**VELAGAPUDI RAMAKRISHNA
SIDDHARTHA ENGINEERING COLLEGE
DEEMED TO BE UNIVERSITY**
(Under Section 3 of UGC Act, 1956)
Kanuru, Vijayawada - 520 007, AP. www.vrsiddhartha.ac.in
(Sponsored by Siddhartha Academy of General & Technical Education)

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SCHOOL OF SCIENCE
SCHEME OF INSTRUCTION FOR B. Sc PROGRAM (w.e.f 2024-25)

SEMESTER I   **CONTACT HOURS: 25/W**

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24EN111	First Language	Communicative English - I	2	0	2	3
2.	24CA101	Major -1	Problem Solving using Python	3	0	3	4.5
3.	24MA111	Major -2	Calculus and Real Analysis	3	1	0	4
4.	24MA112	Multidisciplinary-1	Essential Statistics for Computer	2	0	2	3
5.	24CA102	Skill Enhancement Courses (SEC)-1	Office Automation Tools and Power BI Lab	1	0	3	2.5
6.	24CA103	VAC-1	AI Tools and Applications	1	0	2	2
			TOTAL	12	1	12	19

SEMESTER II   **CONTACT HOURS: 28/W**

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24EN112	First Language	Communicative English - II	1	0	4	3
2.	24CA106	Major -3	C and Data Structures	3	0	2	4
3.	24CA107/ 24CA108/ 24CA109	Minor-1	Elective Minor 1 *	3	0	2	4
4.	24CO105	Multidisciplinary-2	Principles of Accounting	2	0	2	3
5.	24MA113	Skill Enhancement Courses (SEC)-2	Statistical Data Analysis using R	2	0	2	3
6.	24CY111	VAC-2	Environmental Studies	2	0	0	2
7.		VAC-3	Yoga Education	1	0	2	2
			Total	14	0	14	21

Students on exit shall be awarded Undergraduate Certificate (in the Field of Study/ Discipline) after securing the requisite 40 credits in Semesters I and II

SEMESTER III

CONTACT HOURS: 23/W

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24TL211	Second Language	Telugu	2	0	0	2
	24HI211		Hindi				
2.	24CA201	Major -4	Object Oriented Programming using Java	3	0	2	4
3.	24MA211	Major -5	Linear Algebra and Discrete Mathematics	3	1	0	4
4.	24CA202/ 24CA203/ 24CA204	Minor-2	Elective Minor 2*	3	0	2	4
5.	24CA205	Multidisciplinary-3	Cognitive Science	2	1	0	3
6.	24CA206	Skill Enhancement Courses (SEC)-3	Digital Marketing	2	0	2	3
			TOTAL	15	2	6	20

SEMESTER IV

CONTACT HOURS: 25/W

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24CA208	Major -6	Database Management Systems	3	0	2	4
2.	24CA209	Major -7	Web Application Development using PhP and MySQL	3	0	2	4
3.	24MA212	Major -8	Probability	3	0	2	4
4.	24CA210/ 24CA211/ 24CA212	Minor-3	Elective Minor 3*	3	0	2	4
5.	24CA213/ 24CA214/ 24CA215	Minor-4	Elective Minor 4*	3	0	2	4
			Total	15	0	10	20

Students exiting the programme after securing 80 credits will be awarded UG Diploma in the relevant Discipline /Subject provided they secure additional 4 credit in skill based vocational courses offered during first year or second year summer term.

SEMESTER V   **CONTACT HOURS: 25/W**

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24CA301	Major -9	Data Mining and Warehousing	3	0	2	4
2.	24CA302	Major -10	Object Oriented Software Engineering	3	0	2	4
3.	24MA311	Major -11	Probability Distribution and Statistical Inference	3	0	2	4
4.	24CA303/ 24CA304/ 24CA305	Minor-5	Elective Minor 5*	3	0	2	4
5.	24CA306/ 24CA307/ 24CA308	Minor-6	Elective Minor 6*	3	0	2	4
			TOTAL	**15**	**0**	**10**	**20**

SEMESTER VI   **CONTACT HOURS: 24/W**

S.No	Course Code	Type of the Course	Course Name	L	T	P	Credits
1.	24CA310	Major -12	Software Testing Techniques	3	0	2	4
2.	24CA311	Major -13	Web Interface Designing Technologies	3	0	2	4
3.	24CA312	Major -14	Operating Systems	3	0	2	4
4.	24CA313	Major -15	Python for Web Development(Flask)	3	0	2	4
5.	24CA314	Core Project Work	Project Work	0	0	4	2
			Total	**12**	**0**	**12**	**18**
			3 YEAR DEGREE PROGRAMME	**L**	**T**	**P**	**C**
			GRAND TOTAL	**83**	**3**	**68**	**120**

* If student chooses Economics, Finance or Banking as minor courses, then Lecture hours will be 3, Tutorial hours will be 0 practical hours will be 2, totaling for 4 credits. If student chooses Data Science, AI or Cyber Security as minor courses, then Lecture hours will be 3, Tutorial hours will be 0 and practical hours will be 2 totaling for 4 credits.

Dean - Schools of MSLAC