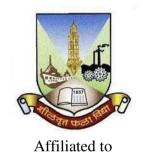


Hindi Vidya Prachar Samiti's

Ramniranjan Jhunjhunwala College of Arts, Science & Commerce (Autonomous), Ghatkopar (W)



University of Mumbai

Mapping of the courses to Employability/ Entrepreneurship/ Skill Development

Program: M.Sc. Data Science & Artificial Intelligence Program Code: RJSPGDSAI

Choice Based Credit System Syllabus

(With effect from the academic year 2020-21)

Mapping of the courses to Employability/ Entrepreneurship/ Skill Development

Course Name	Course Code	Topics focusing on	Employability /
		Employability /	Entrepreneurship /
		Entrepreneurship /	Skill development
		Skill development	
Fundamentals	RJSPGDSAI101	Unit I: Basics of	1. Technical skills
of Data		Data Science - Data	2. Programming
Science		Science Software	skills
		Tools, Programming	3. Testing skills
		Languages for Data	4. Analytical skills
		Science Distributions,	5. Employability in
		Significance Testing	field of data
		Unit IV - Regression	analysis
		and Prediction -	
Data	RJSPGDSAI102	Unit I & Unit II:	1. Technical skills
Warehousing		Dimensional	2. Design skills
		Modelling overview	3. Management
		Unit III: Retail Sales,	skills
		Order Management –	4. Leadership skills
		Unit IV: Inventory,	5. Employability as
		CRM -	CRM functional
			resource
Artificial	RJSPGDSAI103	Unit I: Problem	1. Problem solving
Intelligence		Solving, Adversarial	skills
		search - Skill	2. Analytical skills
		Development,	3. Logical reasoning
		Employability	4. Design skills
		Unit II: Knowledge,	5. Employability as
		reasoning and	AI System
		planning - Skill	
	Fundamentals of Data Science Data Warehousing Artificial	of Data Science RJSPGDSAI102 Warehousing Artificial RJSPGDSAI103	Employability / Entrepreneurship / Skill development Fundamentals of Data Science RJSPGDSAI101 Unit I: Basics of Data Science - Data Science Software Tools, Programming Languages for Data Science Distributions, Significance Testing Unit IV - Regression and Prediction - Data RJSPGDSAI102 Unit I & Unit II: Dimensional Modelling overview Unit III: Retail Sales, Order Management — Unit IV: Inventory, CRM - Artificial RJSPGDSAI103 Unit I: Problem Solving, Adversarial search - Skill Development, Employability Unit II: Knowledge, reasoning and

		Development Unit III: Probabilistic planning, simple and complex decision making - Skill development Unit IV: Applications of AI - Skill Development, Employability	Engineer
PG Lab 1	RJSPGDSAI1L1	Practical on Fundamentals of Data Science -	1. Technical Skills
PG Lab 2	RJSPGDSAI1L2	Practical on Data Warehousing	 Technical skills Employability as data warehouse manager
Professional Elective – I Advanced Data Structures	RJSPGDSAI1P1A	Unit I & II: Fundamentals and algorithms Unit III & IV: Algorithms	 Design skills Analytical skills Technical skills Problem solving skills
Professional Elective – I Image Processing	RJSPGDSAI1P1B	Unit I : Introduction & Visual Preliminaries — Unit II : Transformations & Filtering - Skill Development Unit III: Colour	 Design skills Technical skills Creative skills Employability as image processing engineer Entrepreneurship

	Career Advancement Course – I	RJSPGDSAI1C1	Image Processing & Image Compression – Unit IV: Morphological Image Processing - Unit II: Stages of Research Process - Unit IIII: Research	 Research skills Writing skills Analytical skills
	Research in Computing		Methods - Unit IV : Field work -	
MSc DSAI Part 1 Sem II	Machine Learning – I	RJSPGDSAI201	"Unit I : Data Pre- processing & Statistical Learning	1. Technical Skill
	Big Data Technology	RJSPGDSAI202	Unit I : Introduction to Big Data & Hadoop Unit II & III : Hadoop Architecture, Ecosystem & Yarn Unit IV: Hive, SQL, HBase concepts	 Analytical skills Problem solving skills Designing skills Employability as a big data engineer / analyst
	Soft Computing	RJSPGDSAI203	Unit II: Artificial Neural Network, Supervised Learning Network, Associative memory network Unit III: Unsupervised Learning Network, Special Networks - Unit IV: Fuzzy Logic	 Technical skills Design skills Employability as data analyst

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PG Lab – III	RJSPGDSAI2L3	Practical on Machine	Technical skills
Machine		Learning	
Learning - I			
PG Lab – IV	RJSPGDSAI2L4	Practical on Big Data	Technical skills
Big Data		Technology:	Employability in
Technology			Big data analyt
Professional	RJSPGDSAI2P2A	Unit I : Cloud	1. Technical skills
Elective – II		Computing Basics -	2. Design skills
Data Science		Unit II :	3. Implementation
in Cloud		Virtualization	skills
Computing		Fundamentals	4. Employability
		Unit III : SAAS,	a cloud archited
		PASS, IASS	
		Unit IV: Cloud	
		Storage applications,	
		Programming	
		Technologies -	
Professional	RJSPGDSAI2P2B	Unit I: Introduction,	1. Technical skill
Elective – II		Geometry of Virtual	2. Analytical skill
Virtual and		world -	3. Design skill
Augmented		Unit II : Light &	4. Entrepreneursh
Reality		Optics – Unit III:	– VAR design
		Tracking &	architect
		Interaction –	
		Unit IV: Audio -	
Career	RJSPGDSAI2C2	Unit II: Visualizing	1. Technical skills
Advancement		Data Methods	2. Design skills
Course - II		Unit III : Visualizing	3. Analytical skill
Data		Data Process -	

Visualization	Unit IV: Parsing data	
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