



<b>Course Name</b>	<b>IBM CE Minor Projects - Enterprise Application Development</b>
<b>Course Code</b>	MPRJSDLOIN
<b>Course Duration</b>	50 Hours
<b>About Technology</b>	Lack of project exposure is one of the biggest challenges faced by IT companies while recruiting new hires like you. To bridge this gap, the IBM Career Education Program provides an opportunity in Experiential Learning to work on projects based on real-world problems, rather than industry simulations. Make the right beginning with a project that requires practical knowledge to back-up the theories you have mastered.
<b>About Course</b>	<p>Minor projects act as the foundation stone in preparing you for real life software engineering challenges. They are specifically designed to provide you an opportunity to experience and learn the practical application of principles learned in various courses in last 2 years. Each project is inspired by a real life problem. Besides application of knowledge, they also promote reflective thinking, exploration of possibilities and teamwork.</p> <p>Based on your interest, IBM offers a wide range of projects to choose from. While each project requires application of integrated knowledge, it also has a carefully chosen special focus area. Such focus areas include user experience design, Java EE architecture, specialized algorithms and/or data structures like Benford distribution or bloom filter, and industry standards like QR Code or RESTful APIs. It even covers projects on gaming, the most complex yet interesting and promising software vertical.</p> <p>A typical minor project will enhance and sharpen your skills on Java EE, RDB, HTML/XHTML, CSS, and JavaScript using IBM's state-of-the-art tools and RUP methodology. In some of the specialized cases, not all elements may be present; for example a game development may have minimal or no database element.</p> <p>A set of bridge courses help you further to fill the knowledge gap that you may have to execute a minor project of your choice successfully. During project execution, a mentor guides you through each step of the project.</p> <p>This also becomes a stepping-stone to embark upon the journey of IBM Major Project; something that gives you real industrial grade software development experience right during your graduation course.</p>
<b>Target Audience</b>	Students of – Engineering (CS, IT, ECE, EEE) – 3 <sup>rd</sup> Year – MCA –Semester 2/3 – BSc, BA -2 <sup>nd</sup> Year
<b>Pre-requisites</b>	To benefit from this course, students must: <b><i>Students need to have knowledge of</i></b> – Basic problem determination skills – Basic knowledge of Software Development Life Cycle and different SDLC process models – Fundamentals of DBMS and database designing – Basic programming skills using Java – Exposure to Data Structures, HTML, XHTML, Java Script & CSS
	Pre-requisites courses:  – IBM CE – Introduction to Object -Oriented Programming using Java – IBM CE - Basics of Information Management with DB2



## Contents

IBM Career Education **Minor Projects** include

- Bridge course on

Best Practices of programming including concepts of RUP

Introduction to DB2

- Minor projects enabling students to understand the algorithmic concepts associated with real world enterprise projects

### **Key features:**

- Choose from a variety of Real World minor projects *based on algorithmic requirements of current day enterprise programming challenges faced by customers, who have addressed the challenges using IBM Technologies*
- Learn & work with tools, methodologies and best practices used by the enterprises today
- Constant monitoring and mentoring by experts
- *Project evaluation, and certification by IBM* for each candidate who completes the project

The IBM Career Education – Minor Project enables the student to understand the phases of application development from Requirements to Deployment. These projects mainly focus on building the students' skills on appreciating and understanding the methodology to developing effective algorithmic codes and develop interactive user experience, which is the key aspect for a successful project implementation.

### **On completion of project students will learn using Java, HTML & Java Script:**

How to design and develop algorithms

Develop user experience

Choosing amongst various process models / methodology that suit the requirements.

### **Details of the Bridge Course**

Best Practices of Programming

- Introduction to SDLC
- Introduction to RUP
- Introduction to Agile

Introduction to DB2

- Module 1 Introduction to DB2 Environment
- Module 2 Simple SQL Queries
- Module 3 Functions - Scalar and Column
- Module 4 Using Subqueries
- Module 5 Maintaining Data
- Module 6 Integrating XML Contents with DB2

## **Applicable Certification**

-NA-

## **Follow on courses**

IBM CE Enterprise Applications Major Projects using Java/ J2EE