**E-mobile applications (ECTS credits: 4)**

Language: the course is offered in English, Serbian and Hungarian.

**Course description:**

The course covers the theoretical and applicative usage of programming methods and techniques to create multiplatform websites, mobile applications and integrated web systems.

Main topics in this course are development of mobile websites, detections,detection of mobile devices, and content adaptation using the PHP programming language, basics of Responsive Web Design techniques, using frameworks to create multiplatform websites, QR codes, JSON data exchange standard, implementation of API services. Creating web-based mobile applications. Creating mobile applications for the Android operating system, network communications, sensors, GPS, SMS, storing data on a mobile device. The concept of an integrated web system. Communication between web applications and mobile applications through JSON. PUSH notifications, secure communication within integrated web systems. Creation of multiplatform integrated web systems using PHP programming language, Android mobile applications, databases and web services.

**Aims:**

Students should accept the theoretical and practical application in the field of creating integrated web systems.

To educate students to develop integrated web systems made up of web applications, mobile applications, databases and web services for different purposes.

**Learning outcomes:**

After completing the course the student should be able to:

* Create complex integrated web systems independently using the PHP programming language, Android mobile applications, databases and web services.
* Develop multiplatform integrated web systems that meet client requirements and security aspects of data exchange.