

COURSE INFORMATION

1.																		
2	Name of Course											Intro	duction	to Dat	a Sc	ience		
۷.	Course Code											TDS2	2101					
3 .	Type of Course											Spec	cializati	on Cor	e for	BCS (DS) and ele	ctive for all other s	specializations
	(e.g. : Core, major, elective etc.)											4.0		(D -	- 0-			
4.	4 . Synopsis										Overview of Data Science This topic provides an overview to the definition and importance of data science. It also helps to prepare students with understanding of role and responsibilities of data scientists in academia and industry. Data Preprocessing, storage and analysis This topic covers methods to preprocess data and managing stored data. Students can also understand characteristics of different methods used to analyze data. 3. Basic concepts of programming language used to support data science. This topic helps students to build the fundamental understanding in using programming language for data science.							
5 .	Version (State the date of theSenate's ap	proval -	previo	us and	the cur	rrent a	pproval	I date)						nuary 2 une 20				
6 .	Name(s) of Academic Staff												vani A/ Chiung	P S.Se Ching	lvare	tnam		
7.	Semester and Year Offered											Trime	ester 2	(Gamr	na)			
	Credit Value											4	63161 Z	(Carrii	iia)			
9.	Pre-Requisite											None	Э					
10 .	Objective of the course in the	lament lament	al con	cepts	re-pro	cess,	store											
11 .	Justification for including																	
	This course prepares studen									gramm	ing to ma	nage ar	nd ana	lyze da	ta. It	is an introductory	course and a pre-	requisite course for
	selected courses offered to s	tuaent	is wno	intend	to sp	eciali	ze in L	oata Scienc	e.									
12 .	Course Learning Outcome													D	omai	n		Level
	CLO1: Explain about co	ncepts	of da	ta scie	nce									Co	gniti	ve		2
	CLO2: Demonstrate und	derstan	nding a	about o	dealing	g with	data,	data storaç	je and	data a	nalysis.				gniti			3
	CLO3: Demonstrate und	dereter	nding s	ahout h	naeic c	conce	nte of	programmi	na lan	ו פחבווה	read to	1						
	support data scie		iuii iy a	about t	Jasic C	JULICE	pts oi	programm	ny ian	guage	useu io			Co	gniti	ve		3
13 .	Mapping of the Course Lea	arning	Outc	omes	to the	Prog	ramm	ne Learnin	a Outo	omes	Teachin	a Meth	nods a	nd Ass	essr	ment:	l	
												1						sment Method
	Course Learning Outcomes (CLO)			FIC	gram	me L	earnii	g Outcon	les (FI	.0)		-	'	eacmi	ig ivi	ethods	Asses	Sment wethou
	(Must tally with CLOs in									Р	P P							
	item 12)	Р	Р	Р	Р	Р	Р	P P	Р	L	L L							
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14 .	CLO2 CLO3 Total Transferable Skills:								1			Indica (This	ate the r descrip	elevano tion mu	y bet st be	read together with s	PLO by ticking "√" th	zzes / Final Exam le appropriate relevant box
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Ethics, security and privacy issues related to data science Definition of ethics, security and privacy; Importance of ethics and privacy; Big Data best practices, Code of Conduct for data scientists	1	2	2			8	4 Total SLT	16 112			
	SUMMATIVE ASSES	SMEN	т								
1. Continuous Assessment	I	•	Perc	entac	1e %	Total SLT					
Quizzes							4				
Test							6				
Assignments				30%		16					
		Total	SLT f	or Co	ntinuo	ous Assessment	26				
2. Final Assessment				Perc	entac	ıe %	Total SLT				
Final Exam					40%	•	F2F	ILT 20			
Final Exam	Total	CI T fo	r Eine	al A a a a		ent (F2F + NF2F)	_				
	Total	SLI IC	I FIIIc	ai ASS	255111	ent (FZF + NFZF)	22				
Grand Total					100%		160				
Indicate the CLO based on the CLO's numbering in Item 12.											
*L= Lecture, *T= Tutorial, *P= Practical, *O= Others, F2F*= Face to Face, NF2F*= Non Face to Face											
Identify Special Requirement to Deliver the Course (e.g., softwar	e, nursery, computer lab, simula	ion ro	om):								
R Studio / Python Software	* *										
. Main References:											
EMC Education Services (Editor). (2015). Data Science and Big D	ata Analytics: Discovering, Analytics	zing, V	isualiz	ing an	d Pres	senting Data.					
. Additional References:							•				
	Neil, C. & Schutt, R. (2013). Doing Data Science Straight Talk from the Frontline. O'Reilly Media.										
Lutz, M. (2013). Learning Python. 5th Edition. O'Reilly Media.											
Adler, J. (2009). R in a Nutshell: A Desktop Quick Reference.											

Note:

Cells shaded light grey contain formulas / fixed values. Edit these formulas only if needed.