



# SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

(Established under section 3 of the UGC Act, 1956)

Re-accredited by NAAC with 'A++' Grade | Awarded Category - I by UGC

Founder: Prof. Dr. S. B. Mujumdar, M. Sc., Ph. D. (Awarded Padma Bhushan and Padma Shri by President of India)

**Course Name:** Power BI  
**Course Code:** TE7284  
**Faculty:** Engineering  
**Course Credit:** 3  
**Course Level:** 4  
**Sub-Committee (Specialization):** Computer Science  
**Learning Objectives:**

Infer the various data preparation activities.  
 Model data as an expert BI analyst.  
 Examine different practises for development of reports and dashboards.  
 Experiment various power BI tools and techniques through development of capstone project.

**Books Recommended:**

Book	Author	Publisher
Analyzing Data with Power BI and Power Pivot for Excel	A. Ferrari and M. Russo, 2017,	Microsoft Press.
Power Query for Power BI and Excel	C. Webb, 2014	Apress.

**Course Outline:**

Sr. No.	Topic	Actual Teaching Hours	Contact Hours Equivalence
1	<b>Data preparation like a super nerd</b> Overview desktop layout features and views connecting to common data sources query editor layout and functionality creating relationships in your data model	12	12
2	<b>Develop your data nerd prowess</b> Built-in Aggregations Calculated Columns and Measures A Visual Demonstration Some Slightly Advanced Measures	11	11
3	<b>Developing reports and dashboards</b> Data visualization best practices report and dashboard layout creating a sales analysis report creating a project management report	11	11
4	<b>Tips, tricks and capstone project</b> Telling the story of your data thinking outside the visual box theme-ing it up capstone project	11	11
<b>Total</b>		<b>45</b>	<b>45</b>

**Pre Requisites:**

Knowledge of relational databases and reporting, data warehouse schema topology, awareness of key business priorities such as revenue, profitability, and financial accounting and Familiarity with Microsoft Office Excel

**Evaluation:**

Quiz

**Pedagogy:**

Interactive classroom teaching

Demonstration in labs

Case study