

Advanced Java Programming

Advanced Java course is designed for students already familiar with any programming language and/or Object Oriented Programming techniques. It covers a large number of advanced topics including software development methodologies using Java tools and APIs, Java core technologies, Java Framework, Java GUIs, Network programming in Java and Java Database Connectivity (JDBC). The main focus of the course is Advanced Java Technologies and Architecture. Students will learn to use Java technologies in the real world and write numerous, nontrivial programs to demonstrate mastery of the concepts.

Embedded Systems

Embedded systems are involved in almost every facet of modern life including cell phones, pagers, answering machines, microwave ovens, televisions, CD and DVD players, video game consoles, remote controls, fax machines, and digital cameras. Modern automobiles may contain many embedded microprocessors, controlling such tasks as antilock braking, climate control, engine control, audio system control, and airbag deployment. Embedded processor sales far outweigh any other type of microprocessor. This tremendous growth in embedded computing has given rise to demand for engineers with experience in designing and implementing embedded systems.

This course is aimed at practicing embedded software engineers as well as those engineers planning to enter the embedded field. The course presents practical lessons and techniques for use in designing, implementing, integrating, and testing software for modern embedded systems. The course will describe what an embedded system is, what makes them different, and what embedded systems designers need to know to develop embedded systems. The course will provide the student with a life cycle view for designing multi-objective, multi-discipline embedded systems. The objective of this

course is to impart a solid understanding of the role of embedded systems and embedded systems design and development. Students completing this course will have a framework for evaluating, developing, implementing and integrating embedded systems software projects in this high demand field and will understand the role of embedded systems in the context of complex engineering systems.