

1st Semester

MTCE 601A

COMPUTER SYSTEM SOFTWARE

L	T	P
4	0	0

Credits : 4

Introduction to Object Oriented Programming and Object Oriented Design.

Concepts of classes, objects, abstraction, encapsulation, inheritance, function overloading, virtual functions, function overriding, templates.

Object modeling: Class and object diagrams, association, aggregation, generalization, dynamic modeling and function modeling.

Introduction to UML: Class diagrams, Use cases, Interaction diagrams, collaboration diagrams, deployment diagrams.

Principles of class design: Open close principle, Liskov's substitution principle, dependency inversion principle, package cohesion principle etc.

System Software design issues. Design of assemblers, macro processors, linkers and loaders, dynamic linking.

References

1. Object Oriented Programming with C++ By Robert Lafore
2. Object Oriented Modeling and Design By James Rumbaugh
3. System Programming By Dhamdhare
4. System Programming By Dannovan
5. Object Oriented Analysis & Design By Grady Booch