BSE2200; Systems Software (4CU)

Course Objectives: By the end of this course (i) Students will understand the various levels of system and applications of tware; (ii) They will be familiar with the major Operating System services such as file systems, memory management, process management, device control and network services; (iii) They will understand how design decisions in Operating Systems affect users of the system; (iv) In addition, students will have used a major Operating System extensively, with experience in using an interactive command line programming language; and (v) They will also will have experience in using a systems programming language with an Application Programmers Interface to the Operating System for its services based on Unix OS, and the C systems programming language.

Course content: This unit looks at the necessary system architecture introduction for further study of operating systems, computer architectures, and the implementation of higher level languages. It goes further and builds upon that by looking at the concepts under lying Operating Systems, and to show how different choices in Operating System design and implementation have effects on applications, application programmers and user environments.

References

•System Software: An Introduction to Systems Programming by, Leland L. Beck, Addison

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•Modern Operating Systems, by Andrew S. Tanenbaum, 2ndEdition, Prentice Hall 2001, ISBN

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•Operating Systems Concepts, by Abraham Silberschatz, Peter Baer Galvin and Greg Gagne,

6thEdition, John Wiley&Sons2002, ISBN0471250600