Faculty of Engineering and Technology

Discrete Mathematics
(CSPS-111)

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Outlines

- **Set Identities**
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Set Identities

- Identity: $A \cup \varnothing = A \quad A \cap U = A$
- Domination: $A \cup U = U \quad A \cap \varnothing = \varnothing$
- Idempotent: $A \cup A = A = A \cap A$
- Double complement: $A \cup B = B \cup A \quad A \cap B = B \cap A$
- Commutative: $A \cup (B \cup C) = (A \cup B) \cup C$
- Associative: $A \cap (B \cap C) = (A \cap B) \cap C$

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