

<b>Module title</b> App Development for Android Smartphones				
<b>Module code</b> Tbd.	<b>Level</b> Bachelor (B.Sc.)	<b>Hours per week</b> 4	<b>ECTS credits</b> 5	<b>Duration</b> 1 semester
<b>Module instructor</b> M.Sc Jussi Koistinen Savonia University of Applied Sciences, Finland	<b>Lecture type</b> Lectures + Guided Lab Sessions	<b>Prerequisite(s)</b> Java programming		<b>Grading</b> Weekly assignments + final project
<b>Objectives</b> This course will introduce the principles, practices and tools of how to implement and deploy Android application. <ul style="list-style-type: none"> <li>• Students understand the principles of Android programming</li> <li>• Students know how to use various widgets when building Android application</li> <li>• Students can use selected API:s</li> <li>• Students can implement an Android application which uses HTTP connection to communicate with backend system</li> <li>• Students know how to deploy and publish Android application</li> </ul>				
<b>Content</b> <ul style="list-style-type: none"> <li>• Fundamentals of Android system</li> <li>• Activities and Intents</li> <li>• UI design (widgets, menus, dialogs, notifications)</li> <li>• Saving data</li> <li>• Connecting to backend system with HTTP</li> <li>• Location API</li> <li>• Capturing photos and video</li> </ul>				
<b>Textbook/teaching material</b> <ul style="list-style-type: none"> <li>• Android Developer Resource website</li> <li>• Android Programming: The Big Nerd Ranch Guide (2nd Edition)</li> <li>• Advanced Android Application Development (4th Edition) (Developer's Library)</li> </ul>				

Note: this is not the official course descriptor according to the "Studien- und Prüfungsordnung" (SPO)