

# GDSE®

BSc.(Hons)in Computer Science



## GDSE® - SEMESTER 1

- Object Oriented Programming
- Input and Output (I/O) Handling
- Database Management Systems
- Database Programming with JDBC
- Data Structures and Algorithms I
- Programming Fundamentals
- Software Process Modeling
- Multi-Threaded Programming
- Introduction to UX Engineering
- Software Development with CASE tools

### Semester 1 Final Project & Top Tech Stack

Java SE   Java FX   Netbeans IDE   MySQL   Heidi SQL   DBeaver   Jasper Studio   Jasper Reports

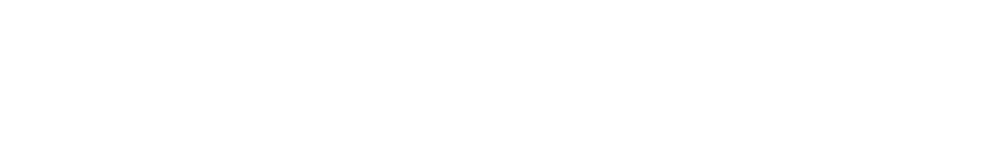


## GDSE® - SEMESTER 2

- Design Patterns
- Data Structures and Algorithms II
- Software Engineering Principles
- Internet Technologies
- Versioning Control with GIT/ GitHub
- Network Programming and Client-Server Architecture
- Advanced Database Management System
- Application Development with Industrial Standards
- Client-Server Application Developments
- ORM Concepts with JPA/Hibernate - I

### Semester 2 Final Project & Top Tech Stack

HTML5   CSS3   SASS   ECMAScript   PHP   GIT   Hibernate   IntelliJ IDEA



## GDSE® - SEMESTER 3

- Advanced API Development with Spring Web MVC
- ORM Concepts with JPA/Hibernate - II
- Web Security
- Software Architecture (Layered Architecture)
- RESTful Web Services
- Advanced Java EE Programming
- Spring Data JPA
- Spring Boot
- Angular 8
- Project Management with Maven and NPM

### Semester 3 Final Project & Top Tech Stack

Java EE   Tomcat   Maven   Spring   Spring JPA   Spring Boot   Angular   NPM



## GDSE® - SEMESTER 4

- Machine Learning
- Cloud Computing
- Service Oriented Architecture (SOA)
- Advanced Mobile Application Development
- Artificial Intelligent
- Micro-Service Architecture
- Data Analytics

### Employment

Software Engineering   Web and Systems Based Programming

- Professional Issues in Computing
- Web Application Project Management
- Major Project

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