**The name of the academic discipline:**

**“Digital signal processing”**

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| **Specialty code and name** | 1-40 01 01 Information Technology Software |
| **Year of study** | 4 |
| **Semester of study** | 7 |
| **Number of in-class academic hours:** | 44 |
| **Lectures****Seminar classes** **Practical classes****Laboratory classes** | 24 |
| - |
| - |
| 20 |
| **Form of the current assessment (*credit/ graded credit /exam*)** | exam |
| **Number of credit points** | 3 |
| **Competences** | Use methods of digital filtering, spectral correlation analysis, multi-speed processing, transfer and transformation of spectra to design hardware and software systems for the implementation of digital data processing. |
| **Summary of the academic discipline:**Digital signal processing is an academic discipline, the purpose of which is to teach students the basic concepts, provisions and algorithms used in conducting research and implementing projects that require creating software for digital processing of signals and data: the transition from continuous signals to digital ones; methods and algorithms for their subsequent processing, such as spectral analysis, digital filtering, wavelet analysis, data smoothing, as well as methods for their implementation using modern algorithmic languages ​​and programming systems and application in applied areas. |