***The CIA – confidentiality integrity and availability***

[MUSIC] In the previous units, we discussed the definition of information security and cybersecurity. Here, we introduce some key models used to identify the scope of our study. Our definition identifies that our subject is interdisciplinary usually in the context of cybersecurity. The classic model used to describe the key concepts in information security is called the CIA triad. That's not the US Central Intelligence Agency, it stands for confidentiality, integrity and availability. This is displayed in this classic diagram, is incorporate a different components in the context of an organization as a series of layers and components. We have the hole enveloped within the organization and its procedures enacted by people and products that are based on hardware software and communication technology.

1:00 Which store and process and transmit information. Confidentiality. A system should ensure that only authorised users access information.

1:10 This is through the application of technologies and processes. Some of which we will begin to investigate through our introduction to cryptography, network and computer security.

1:21 Integrity, a system should ensure completeness, accuracy, and an absence of unauthorized modifications in all its components.

1:31 That is we can determine that a piece of information is provided as requested and we can verify its providence. If an entity tries to alter that piece of information, it can only do so if it is authorized. Availability. A system and all system components are available and operational when required, as requested by an authorized user. So a system should be dependable to some extent and resilient to failure or an attack. This is, of course, tempered by economic realty, because we can't make everything perfect. All these aspects require us to know who our users are, what they are able to access, or do to a system component, or information unit. This is the basis of weeks two, three, and four of this course where we introduce cryptography. Computer and network security and security management.

2:23

These show how we can maintain confidentiality, integrity, and availability within the context of an organization. In the next unit, we look at a different model, which is more expansive than the CIA triad. [MUSIC]