

COURSE NUMBER: CSCI 285

CREDITS: 3

COURSE TITLE: Introduction to Android Mobile App Development

PREREQUISITES: CSCI 125

Total Hours: 39

COURSE DESCRIPTION: This practical course introduces Android application development for mobile devices. It is designed for students with a solid background in object-oriented programming in Java. Students will learn the fundamental concepts and terminology of Android application development and acquire skills to develop, debug and deploy mobile apps. They will be equipped with an understanding of version control systems and will get to know useful online resources for Android development that will empower them to expand their basic skills.

LEARNING OUTCOMES:

By successful completion of this course, you will be able to:

- Explain the components of the Android platform.
- Use Android Studio as an IDE for Android app development.
- Design a responsive user interface for an Android app using material design principles.
- Develop interactive mobile apps.
- Use logging and the debugger for program development.
- Build an app with multiple activities.
- Create an Android project using persistent data.
- Develop an app with animations.
- Create services for background processing.
- Deploy an app to the Google Play Store.
- Use a version control system for software development.
- Expand their skills by researching adequate online resources.

COURSE CONTENT:

| Week | Торіс |
|--------|-----------------------------------|
| Week 1 | The Android World; Android Studio |
| Week 2 | Components of an Android App |



| Week 3 | User Interface Design; XML |
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| Week 4 | Interactive Apps; Debugging; Logging |
| Week 5 | Activities, Intents |
| Week 6 | Midterm Introduction to Version Control |
| Week 7 | App Bar; Action Bar |
| Week 8 | List View; Adapters; Spinner |
| Week 9 | Fragments; Fragment Life Cycle |
| Week 10 | Persistent Data |
| Week 11 | Animation |
| Week 12 | Services |
| Week 13 | Publishing an App |