

<b>Title</b>	<b>Mobile Computing</b>
<b>Code</b>	<b>CS-435</b>
<b>Credit Hours</b>	3
<b>Category</b>	CS Technical Elective
<b>Prerequisite</b>	None
<b>Co-Requisite</b>	None
<b>Follow-up</b>	None
<b>Course Description</b>	<p><b>Topics:</b> Activities, Intents, Service, Content Provider, Broadcast Receiver, Views, Location Based Apps, Sensors, SQLite, Persistent data storage, Compass, GPS: Introduction to the Mobile Computing Domain, Comparison of different Mobile Platforms, Revision of Java, Intro to Android Platform, Dalvik Virtual Machine, Android Constructs (Activity, Intent, Content Provider, Service, Broadcast Receiver), Activity Lifecycle, Project Structure, Manifest File, Emulators (AVD), Debugging (DDMS), R.java, Inter Activity Communication(Intent), Event Handlers, Layout XML, @ Sign, Layouts, Adapters, Dynamic Lists, Holder Pattern, Menus and dialogs, Menu, Menu Group, Menu Item, Icon Menu, Sub Menu, Context Menu, Sub Menu, Dynamic Menu, Using XML Files for Menus, Services, Intents, Data Storage: Key Value Sets, Files; Intro to SQLite, Web Service Integration, JSON, HTTPClient, Graphics, Widgets &amp; Notifications, Multimedia and telephony API, Android Native Development Kit (NDK).</p>
<b>Text Book(s)</b>	<ol style="list-style-type: none"> <li>1. Mark L. Murphy, Beginning Android 2, Apress, ISBN 978-1-4302-2629-1</li> <li>2. Zigurd Mednieks, Laird Dornin, G. Blake Meike, and Masumi Nakamura Programming Android, 2<sup>nd</sup> Edition, O Reilly Press, ISBN: 978-1-449-31664-8</li> <li>3. Syed Hashmi, Satya Komatineni, Dave Maclean, Pro Android 2, Apress, ISBN 978-1-4302-2659-8</li> </ol>
<b>Reference Material</b>	<ol style="list-style-type: none"> <li>1. <a href="http://developer.android.com/develop/index.html">http://developer.android.com/develop/index.html</a></li> <li>2. <a href="http://developer.android.com/guide/components/services.html">http://developer.android.com/guide/components/services.html</a></li> <li>3. <a href="http://developer.android.com/guide/components/intents-filters.html">http://developer.android.com/guide/components/intents-filters.html</a></li> <li>4. <a href="http://developer.android.com/guide/topics/data/data-storage.html">http://developer.android.com/guide/topics/data/data-storage.html</a></li> <li>5. <a href="http://developer.android.com/guide/topics/graphics/index.html">http://developer.android.com/guide/topics/graphics/index.html</a></li> <li>6. <a href="http://developer.android.com/guide/topics/sensors/index.html">http://developer.android.com/guide/topics/sensors/index.html</a></li> <li>7. Handouts.</li> </ol>