

**GENERIC ELECTIVE (GE) COURSES**

**Name of the Programme** : M.Sc. Data Science  
**Course Code** : CSA-621  
**Title of the Course** : Corporate Skills  
**Number of Credits** : 4 (4L-0T-0P)  
**Total contact hours** : 60 hours  
**Effective from AY** : 2023-24

<b>Prerequisites for the course</b>	Programme prerequisites	
<b>Course Objectives</b>	The course is aimed at learners to gain practical and essential skills to work effectively in the industry.	
<b>Content</b>	<p>Understanding the Industry and Companies</p> <ul style="list-style-type: none"> <li>Understanding the evolution of the industry and technology and methods used</li> <li>Understanding Innovation and how new Impactful ideas have evolved</li> <li>Types of companies and typical organization - Who does What</li> <li>Understanding companies - Domain, Offering, Customers, Strategy</li> <li>Company Culture &amp; Professionalism</li> <li>Understanding companies financially</li> </ul>	<b>8 hours</b>
	<p>Understanding Execution and day to day work in organizations</p> <ul style="list-style-type: none"> <li>Product Solutioning and Development - Understanding beyond the theory</li> <li>Product Management - Understanding beyond the theory</li> <li>Quality - Understanding beyond the theory</li> <li>Solutioning and Design - A key step between requirements and delivery</li> <li>Site Reliability, Devops, Support - Understanding beyond the theory</li> <li>Common Metrics and Measurements</li> <li>Key Tools in a Product Life Cycle</li> <li>Issues Management and Lifecycle - A key aspect of customer Satisfaction</li> <li>Software delivery models and Release cycles - how they work in the real world</li> <li>Usability by end user - UI/UX and other key concepts and its importance</li> <li>Understanding Data engineering and Data science</li> <li>Writing good product or service specifications which can be translated to building a good product</li> <li>Understanding data from collection to modeling to usage</li> <li>How to do effective product, competition or technical research and use it effectively</li> </ul>	<b>20 hours</b>

	<ul style="list-style-type: none"> <li>● testing and testing automation - understand beyond the theory</li> <li>● what is effective program management and scrum management</li> <li>● Designing for performance, scalability and reliability in products</li> <li>● Effective root cause analysis and building products which can allow quicker RCA</li> <li>● Understanding dev ops and its importance and role in a company</li> <li>● Understanding product architecture with respect to a monolith or modularity and its pros and cons</li> <li>● Governance, alerts and monitoring and its importance</li> </ul>	
	<p>Useful skills to work effectively in an organization</p> <ul style="list-style-type: none"> <li>● Continuous learning and improvement - An essential skill</li> <li>● Ownership and Leadership</li> <li>● Analyzing one's career path and making educated judgments</li> <li>● Time management and multi-tasking model</li> <li>● Being an effective Mentee and Mentor</li> <li>● Being Inquisitive: Why is asking questions more difficult than giving answers?</li> <li>● Effective Articulation and Communication</li> <li>● Introducing yourself and making Effective Presentations</li> <li>● Problem breakdown and resolving model</li> <li>● Effective project management</li> <li>● Mind Mapping - A powerful technique to learn</li> <li>● Must have tips to succeed in any career</li> </ul>	<b>20 hours</b>
	Mini-Project	<b>12 hours</b>
<b>Pedagogy</b>	Hands-on assignments / tutorials / peer-teaching / mini-project / case studies	
<b>References/ Readings</b>	All the course material is based on real life industry practices, experiences and case studies and focused on the application of skills and knowledge. The course is being imparted by experienced industry professionals who are still working in the industry and leading critical functions and teams and have the pedigree of building products, managing and delivering to customers, managing teams, and entrepreneurs or being part of core teams in software product or services organization.	
<b>Course Outcomes</b>	<p>At the end of the course, the students will be able to</p> <ol style="list-style-type: none"> <li>1. understand core concepts. (To measure this outcome, Question and Answers, Situations analysis, case studies would be used)</li> <li>2. analyze the problem and apply the appropriate concept. (To measure this outcome, Projects and Case studies would be used)</li> <li>3. give reasoning. (To measure this outcome, Problem analysis and solving techniques would be taught and used, Question and answers and use</li> </ol>	