Hydraulics
(course title)

COURSE SYLLABUS ABSTRACT

1-40 05 01 Information systems and technologies (majors in)
(speciality code and name)

1-40 05 01-01 Information systems and technologies (in designing and producing)
(specialisation code and name)

	STUDY MODE		
	full-time	part-time	part-time (shortened program)
Year	2	2	2
Semester	4	4	3
Lectures, hours	34	8	8
Practical classes (seminars), hours	34	8	8
Pass/fail, semester	4	4	3
Contact hours	68	16	16
Independent study, hours	76	128	128
Total course duration in hours / credit units	144/4		

1. Course outline
Fluid and gas static. Fluid and gas kinematics. Fluid and gas dynamics. Hydraulic and pneumatic drive of process equipment.

2. Course learning outcomes
Upon completion of the course, students will be expected to
know**:**
– basic properties of liquids and gases;
– basic laws of fluid and gas mechanics;
be able to**:**
– solve the problems of statics, kinematics and dynamics of liquid and gas;
possess:
– methods of solving the problems of statics, kinematics and dynamics of liquid and gas;
– methods of calculation of hydraulic and pneumatic systems.

3. Competencies
SK-4 – Use the basic laws of natural science disciplines in professional activities.

4. Requirements and forms of midcourse evaluation and summative assessment
– verbal-written: protection of practical classes, test.