



<b>The Faculty of:</b>	Electrical and Computer Engineering
<b>Field of study:</b>	Computer Science
<b>Speciality:</b>	
<b>Study degree (BSc, MSc):</b>	MSc

**COURSE UNIT DESCRIPTION**

<b>Course title:</b>	Concurrent and distributed programming
<b>Lecturer responsible for course: Dr. Bogdan Kwolek</b>	
<b>Contacts: phone: 1592</b>	<b>e-mail: <a href="mailto:bkwolek@prz-rzeszow.pl">bkwolek@prz-rzeszow.pl</a></b>
<b>Department : Department of Electrical Engineering and Informatics</b>	

Semester	Weekly load	Type of classes				Number of ECTS credits
		L Lectures	C Theoretical Classes	Lb Laboratory	P Project	
6		30		15		3

Course description
<p><b>Lecture:</b>            Concurrent processes.            Mutual exclusion, security and liveness, blocking, starvation, and fairness.            Classical problems of concurrency.            Messages and pipes in UNIX.            Multi-thread programming in Windows.            Java threads, communication and synchronization.            Distributed programming in Java.            Remote Method Invocation</p>
<p><b>Classes:</b></p>
<p><b>Laboratory:</b>  <b>Threads in Java. Synchronization and communication. Sockets, RMI.</b></p>
<p><b>Project:</b></p>

<b>Objectives of the course</b>
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The objective of the Concurrent and Distributed Programming is to prepare students to be a part of teams that specify, design, build, and implement concurrent/distributed systems/software. To accomplish this objective, students must understand how to use concurrent/distributed technology, including software, and communication, as basic components of large information systems. This understanding is based on a theoretical grounding as well as on experience in working both individually and in teams to solve software and computation problems.
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<b>Examination method</b>
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Written examination.
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<b>Bibliography</b>
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Z. Weiss, T. Gruzlewski; Programowanie współbieżne i rozproszone; WNT, 1993
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