

Mathematical Models of Emotional Robots

Unit Title	Mathematical Models of Emotional Robots		
Level of Study	Level I –Bachelor’s degree		
Credit Value	1	ECTS Value	1
Home Department	Information security and communication systems		
Home Faculty	Mathematics and Mechanics		
Unit Co-ordinator			
Key Words	robot, artificial intelligence, mathematical model, psychology, memory		
Brief Summary	<p>The course presents mathematical theory of robots - psychological human analogues - which are able to forget older information (past experience). We consider the questions of mathematical formalization of emotions, education, temperament, forgetting older education, formalization of emotional behaviour of robot groups, including formalization depending on the robot’s memory. Also the course offers mathematical models of data accumulation by a robot and an algorithms of selection between emotion and logic in a decision making process.</p>		
Indicative Content	<p>Students will study:</p> <ul style="list-style-type: none"> • modern emotional robots; • mathematical models of the simplest emotional robots; • mathematical models of harmonic emotions of robots; • mathematical models of psychological characteristics of robots; • mathematical models of effective formation of public consciousness with the help of mass media. 		