



SHIVAJI UNIVERISTY, KOLHAPUR-416 004. MAHARASHTRA

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शिवाजी विद्यापीठ, कोल्हापूर – 416004.

दुरध्वनी (ईपीएबीएक्स) २६०९००० (अभ्यास मंडळे विभाग— २६०९०९४)

फॅक्स : ००९१-०२३१-२६९१५३३ व २६९२३३३.e-mail:bos@unishivaji.ac.in

SU/BOS/Science/6987

Date:- 17-11-2016

To,

Head, Department of Computer Science, Shivaji University, Kolhapur.	The Principal All Affiliated Colleges (M.Sc. Computer Science) Shivaji University, Kolhapur
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Sub:- Regarding syllabi of course/paper : Android Fundamentals Development.

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the University Authorities have accepted and granted approval to the syllabi, of course/paper : Android Fundamentals Development for M.Sc. Part-I Computer Science (Sem. II) under Choice Based Credit System (C.B.C.S.)

The syllabi shall be implemented from the academic year 2016-2017, (i.e. from June 2016) onwards. A soft copy of which is enclosed herewith. The said syllabi is also made available on university website www.unishivaji.ac.in. The above mentioned course/paper is four credit open Elective course can be offered by any M.Sc./M.C.A./M.Tech. Students having knowledge of Java Programming under Choice Based Credit System.

You are therefore requested to bring this to the notice of all students and teachers concerned

Thanking you,

Yours faithfully,


17/11/16.
Deputy Registrar

Enclosed as above.

Copy f.w.cs.to-

- 1) The Co-ordinator Faculty of Science.
- 2) The Chairman, Co-ordinating committee in Computer Science.

Copy to:-

- 1) Appointment Section
- 2) B.Sc. Section
- 3) P.G. Affiliation
- 4) Eligibility Section
- 5) P.G. Admission
- 6) I.C.T. Cell

For Information & necessary action

MSc. (Computer Science) Part-I sem-II
Android Fundamentals Development

4- credits

Unit-I (20)
The Basics: Hello World, Activities and Intents, Connect to the Internet, Testing and Debugging, and Backwards Compatibility

User Interface: User Interaction and intuitive navigation, Delightful User Experience, Testing your UI

Unit 2: (16)
Data -- Saving, Retrieving, Loading
Storing Data in your app, Storing Data using SQLite, Sharing Data: Content Resolvers and Content Providers, Loading Data using Loaders

Unit 3: (8)
Background Tasks and Events
Using Services for long running tasks, Triggering, Scheduling, and Optimizing Background Tasks

Unit 4: (16)
Polish and Publish
Permissions and Libraries, Security best practices, Notifications and Widgets, Publishing your App

References:
Textbook (in github) providing high level information for each topic, with links to more learning resources

Practical Paper of Android Fundamental Development

4- credits

- Create Your First Android App, Layouts, Views and Resources
- Scrolling Views and Lists , Resources to Help You Learn
- Activities and Intents
- The Activity Lifecycle and Managing State, Starting Activities with Implicit Intents
- Background Tasks, Connecting to the Internet
- Debugging your apps, Testing your app, Support libraries
- User input, Menus, Navigation styles, Delightful User Experience
- Adapt layouts for multiple devices and orientations
- Testing/Debugging the UI, Storing Data in your app
- Storing Data using SQLite, Store data using SQLite database
- Using Content Resolvers to access data, Content Providers
- Loading Data using Loaders, Using Loaders to Load and Display Data
- Using Services for long running tasks, Services
- Triggering, Scheduling, and Optimizing Background Tasks
- Alarms and Broadcast Receivers, Transferring Data Efficiently
- Permissions and Libraries, Permissions, Libraries
- Security best practices, Notifications, Widgets, Publishing your App, Monetizing your app
- Making and publishing APKs, Multiple Form Factors
- Google Services, Firebase
- Google Cloud Messaging
- Making your app data searchable

Material provided by google:

Practicals : Detailed instructions for coding exercise, plus description of "do it yourself" challenge to consolidate learning

Solution code: Code for all apps that students build while working through the practicals