

Branch Name:	Cyber Security
Program Code	ET207
Course Title:	Android Security Practical
Course Code:	2ET2070303P
Pre-requisite:	Basic Detail Android Programming

Course Objective: These objectives aim to equip learners with the practical skills and theoretical knowledge necessary for implementing robust security measures in Android applications.

Teaching and Examination Scheme:

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)								
					Theory (Marks)				Practical (Marks)				Total (Marks)
	L	T	P	Total	SEE		CCA		SEE		CCA		
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
1	-	-	2	3	-	-	-	-	10	25	10	25	50

Course Contents:

Sr. No	Practical	Total Hours	Weight (%)
1	a) Creating and Accessing App Permissions b) Configuring Permission Among Different Apps	4	10
2	a) Creating Two Applications with the Same Linux ID b) Backing up Data on Cloud Storage.	4	10
3	a) Ensuring Data Confidentiality- Hacking Application b) Protecting Application Data with Permissions	4	10
4	Data Storage Applications a) Using Shared Preferences b) File Storage Operations c) Storing Data in Cache d) SQLite Database Storage	4	10

List of References:

1. Android Developer Documentation - Permissions: Permissions Overview
2. Android Developer Documentation - Data Backup: Data Backup Overview
3. Android Developer Documentation - Shared User ID: Shared User ID
4. OWASP Mobile Security Testing Guide - Data Storage: Data Storage Testing
5. Android Developer Documentation - Data and File Security: Data Security

Course Learning Outcomes (CLO): On completion of this course, the students will be able to:

CLO	Description	Bloom's Taxonomy Level
CLO1	Implement permissions in an Android application to access protected resources.	3 Applying
CLO2	Explain how permissions can be configured to allow interaction between different applications.	2 Understanding
CLO3	Develop and test two Android applications that share the same Linux ID to access each other's data	5 Evaluate, 3 Applying
CLO4	Describe the mechanisms available for backing up Android application data to the cloud.	5 Evaluate,
CLO5	Assess the effectiveness of implemented security measures in protecting data confidentiality.	5 Evaluate,

Mapping of CLOs with POs & PSOs

Course Learning Outcomes	Program Outcomes (POs)												Program Specific Outcomes(PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CLO1	M	M			M	M							H	M	M	
CLO2	M	H		M		M							L	M	M	
CLO3	M	H	H	H		M							L	M	M	
CLO4		M		H		M							M	M	M	
CLO5		M		H	L	M	M				L	L	M	H	H	

H: High, M: Medium, L: Low