

Program	Level	Schort cycle					
	Name of the program	Information Technologies					
COURSE							
Course title	Web Programming II						
Course code	Semester	Course status	ECTS	Contact hours (L+AE+LE)			
IT 270	IV	Mandatory course	5	2+0+2			
Lecturer							
Course Goals	The module's objectives are to familiarize students with creating dynamic web systems through scripting languages and connecting with databases—knowledge of client-server technology. In addition, students are introduced to the methodology of solving problems by creating a dynamic website.						
Learning Outcomes	Through the mentioned module, students will master the use of scripting languages and databases through independent work on laboratory exercises as a means for designing and implementing an information system, as well as training students to develop these systems.						
COURSE CONTENT							
<ul style="list-style-type: none"> • Basics of PHP language; • Creating PHP scripts; • Scalar values; • Advanced PHP programs; • PHP and My SQL; • Node.js; • Npm; • Asynchronous programming; • React framework - Git and GitHub; • Web services SOAP and REST models; • WSDL; • Writing web services; • MongoDB; • Mongoose; • Express; • Socket.IO; • Angular.JS; • JWT Authentication. 							
LITERATURE							
<p>[1] Larry Ullman: PHP and MySQL for Dynamic Web Sites: Visual QuickPro Guide (5th Ed.), Peachpit Press, 2017.</p> <p>[2] Jim Wilson: Node.js the Right Way: Practical, Server-Side JavaScript That Scales, 1st Ed., Pragmatic Bookshelf, 2013.</p> <p>[3] Evan M. Hahn: Express in Action (Writing, building, and testing Node.js applications), Manning Publications, 2016.</p> <p>[4] Basarat Ali Syed: Beginning Node.js, Apress, 2014.</p>							
STUDENT WORKLOAD (hours in a semester)							
Lectures	30	Exercises	30	Individual work	65	T o t a l	125
GRADING				REMARKS			
Criterion	Maximum points	Minimum points					
Midterm exams	5	3					
Homework	5	3					

Projects	40	21	
Seminar	5	3	
Final exam	45	25	
T o t a l	100	55	