L4	Creating first Android application, Project Structure, Android Application Fundamentals, Android application building blocks
L5	Activating components, Shutting down components, Lifecycle of Application, Development tools, Manifest File, Lifecycle of Activity
L6, L7	User Interface, View Hierarchy and Layouts, UI Events, Building Menus, Notifying users, Creating dialogs
L8-L10	Graphics & Animations, Main Building Blocks, Activity, Intents, Services, Content Providers
L11-L13	Broadcast Receivers, Resources, Overview of Android Resources
L14	Creating Resources
L15	Using Resources
L16	Drawable Resources
L17-L18	Animation Resources,
L19-L20	Data Storage, Shared Preferences
L21-L23	Internal Storage (Files), External Storage(SD Card)
L24-L26	SQLite Databases
L27	Android Media API
L28	Playing audio/video
L29	Media recording
L30	Blue tooth, WiFi,
L31-L34	Camera, Telephony Manager,
L35-L39	Location Services, Google Maps,
L40	Deploying Android Application on Device

Course Code	**CS515**
Course Title	**Theory of Computation**
(TCH LCH Cr.H)	(3 0 3)
Pre-requisite	Nil
Recommended Texts	1. Introduction to the Theory of Computation 3rd edition, Michael Sipser , Cengage Learning Publisher (2014), ISBN: 978-8131525296 2. Introduction to the theory of Computation, by Michael Sipser, ISBN-13: 978-1-133-18779-0, published by Cengage Learning, 2012 3. Introduction to languages and the theory of computation, by John Martin, ISBN: 0073191469, 2010 4. Introducing The Theory Of Computation, Wayne Goddard, 2008, ISBN-13: 978-0763741259
Course Description Introduces the foundations of formal language theory, computability, and complexity. Shows relationship between automata and various classes of languages. Addresses the issue of which problems can be solved by computational means, and studies complexity of solutions.	
Course Objectives • To introduce the students to the mathematical foundations of computation including automata	

theory, the notations of algorithm, decidability, complexity and computability.

- To enhance students ability to understand and conduct mathematical proofs for computation and algorithms

Lecture Wise Distribution of the Contents

Lecture Number	Topic
L1	Introduction
L2	Terminologies of Languages
L3	Descriptive definition
L4	Examples using Descriptive definition
L5	Examples using Descriptive definition
L6-L7	Examples using Descriptive definition
L8	Recursive Definition
L9	Examples using Recursive definition
L10	Regular Expressions(RE)
L11	Examples of Regular Expressions(RE)
L12	Finite Automaton(FA)
L13-L14	Examples of Finite Automaton(FA)
L15	Martin Technique
L16	Non- Deterministic Finite Automata- NFA
L17	Conversion of NFA to DFA
L18	Union of Two FAs
L19	Concatenation of Two FAs
L20	Transition Graph-TG
L21	Generalize Transition Graph- GTG
L22	Context Free Grammar-CFG
L23	Examples of CFG
L24	Tree
L25	Ambiguity
L26	Parsing
L27-L28	Languages that are not context-free: pumping lemma for CFLs
L29	Pushdown Automata
L30	Recursively Enumerable Languages
L31	Turing machines
L32	Examples
L33	Computability Theory
L34	Transformations
L35	Decidability
L36	Complexity Theory
L37	Time and space complexity
L38	P, NP
L39	NP-Completeness, reductions
L40	Other complexity classes