Round 1 CCI Reconciled Topics (11-2-14)

Index Category Topic

1

fundamental concepts

- confidentiality
- 2 authentication
- 3 integrity4 assured operations

adversarial thinking

- 5 adversarial modelling
- 6 vulnerability assessment
- 7 threat analysis
- 8 risk management

attack & defense

- 9 common attacks including social engineering, replay, man-in-the-middle, password cracking, traffic analysis
- 10 countermeasures including physical security, defense in depth, data security
- 11 forensics

cryptography

- 12 symmetric and asymmetric encryption
- 13 key management, public-key infrastructure

computer & network security

- 14 authorization and access control
- 15 principle of least priviledge
- 16 basic network security protocols
- 17 intrusion detection, firewalls, penetration testing
- 18 web security

software

- 19 malware (types, threats, analysis of, how to defend against)
- 20 software vulnerabiliies including buffer overflow
- 21 secure coding practices

system design & operations

- 22 response & recovery
- 23 operational security
- 24 security policies
- 25 auditing
- 26 usable security

big picture & professional skills

- 27 ethics, legal issues
- 28 economic issues of security
- 29 privacy