



### COURSE DESCRIPTION

Course code	full-time studies	
	part-time-studies	
Course name	<b>Administracja Serwerami</b>	
Course name in English	<b>Server administration</b>	
Valid from academic year	<b>2022/23</b>	

### PLACEMENT IN THE TEACHING PROGRAM

Field of study	<b>Computer Science</b>
Level of education	<b>1st degree</b>
Studies profile	<b>General</b>
Form and method of teaching classes	<b>Full-time and part-time studies</b>
Specialization	<b>All specializations</b>
Organizational unit responsible for the course	<b>Katedra Informatyki Stosowanej</b>
Course coordinator	<b>Dr inż. Jarosław Wikarek</b>
Approved by	<b>Dean of the Faculty of Electrical Engineering, Automatic Control and Computer Science Roman Deniziak, KUT prof., DSc, PhD</b>

### GENERAL CHARACTERISTIC OF THE COURSE

Course affiliation	<b>main subject</b>	
Course status	<b>elective subject</b>	
Language	<b>English</b>	
Semester	full-time studies	<b>Semester VII</b>
	part-time-studies	<b>Semester VIII</b>
Requirements		
Exam (YES/NO)	<b>NO</b>	
ECTS	<b>6</b>	

Course form		lecture	classes	laboratory	project	other
Hours per semester	full-time studies	<b>30</b>		<b>30</b>		
	part-time-studies	<b>18</b>		<b>18</b>		

## LEARNING RESULTS

Category	Result Symbol	Learning Results	References to the field of study results
Knowledge	W01	Knows and understands the issues related to server virtualization.	INF_W15
	W02	Knows and understands issues related to the configuration of network interfaces and servers of network services. Has knowledge about the configuration of the most popular database servers.	INF_W15
	W03	Knows and understands the principles of operation of domain controllers.	INF_W15
	W04	Knows and understands the operation of server performance and security monitoring tools	INF_W15
Skills	U01	Can install and configure virtualization software.	INF_U15
	U02	He can configure interfaces and network services in the Linux operating system. He can install and configure the most popular database servers.	INF_U15
	U03	Can install and manage a domain controller	INF_U15
Social competence	K01	Knows how to prioritize actions.	INF_K1
	K02	He is ready to work in a team, solve a task together.	INF_K2

## COURSE CONTENT

Course Form	Content
lecture	<ol style="list-style-type: none"> <li>1.Server virtualization - classification and types of software.</li> <li>2.Advanced methods of configuring network interfaces.</li> <li>3.Installation and configuration of network service servers (DHCP, DNS, Mail, FTP, SAMBA, etc.) in the Linux operating system.</li> <li>4.Installation and configuration of the most popular database servers.</li> </ol>
laboratory	<ol style="list-style-type: none"> <li>1. Installation and configuration of the selected virtualization platform.</li> <li>2. Installation and configuration of the selected operating system on the virtual machine.</li> <li>3. Installation and configuration of selected web service servers.</li> <li>4. Install and configure the domain controller software</li> </ol>

## LEARNING RESULTS VERIFICATION METHODS

Result Symbol	Learning results verification methods					
	Oral Exam	Written Exam	Midterm	Project	Report	Other
W01			X		X	
W02			X		X	
W03			X		X	
W04			X		X	
U01					X	
U02					X	
U03					X	
K01					X	
K02					X	

## ASSESSMENT FORMS AND CRITERIA

Course Form	Assessment Form	Assessment Criteria
lecture	pass with a grade	Obtaining at least 50% of the points in the written test
laboratory	pass with a grade	Average grade for completing tasks in class and reports.

## STUDENT'S VOLUME OF WORK

ECTS Balance												
No.	Activity Type	Student Involvement										Unit
		full-time studies					part-time-studies					
		Lec	C	Lab	P	S	Lec	C	Lab	P	S	
1.	Participation in classes according to the schedule	30		30			18		18			h
2.	Other (consultations, exams)	2		2			2		2			h
3.	<b>Total with the direct assist of an academic teacher</b>	<b>64</b>					<b>38</b>					h
4.	<b>Number of ECTS, that students obtains with the direct assist of an academic teacher</b>	<b>2,56</b>					<b>1,52</b>					ECTS
5.	<b>Hours of unassisted student work</b>	<b>36</b>					<b>62</b>					h
6.	<b>Number of ECTS that student obtains working unassisted</b>	<b>1,44</b>					<b>2,48</b>					ECTS
7.	<b>Practical classes volume of work</b>	<b>30</b>					<b>18</b>					h
8.	<b>Number of ECTS obtained by student at practical classes</b>	<b>1,20</b>					<b>0,72</b>					ECTS
9.	<b>Total student's volume of work expressed in hours</b>	<b>100</b>					<b>100</b>					h
10.	<b>ECTS</b>	<b>4</b>										ECTS

## BIBLIOGRAPHY

1. Practical Virtualization Solutions: Virtualization from the Trenches. Kenneth Hess, Amy Newman
2. TCP IP Network Administration. Craig Hunt
3. Linux Network Administrator's Guide. Tony Bautts