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COURSE: *Electronic systems*

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LANGUAGES OF EDUCATION: Ukrainian, Russian, English

THE SUBJECT: students are introduced to electronic information systems assessments, description of signals used in various electronic systems and methods of information processing, storage and conversion.

THE AIM of the course includes formation of following students' **abilities**:

- ❖ Ability to code electronic systems;
- ❖ Ability to construct digital information systems, continuous communication systems, optimal coding multichannel transmission systems, registration and display information systems;
- ❖ Ability to monitor and diagnose electronic systems.

MAIN TASK OF EDUCATIONAL COURSE

To give students a solid knowledge for information evaluation of electronic systems, representation of signals, methods for their conversion and storage, construction and operation principles of the electronic systems of information selection, transformation, transmission, reception, recording and display.

Knowledge:

- ✓ information theory
- ✓ signals processing and conversion in the time and frequency domains using electronic systems
- ✓ principles of design of electronic information systems for various purposes

Skills:

- ✓ ability to carry out assessment of the information electronic systems of information selection, transformation, transmission, reception, recording and display to determine the functional structure of electronic systems with required level of noise immunity and reliable operation

Experience:

- ✓ to apply gained knowledge while doing the course work, in practice and research in the specialty

COURSE DURATION: 6 credits, 180 hours in total, 36 hours of lectures, 18 hours of laboratory works, 126 hours for own student's work.

REQUIREMENTS TO STUDENTS: knowledge in field of computer science, information theory and signal processing, digital information systems.

