference materials having an HBR url can be accessed by creating a free account at www.hbr.org . Each account can access six articles per month.