



## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

### **List of Revised Courses**

Department : Computer Science and Information Technology

Program Name : B.Sc(CS)

Academic Year: 2016-17

## **List of Revised Courses**

Sr. No.	Course Code	Name of the Course
01.	PCSC-504	Introduction to Software Engineering
02.	PCSC-602	Introduction to JAVA



Program Revision Criteria – I (1.1.2)

# Minutes of Meetings (MoM) of Board of Studies (BoS)

Academic Year: 2017-18

School : School of Mathematical and Computational Sciences

Department : Computer Science and Information technology

Date and Time: Feb 24, 2017 - 11:30 AM

Venue : CSIT LAB-3

# Minutes of the meeting of Board of Studies

The Board of studies meeting in Computer Science and Information Technology was held on 24th Feb. 2017 in the CSIT department. Following members were present

- Prof. M. Surendra Prasad Babu, Professor
  - Department Of Computer Science & Systems Engineering, College Of Engineering
  - Andhra University, Visakhapatnam 530 003
- II. Prof A K Saxena, Dept of CSIT-GGV Bilasour
- III. Mrs. P L Pujari, Asst. Prof. Dept of CSIT, GGV Bilaspur

#### Following are the resolutions of the meeting

- a. The existing syllabus for BSc, MSc (CS), MCA, PhD to continue with minor changes in papers Software Engineering and JAVA programming.
- b. For the next academic session, enclosed scheme is recommended. The contents of each paper will be supplied by dept of CSIT through Head of the Department CSIT. Similarly elective papers can be modified by Head, CSIT depending on availability and suitability of the course to be introduced as elective.
- c. The PhD course work syllabus of Machine Vision is approved with immediate effect.
- d. A new paper can be introduced at PhD course work in MOGC based on concept that the candidate pursuing Ph D can opt this paper (not repeated with the paper which he/she opts for course work as optional paper) from a list of papers supplied by Dept of CSIT. The paper will be evaluated using (i) certificate by Stanford/MIT institutions or any such institution and (ii) a viva voce conducted by the Dept of CSIT. Introduction of this paper (MGOC) is subject to the approval from competent authorities of Vishwavidyalaya.

7-1-12412174

(Prof. M. Surendra Prasad Babu)

Marin.

(Prof & K.Savena)

16/24/02/2017

(Mrs. P L Pujari)

Program Revision Criteria – I (1.1.2)



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# Subject - Introduction to Software Engineering Paper code - PCSC-504

**Software Engineering Fundamental:** Introduction, evolution of software Engineering, Software Life Cycle Models, Comparisons of all models, Metrics for Project Size Estimation: line of Code, Function Point .Project Cost Estimation Model COCOMO and its types.

Requirement Analysis and Software Design: SRS and its characteristics, Software designing approaches, Modular designing, coupling, cohesion. Interface designing: Basic Concepts and types,

Coding and Testing: Coding standards and guidelines, code review techniques, types of system Failure, objective and types of testing, testing activities.

Software Reliability, Quality Management: Software reliability and software Quality Assurance, Software reliability Metrics, ISO 9000 certification, SEI Capability Maturity Model(CMM) its level, focus and key process.

Software Maintenance: Types of maintenance, maintenance tools, maintenance activities,

#### Readings:

- 1. Software Engineering: A practitioner Approach, Pressman Rogers, TMGH
- 2. Fundamentals of Software Engineering, Rajib Mall, PHI
- 3. An Integrated approach of software Engineering, Pankaj Jalote, Narosa, New Delhi.
- 4. Software Engineering Demystified by Deepti Bhanot, Galgotiya Publication.

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#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

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Subject- Introduction to JAVA Paper code – PCSC - 602

Introduction: Genesis of java, importance to the Internet, overview and features. Language Basics: Constants, Variables and Primitive Data types, Operators and Expression, Decision Making and Branching statement, Decision Making and Looping, Classes, Objects and Methods, Arrays, Strings and Vectors.

Inheritance: Definition, Types, Method overloading and Method Overriding, super and this keywords. Interfaces: Defining Interface, Extending Interfaces Implementing Interface.

Packages: Defining Packages, Java API Packages, Naming Conventions, Creating Packages, Accessing Packages, Adding class to Package, CLASS PATH. Exception handling: Exception Types, Try, Catch & finally Blocks, Throw and Throws keywords. Creating user defined Exception.

Multithreaded Programming: Thread Model, Creating Threads, Thread Priority, Thread Exception, Synchronization. Input/output: Basic Streams, Byte and Character Stream, predefined streams, reading and writing from console and files.

Java Collection: Introduction, Overview of Interfaces, Overview of Classes. Introduction to AWT: Window fundamentals, creating windowed programs working with graphics, Using AWT controls, Delegation event model, handling mouse and keyboard event

#### Readings:

- 1. Naughton P and schildt H, Java: The complete reference, Osborne Mcgra-Hill, Berkeley, USA, 1997.
- 2. Rodgers Cadenhead, Laura Lemay, Sams Teach Yourself Java 2 in 21 Days, Sams Publishing.
- 3. E. Balagurusamy, Programming with Java, Tata McGraw Hill.
- 4. Bruce Eckel, Thinking in Java, Pearson Education.
- 5. Peter Van Der Linden, Just Java 2, Sun Microsystems/Prentice Hall.
- Simply JAVA :An Introduction to JAVA programming By James R. Levenick ,Firewall Media New.Delhi
- 7. Java Programming Khalid Mughal.
- 8. Core JAVA An Integrated Approach By Dr. R. Nageswara Rao dremtech Publication.

HEAD DEPT OF CSIT G.S.V. BILASPUR (C.G.)

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