OBJECT ORIENTED ANALYSIS AND DESIGN

MULTI-FACULTY

Dept. of Computer Science and Engineering
IIT Kharagpur

INTENDED AUDIENCE : Computer Science and non-Computer Science Students with interest in parallel programming for HPC applications.

PRE-REQUISITES :
1. Basic Knowledge of Programming & Data Structure
2. Experience of Programming Projects would help; but is not mandatory
3. Attending a course on C++ with this course will help

INDUSTRIES APPLICABLE TO : Microsoft, Samsung, Xerox, Yahoo, Google, IBM, TCS, Infosys, Amazon, Flipkart, etc.

COURSE OUTLINE :
The complexity of software systems is ever on the rise – more complex problem domains being attempted (complex embedded systems), ever growing man-power engaged in increasingly intricate development processes to turnaround in shorter and shorter time, possible flexibility of software being stretched to the limit with XaaS, platforms getting challenging with widely expanding distribution, cloud computation etc. Hence the analysis and design of software require well-organized and structured approaches to manage the challenges of complexity.

ABOUT INSTRUCTOR :
MULTIFACULTY

COURSE PLAN :

Week 1: Software Complexity: Understanding the challenges OOAD can address
Week 2: Object Model: Defining the primitives of the OO paradigm
Week 3: Classes and Objects: Bringing in the broader perspectives
Week 4: Classes and Objects: Identification approaches using OOAD
Week 5: Unified Modeling Language
Week 6: Unified Modeling Language
Week 7: Unified Modeling Language
Week 8: OOAD Case Studies: Applying OOAD in different contexts

TYPE OF COURSE : Rerun | Core | UG / PG
COURSE DURATION : 8 weeks (20 July’20 - 11 Sep’20)
EXAM DATE : 27 Sep 2020