STRUCTURE OF THE TWO YEAR STUDY PROGRAM ON SOFTWARE ENGINEERING, SECOND CYCLE OF STUDIES WITH 120 ECTS

	Eight semester	
	Title of the subject	**Credits ECTS**
1	System theory	**7**
	Elective courses (3 of 4):	
	Calculation in cloud and SOA	6
	Embedded systems	6
	Operational research	6
	Virtual societies	6
	Elective subject from the offered electives from a university list of electives	
		5
	Total	30

Literature	
Subject	**Literature**
System theory	*Systems Analysis and Design,* Kenneth E. Kendall, J. Kendall, Pearson, 2014 *Linear System Theory,* Wilson J. Rugh, Pearson, 1996
Calculation in cloud and SOA	*Пресметување во облак и СОА,* Thomas Erl, Prentice Hall, 2005 **Cloud Computing: Automating the Virtualized Data Center (Networking Technology),** Venkata Josyula, Malcolm Orr, Greg Page, Venkata Josyula, Malcolm Orr, Greg Page, 2011
Embedded systems	*Introduction to Embedded Systems*, Jonathan W Valvano, CreateSpace Independent Publishing Platform; 1 edition, 2016 *Designing Embedded Systems with Arduino: A Fundamental Technology for Makers,* Tianhong Pan, Yi Zhu, Springer; 1st ed., 2017
Operational research	*Operations Research: Algorithms and Applications,* Ratindra P. Sen, PHI, 2010 *Linear and Nonlinear Programming,* D.G.Luenberger, Y.Ye,

	Stanford University, D.G.Luenberger, Y.Ye, Stanford University, 2008 **Operations Research, H.A. Taha, Magor, 2010**
Virtual societies	***Мобилизирање на информатичкото општество,*** Робин Мансел Р.Едвард Стеинмуелер, ТРИ, 2009 **The State of Play: Law, Games and Virtual Worlds,** J. Balkin, B. S. Noveck, New York University Press, 2006 **Virtual Society: Technology, Cyberbole, Reality,** Steve Woolgar, Oxford University Press, 2002