DEVELOPMENT OF METHODOLOGICAL PRINCIPLES FOR DESIGN A CORPORATE INFORMATION AND EDUCATIONAL SYSTEM OF AN INNOVATIVE UNIVERSITY UNDER ANTI-CORRUPTION CONDITIONS

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CONCEPT OF CORRUPTION COUNTERACTION

**Level 1 strategic Goals:**

- Impossibilities of changes in regulatory documents
- Legal
- Financial
- Security strategy
- Cybersecurity
- Social
- Functional strategies
- Strategies of structural units
- Corporate strategy
- Cybersecurity
- IAU mission

**Level 2 operative Goals:**

- To prevent corrupt changes in objectivity of assessment of students’ knowledge
- Corporate concept
- Corporate strategy
- Information security
- Functional strategies
- Legal
- Financial
- Security strategy
- Information security
- Social
- Personnel

**Level 3 tactical Goals:**

- to enhance the level of objectivity of assessing students for particular disciplines
- Security concept
- Corporate strategy
- Security for Information
- Functional strategies
- Personal security
- Information security
- Social
- Corporate
- Others
- Strategies of structural units and SI strategy of corporate system of IAU

**strategic level**

**operational level**

**tactical level**
METHODOLOGICAL FOUNDATIONS FOR THE CONSTRUCTION OF CIES OF IAU

Conceptual synergic security model of CEIS of IAU

Updated classifiers of threats to cyberphysical (CFS) and information and communication (ICS) systems

\[
W^C_{ICS} = \sum_{i=1}^{M} w_{ICSi} C^CICS \quad \cup \quad W^C_{CPS} = \sum_{i=1}^{M} w_{CPSi} C^CPS \quad \ldots
\]

\[
W^A_{ICS} = \sum_{i=1}^{M} w_{ICSi} A^ICS \quad \cup \quad W^A_{CPS} = \sum_{i=1}^{M} w_{CPSi} A^CPS \quad \ldots
\]

Updated model of CIES infrastructure

\[
G^{CIES} = \{O^{CIES}, L^{CIES}, I_a\}
\]

Methodological foundations for constructing CEIS IAU in the context of anti-corruption

Sub-model of corruption officer

\[
d\left(A^{AC}\right) \over dt = R - D, \quad R = A^A \times T^{RA}, \quad FL = A^A S I \sum_{i=1} \Delta A_i, \quad Ad = IR - Rep.
\]

\[
IR = R^a - \sum_{i=1}^{\infty} V_i \times Val_i, \quad DFP = (RMR * Rep) + BFP, \quad d\left(DAP\right) \over dt = IFP
\]

Model of ensuring corruption counteraction in IAU

\[
Val_i = \left(C^I \times AF \times C^{CIS}\right) - \left(C^D \times FL\right).
\]

\[
SA = \left(C^I \times AF\right) - \left(C^D \times FL\right) \quad \text{if} \quad Val_i > 0
\]

\[
0 \quad \text{if} \quad Val_i \leq 0
\]

Model of DM behavior

\[
A^{AS} = S_i \times A^{AS} \quad I \sum_{i=1} S_i \times A^{AS}, \quad P^a = \sum_{i=1} B_i \times C^{CIS}, \quad d\left(AAW\right) \over dt = IAW.
\]

Anti-corruption model in the IAU

MODEL BEHAVIOR DECISION-MAKERS

\[
M_j = \left< BT, DM, IT \right>
\]