

<b>Title</b>	<b>Object Oriented Analysis and Design</b>
<b>Code</b>	<b>CMP-492</b>
<b>Credit Hours</b>	3
<b>Category</b>	Computing
<b>Prerequisite</b>	None
<b>Co-Requisite</b>	None
<b>Follow Up</b>	None
<b>Course Description</b>	<b>Object Oriented Analysis and Design Basics.</b> Introduction to UML, UML Diagrams. Use Case Modeling, Rational Rose overview, Use case modeling in Rational Rose. Introduction of Interaction Diagrams, System Sequence Diagram; <b>Domain Model:</b> Identifying business classes, Domain Model Associations, Domain Model Attributes, Implementation of Sequence Diagram and Domain model in Rational Rose; <b>Interaction Diagram:</b> Sequence diagrams, Collaboration Diagrams, Implementation of Sequence and Collaboration diagrams in Rational Rose; <b>Design Class Diagram,</b> Mapping Design to Code. <b>Object Oriented software engineering:</b> Introduction to design patterns, GRASP, Information Expert, Creator, GRASP: Cohesion, Coupling, Controller, Introduction to Design Class Diagram, Mapping data model to Domain model, Mapping Design to Code.
<b>Text Book(s)</b>	Grady Booch, James Rumbaugh, Ivar Jacobson, The Unified Modeling Language User Guide, 2nd Edition, Addison-Wesley, 2005, ISBN-13: 978-0321267979.
<b>Reference Material</b>	<ol style="list-style-type: none"> <li>1. Simon Bennett, Ray Farmer, Object-Oriented Systems Analysis and Design Using UML, 4th Edition, McGraw-Hill Education, 2010, ISBN: 0077125363</li> <li>2. Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides, Grady Booch, Design Patterns: Elements of Reusable Object-Oriented Software 1st Edition, Addison-Wesley Professional, 1994, ISBN-10: 0201633612</li> </ol>