

ಸಂತ ಅಲೋಶಿಯಸ್ ಕಾಲೇಜು
(ಸ್ವಾಯತ್ತ)
ಮಂಗಳೂರು- 575 003



ST ALOYSIUS COLLEGE
(Autonomous)

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Re-accredited by NAAC with 'A' Grade - CGPA 3.62

Ranked 94 in College Category by NIRF, MHRD, Government of India

Recognised by UGC as "College with Potential for Excellence"

College with 'STAR STATUS' conferred by DBT, Government of India

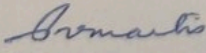
Date: 06- 06 - 2018

NOTIFICATION

Sub: Syllabus of **M.Sc.Big Data Analytics** Under Choice Based Credit System.

Ref: 1. Academic Council decision dated 30-05-2018
2. Office Notification dated 06- 06 - 2018

Pursuant to the Notification cited under reference (2) above, the Syllabus of **M.Sc.Big Data Analytics** Under Choice Based Credit System is hereby notified for implementation with effect from the academic year 2018-19.


PRINCIPAL




REGISTRAR

To:

1. The Chairman/Dean/HOD.
2. The Registrar
3. Library
4. PG Office

SCHEME OF TEACHING: L-T-P-S Scheme

I Semester

Subject Code	Subject Title	Type	Credits	Total No of Hours	Lecture Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Self Study Hrs / week
PH 801.1	Statistics for Data Science	HC	4	45	3	2	--	2
PH 802.1	Big Data Technology & Computing	HC	4	45	3	2	--	2
PH 803.1	Advanced Spreadsheet Analysis and Programming in R	HC	4	45	3	2	--	2
PH 804.1	Algorithms for Advanced Data Analytics	HC	4	45	3	2	--	2
PH 805.1 P	Data Science and Statistical Analysis Lab	HCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
PS 806.1	Data Warehousing and Data Mining	SC	4	45	3	2	--	2
PS 807.1P	Advanced Algorithms and Data Mining using R Lab	SCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
---	Technical Writing & Presentation	---	--	30	2	2	--	4
	Total		26		17	16	12	14

HC – Hard Core SC – Soft Core HCL – Hard Core Lab SCL – Soft Core Lab OE – Open
ive

II Semester

Sl No	Subject Code	Subject Title	Type	Credits	Total No of Hours	Lecture Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Self Study Hrs / week
1	PH 801.2	Multivariate Techniques for Data Analytics	HC	4	45	3	2	--	2
2	PH 802.2	Machine Learning and Deep Learning Algorithms	HC	4	45	3	2	--	2
3	PH 803.2 P	Machine Learning and Data Analytics Lab	HCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
Advanced Data Science Stream									
4	PS 804.2	Probability and Stochastic Process Models	SC	3	45	3	2	--	2
5	PS 805.2	Predictive Modeling and Marketing Analytics	SC	3	45	3	2	--	2
Big Data Framework Stream									
6	PS 804.2	Enterprise Cloud Computing for Big data	SC	3	45	3	2	--	2
7	PS 805.2	Blockchain Technology with Ethereum	SC	3	45	3	2	--	2
Big Data Technology Stream									
8	PS 804.2	Programming with Python for Big data Analytics	SC	3	45	3	2	--	2
9	PS 805.2	Big Data : No SQL, Map Reduce with Hadoop	SC	3	45	3	2	--	2
10	PS 806.2 P	Data Science / Big data Framework / Big Data Technology Lab	SCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
Open Elective - Offered to other Depts									
11	PO 807.2	Statistical Data Analysis using R	SC	3*	45	3	--	--	2
12	---	Technical Writing & Presentation	---	--	30	--	4	--	4
				Total	20+3*	15	16	12	14

HC - Hard Core SC - Soft Core HCL - Hard Core Lab SCL - Soft Core Lab OE - Open Elective

III Semester

Sl No	Subject Code	Subject Title	Type	Credits	Total No of Hours	Lecture Hrs / week	Tutorial Hrs / week	Practical Hrs / week	Self Study Hrs / week
1	PH 801.3	Web Intelligent Analytics using Ontology & Semantic Web	HC	4	45	3	2	--	2
2	PH 802.3	Big Data and Internet of Things	HC	4	45	3	2	--	2
3	PH 803.3 P	Internet of Things and Web Intelligent Analytics Lab	HCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
Advanced Data Science Stream									
4	PS 804.3	Modeling, Simulation and Data Science	SC	3	45	3	2	--	2
5	PS 805.3	Time Series Analysis and Forecasting	SC	3	45	3	2	--	2
Big Data Framework Stream									
6	PS 804.3	Real Time Data Analytics with Streaming Data	SC	3	45	3	2	--	2
7	PS 805.3	Social Media & Network Analytics	SC	3	45	3	2	--	2
Big Data Technology Stream									
8	PS 804.3	Big Data Analytics with Scala and Spark	SC	3	45	3	2	--	2
9	PS 805.3	Big Data Visualization using Tableau	SC	3	45	3	2	--	2
0	PS 806.3 P	Data Science / Big data Framework / Big Data Technology Lab	SCL	3	90	--	(1 x 2) 2	(3 x 2) 6	--
Open Elective - Offered to other Depts									
1	PO 807.3	Big Data For Systems Thinking	SC	3*	45	3	--	--	2
2	---	Seminar and Technical Communication	---	--	30	--	4	--	4
		Total		20+3*		15	16	12	14

HC - Hard Core SC - Soft Core HCL - Hard Core Lab SCL - Soft Core Lab OE - Open Elective

IV Semester

Sl No	Subject Code	Subject Title	Credits	Internal Evaluation		External Evaluation		Total
1	PS 801.4	Domain Knowledge Project	04	Assignments / Paper Presentation (50)		Documentation Viva Voce (100)		150
Sl No	Subject Code	Subject Title	Credits	Max. Marks for Dissertation / Valuation		External Evaluation		Total
				Dissertation I	Dissertation II	Dissertation III	Max. Marks for Viva-voce (Final)	
2	PH 802.4	Industry Internship / Project Work/ Dissertation	16	SRS & SDD (100)	Mid Term Evaluation (100)	Record Reading (100)	200	500
Total			20	--	---	---	---	650