| Course Type | Course Code | Name of Course | L | T | P | Credit |
|---|---|---|---|---|---|---|
| DP | **NMCC510** | Advanced DBMS Lab | 0 | 0 | 3 | 1.5 |

| **Course Objective** |
|---|
| • Advanced DBMS is the important course Data Analytics. |
| **Learning Outcomes** |
| • Students will learn how to use and design Data Base in Data Analytics. |

| Unit No. | Topics to be Covered | Contact Hours | Learning Outcome |
|---|---|---|---|
| 1 | Accessing the database, Basic, intermediate, and advanced SQL, Introduction to Python database toolbox. | 12 | This unit will help students to learn how to access the database, Basic, intermediate andadvanced SQL, and Python database toolbox. |
| 2 | Introduction to Git, Database access from a programming language, Databasemetadata access from a programming language. | 09 | This unit will make students learn about Git, Database access from a programming language, Database metadata access from a programming language. |
| 3 | Create a webpage connected to a database server, Create functions togenerate HTML | 06 | Students will learn how to Create a webpage connected to a database server andCreate functions to generate HTML. |
| 4 | Term projects: self-conceived or assigned by the instructor, Presentationof the term projects | 09 | Students will do some projects related to implementation of DBMS in Data Analyticsas assigned by the instructor. |
| 5 | Practice session and Practical Lab Exam etc. | 06 | |
| **Total** | | **42** | |

**Text Books:**

1. Database System Concepts, Korth, Silberschatz and Sudarshan, McGraw Hill

**Reference Books:**

1. Database: Principles, Programming, Performance, P. O'Neil, Morgan Koffman
2. Principles of Database and Knowledge-Base Systems, J.D. Ullman, Computer Science