

**BMS Institute of Technology Management**  
Yelahanka, Bengaluru -560064

**Department of Information Science &  
Engineering**

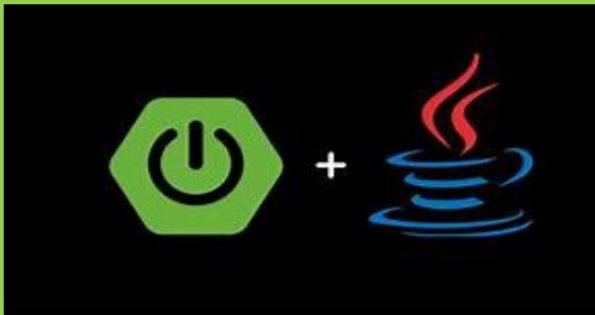


**Five Day Open Course**

On

**“Spring Boot Fundamentals”**

**12<sup>th</sup> June 2023 to 16<sup>th</sup> June 2023**



## About the Institute

With the rising need for technical education, came the establishment of the BMS Institute of Technology and Management in 2002. BMSIT&M has recently gained its status as an autonomous institute affiliated with VTU. The institute currently offers eight UG programs, four PG programs and Ph.D.

## About the Department

The Department of Information Science and Engineering started in the Year 2010 with an approved intake of 60 and enhanced to 180 from the academic year 2019-20. The Department has qualified and professionally dedicated faculty members practicing OBE in the academic deliverables. The faculties have published research articles in various National, International Conferences and Journals. The department has modern laboratories to serve the teaching and research needs of the students as well as faculty members. The Department has been organizing conferences, workshops, expert lectures and student centric activities to encourage students to instill lifelong learning. Few of our students are working for consultancy projects along with few faculty members. The faculties are encouraged to attend 10 days internship to bridge gap between academics and industry. The department has admirable research ambience.

## About the Open Course

Spring Boot is a popular Java framework used for developing enterprise-level applications. It simplifies the development process by providing an opinionated approach to building production-ready applications. Spring Boot is built on top of the Spring framework and follows the convention-over-configuration principle. It eliminates the need for manual configuration by providing sensible defaults, which significantly reduces the development time and effort required to set up a Spring application.

## Objectives of the Course

1. Strong knowledge on the fundamentals of Spring Boot and related topics like Restful APIs, LLD and HLD, Git and Hibernate.
2. At the end of the course, you will also work on a project using the knowledge you have gained in the course.

## Target Audience:

All the Students of BMSIT&M

## Venue:

Linus Torvalds lab, BSN-CR-308

## Course Content

Basics of Java, OOPs & Git, Database fundamentals and CRUD operations, Introduction to HLD, LLD & backend development (Spring Boot), Restful APIs (GET, PUT, POST, DELETE), overview on hibernate, real world hands-on projects

## Registration Details

Registration Amount is Rs:400/-

<http://projects.bmsit.ac.in/>

Online fee payment: <https://bmsitm.gnumns.in>

## Contact Details

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# Open Courses/ Value added Courses Even Semester 2023

## Spring Boot Fundamentals / ISE

### Detailed Course Contents:

<b>DAY 1</b>	
<b>Time</b>	<b>Topic &amp; Resource person</b>
9:30 AM to 11:00 AM	Inauguration, Registration and Introduction to Course,
11:00 AM to 11:15 AM	Break
11:15 AM to 12:45 PM	Basics of Java (Enums, Lambdas, Exception handling, method overloading and overriding)
12:45 PM to 1:45 PM	Lunch
1:45 PM to 3:15 PM	Basics of OOPS (mainly inheritance and abstraction)
3:15 PM to 3:30 PM	Break
3:30 PM to 4:30 PM	Project
<b>DAY 2</b>	
<b>Time</b>	<b>Topic &amp; Resource person</b>
9:30 AM to 11:00 AM	Installation and setup of Tools
11:00 AM to 11:15 AM	Break
11:15 AM to 12:45 PM	CRUD operations + DB to Java integration
12:45 PM to 1:45 PM	Lunch
1:45 PM to 3:15 PM	Introduction to backend development (Spring boot)
3:15 PM to 3:30 PM	Break

## Open Courses/ Value added Courses Even Semester 2023

3:30 PM to 4:30 PM	Project
<b>DAY 3</b>	
<b>Time</b>	<b>Topic &amp; Resource person</b>
9:30 AM to 11:00 AM	Layered architecture pattern in spring and implementation
11:00 AM to 11:15 AM	Break
11:15 AM to 12:45PM	Understanding Restful API's (GET, POST, PUT, DELETE)
12:45PM to 1:45 PM	Lunch
1:45 PM to 3:15 PM	Overview on hibernate (ORM tool -> maps DB response to Java objects)
3:15 PM to 3:30 PM	Break
3:30 PM to 4:30 PM	Project
<b>DAY 4</b>	
<b>Time</b>	<b>Topic &amp; Resource person</b>
9:30 AM to 11:00 AM	Git overview
11:00 AM to 11:15 AM	Break
11:15 AM to 12:45PM	Understanding HLD and LLD
12:45PM to 1:45 PM	Lunch
1:45 PM to 3:15 PM	Git hands-on, completion of the project and code reviews for Projects done from day-1 to day -3
3:15 PM to 3:30 PM	Break
3:30 PM to 4:30 PM	Project Assignment and Q&A
<b>DAY 5</b>	

## Open Courses/ Value added Courses Even Semester 2023

<b>Time</b>	<b>Topic &amp; Resource person</b>
<b>9:30 AM to 11:00 AM</b>	<b>HLD and LLD review</b>
<b>11:00 AM to 11:15 AM</b>	<b>Break</b>
<b>11:15 AM to 12:45PM</b>	<b>Working on the implementation of project</b>
<b>12:45PM to 1:45 PM</b>	<b>Lunch</b>
<b>1:45 PM to 3:15 PM</b>	<b>Working on the implementation of project</b>
<b>3:15 PM to 3:30 PM</b>	<b>Break</b>
<b>3:30 PM to 4:30 PM</b>	<b>Project presentation</b>