BSE3104 Software Metrics (3CU)

Upon successful completion of this course students should be able to: (i) Describe software metrics; (ii) Understand the foundations of measurement theory and models of software engineering measurement; and (iii) Appreciate software products metrics, software process metrics and measuring management.

Course Objectives: The course is composed of the following basic modules: Measurement theory (over view of software metrics, basics of measurement theory, goal-based framework for software measurement, empirical investigation in software engineering), Software product and process measurements (measuring internal product attributes: size and structure, measuring external product attributes: quality, measuring cost and effort, measuring software reliability, software test metrics, object-oriented metrics Measurement management

References

•Software Metrics: A Rigorous and Practical Approach, (2nd ed.) (638p.), N.E. Fenton and S. L. Pfleeger, PWS Publishing,1998. ISBN0-534-95425-1.AdditionalRecommendedText andReferenceBooks:

•Metrics and Models in Software Quality Engineering, Stephen H. Kan, 2nded. (560p.), Addison-Wesley Professional (2002). ISBN:0201729156.

•Software Engineering Measurement, John C. Munson, Auerbach Publications, 2003(443pages) ISBN: 0849315034

•Software Metrics: Measurement for Software Process Improvement, BAK it chenham, Blackwell

Pub, 1996.ISBN:1855548208.

•Applied Software Measurement: Assuring Productivity and Quality, C.Jones, McGraw-Hill,

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