

Bialystok University of Technology									
Field of study	Computer Science							Degree level and programme type	Engineer's degree full-time programme
Specialization/ diploma path	---							Study profile	academic
Course name	Introduction to Linux							Course code	FCS-00057
								Course type	obligatory
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	2
	15				15			No. of ECTS credits	6
Entry requirements									
Course objectives	The aim of the course is to familiarize with various distributions of Linux open source operating system. Will discuss the basic configuration of the system, mainly on the part of the user with the ability to implement shell scripts, also using regular expressions. Will also be presented free software licenses. Subject to a large extent based on a course preparing for the LPIC-1 certification.								
Course content	Introduction to the Linux operating system. License free software, open source, GPL, etc. Installation of the system. Basic commands executed based on the text interface. Bash shell programming. Constructing regular expressions. Configuring network interfaces. Using SSH to connect to remote devices.								
Teaching methods	lecture problem, programming,								
Assessment method	Lecture - written exam laboratory - exercise reports								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
LO1	knows the licenses of free and open source software							K_W14	
LO2	can install the operating system in a variety of configurations							K_U06	
LO3	is able to configure Linux distributions from client side.							K_W03 K_U05	
LO4	is able to create scripts in the selected system shell							K_W03 K_W04 K_U05	
LO5	can create regular expressions							K_W03 K_U05	
Symbol of learning outcome	Methods of assessing the learning outcomes							Type of tuition during which the outcome is assessed	
LO1	Test							L	
LO2	Installation of selected distribution							Sw	
LO3	Test, report on the exercise grade							L, Sw	
LO4	Test, report on the exercise grade							L, Sw	
LO5	Test, report on the exercise grade							L, Sw	
Student workload (in hours)							No. of hours		
Calculation	1 - Attendance at lectures - 15x1h							15	
	2 - Attendance at laboratories - 15x1h							15	
	3 - Preparation for exams and test (lecture) -							40	
	4 - Participation in student-teacher sessions -							20	
	5 - Preparation of reports -							40	
	6 - Preparation for exams and test (laboratory) -							20	
TOTAL:							150		
Quantitative indicators							HOURS	No. of ECTS credits	
Student workload - activities that require direct teacher participation							50 (4)+(2)+(1)	2.0	
Student workload - practical activities							55 (5)+(2)	2.2	
Basic references	1. Man pages of GNU Linux. 2. Course materials LPIC-1 (provided for students by teacher). 3. Bash programming - http://tldp.org/HOWTO/Bash-Prog-Intro-HOWTO.html								
Supplementary references	1. Debian distribution - http://www.debian.org/doc . 2. Fedora distribution - http://docs.fedoraproject.org . 3. SuSe distribution - http://en.opensuse.org/Documentation .								
Organisational unit conducting the course	Department of Information Systems and Computer Networks							Date of issuing the programme	
Author of the programme	dr hab. inż. Ireneusz Mrozek							Feb. 17, 2022	

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW – field work, S – seminar