

Course title: Android Programming
Course code: 63051
ECTS credits: 6
Requirements: None
Basic information
Level of studies: Undergraduate applied studies
Year of study: 3
Trimester: 9
Goal: Designing and implementing applications for Android mobile devices using Android SDK and Android Studio for development and testing.
Outcome: Students should be able to implement Android SDK library and use Android Studio to develop Android applications.
Contents of the course
Theoretical instruction
1. Android SDK platform
2. Mobile App development process
3. XML - user interface design
4. Activities, fragments and intents
5. Android Web services
6. App settings
7. Data persistence in Android
8. Google Play services - Google Maps
9. Background tasks
10. Broadcast Receiver
11. Notifications
12. Content Providers
13. Widgets
14. Position sensors
15. Graphics and Multimedia
16. Android in the Cloud
17. Styles and Themes
18. Android performance optimization
19. Android localization
Practical instruction (Problem solving sessions/Lab work/Practical training)
1. XML - user interface design

2. Activities, fragments and intents
3. Android Web services
4. App settings
5. Google Play services - Google Maps
6. Notifications
7. Graphics and Multimedia
8. Android localization
Textbooks and References
1. James Talbot, Justin McLean, Learning Android Application Programming, Addison-Wesley Professional, 2013
2. B. Phillips, C. Stewart, Android Programming: The Big Nerd Ranch Guide (2nd Edition), 2015
3. P. Deitel, H. Deitel, A. Wald Android 6 for Programmers: An App-Driven Approach, 2015
Number of active classes (weekly)
Lectures: 4
Practical classes: 1
Other types of classes: 1
Grading (maximum number of points: 100)
Pre-exam obligations: Points
Activities during lectures:
Activities on practical exercises: 30
Seminary work:
Colloquium: 20
Final exam: Points
Written exam: 50
Oral exam:
Lecturer: Nenad Teofilović, MSc
Associate: Slobodan Čabarkapa