

STE 2025-28

**School of Science and Computer Studies**  
**BCA (DATA SCIENCE) Programme**



**School of Science and Computer Studies**  
**BCA (DATA SCIENCE)**

**Scheme of Teaching and Evaluation (STE)**  
**Batch [2025-28]**



**I Semester**

Course Code	Course	CMRU Category	CMRU subcategory	UGC Category	School / Dept	Contact Hours/ Week	Credit Distribution L-T-P-C
<b>Program Core</b>							
8CSPL1322	Problem Solving Techniques Using C and Lab	Foundation	Fundamental	Major Core	SSCS	7	3-0-2-5
8CSGC1462	Database Management Systems and Lab	Foundation	Fundamental	Major Core	SSCS	7	3-0-2-5
8MATH1031	Mathematical Foundation for Computer Science	Foundation	Fundamental	Major Core	SSCS	3	3-0-0-3
8CSGC1861	Fundamentals of Digital Electronics	Foundation	Fundamental	Major Core	SSCS	2	2-0-0-2
<b>Common Core</b>							
CPSAD1013	Design Thinking	PS	CC	AECC	DCCC	2	2-0-0-2
CPSSD1061	Creating with AI	PS	CC	AECC	DCCC	1	1-0-0-1
GCSCD1011	Community Service Programme - I	CS	-	-	DCCC		0-0-1-1*
<b>Total</b>						<b>22</b>	<b>18 + 1*</b>

\*The Community Service Programme- I (COS-I) of 30 hours has to be carried out in the I Semester. The corresponding 1 credit and the CIE will be reflected in the VI Semester.



**II Semester**

Course Code	Course	CMRU Category	CMRU Subcategory	UGC Category	School/ Dept	Contact Hours/ Week	Credit Distribution L-T-P-C
<b>Program Core</b>							
8CSGC2391	Data Structures using C and Lab	Foundation	Intermediate	Major core	SSCS	7	3-0-2-5
8CSPL1341	Operating System & Linux Foundation and Lab	Foundation	Intermediate	Major core	SSCS	7	3-0-2-5
8STAT2041	Statistics	Foundation	Fundamental	Major Core	SSCS	3	3-0-0-3
	IDE 1	Interdisciplinary	Fundamental	Minor	SOEC/ SOM/ SCSH/ S OET	3	3-0-0-3
<b>Common Core</b>							
CPSAL1061 / 71 / 81	Hindi / Kannada / English	PS	CC	AECC	DCCC	2	2-0-0-2
CPSAL1121	Active Communication	PS	CC	AECC	DCCC	3	3-0-0-3
GPSDA1012	Career Preparedness Program-I	PS	-	AECC	DCCC	2	0-0-1-1



GCSCD1021	Community Service Programme-II (COS-II) *	CS	-	-	DCCC		0-0-1-1*
<b>Total</b>						<b>27</b>	<b>22 + 1*</b>

\*The Community Service Programme-II (COS-II) of 30 hours has to be carried out in the II Semester. The corresponding 1 credit and the CIE will be reflected in the VI Semester.



**III Semester**

Course Code	Course	CMRU Category	CMRU Subcategory	UGC Category	School/ Dept	Contact Hours/ Week	Credit Distribution L-T-P-C
<b>Program Core</b>							
8CSPL1332	Object Oriented Programming using JAVA and Lab	Foundation	Fundamental	Major core	SSCS	7	3-0-2-5
8CSPL1361	Python Programming and Lab	Foundation	Fundamental	Major core	SSCS	7	3-0-2-5
8CSGC2152	Numerical Techniques and Linear Programming	Foundation	Intermediate	Major Core	SSCS	3	3-0-0-3
	IDE2	Interdisciplinary	Fundamental	Minor		3	3-0-0-3
8CSDS1311	Excel for Data Analysis				SSCS	2	2-0-0-2
<b>Common Core</b>							
CKSAA1033	Introduction to Philosophical Thoughts	KSC	CC	AECC	DCCC	1	1-0-0-1
GCSCD1031	Community Service Programme-III(COS-III) *	CS	-	-	DCCC	2	0-0-1-1*
CPSBD1011	Career Preparedness Program-II	PS	-	AECC	DCCC	2	0-0-1-1



Total	27	20 + 1*
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\*The Community Service Programme- III (COS-III) of 30 hours has to be carried out in the III Semester. The corresponding 1 credit and the CIE will be reflected in the VI Semester.

**IV Semester**

Course Code	Course	CMRU Category	CMRU Subcategory	UGC Category	School/Dept	Contact Hours/Week	Credit Distribution L-T-P-C
Program Core							
8CSAI3102	Artificial Intelligence and Lab	Foundation	Advanced	Major core	SSCS	7	3-0-2-5
8CSGC1473	Software Engineering and Lab	Foundation	Intermediate	Major core	SSCS	7	3-0-2-5
8CSGC2401	Cyber Security	Foundation	Intermediate	Major Core	SSCS	3	3-0-0-3
8MOOC1011	MOOC Course			Major core		4	4-0-0-4
	IDE3	Interdisciplinary	Fundamental	Minor		3	3-0-0-3
Common Core							
CKSAM1051	Indian Constitution	KSC	CC	AECC	DCCC	2	2-0-0-2
CPSDR1011	Career Preparedness Program-III	KSC	CC	AECC	DCCC	1	1-0-0-1
Total						27	23

*Internship - I (SIP) of 4 credits to be carried out between IV and V Semester break. The corresponding 4 credits will be reflected in the VI Semester.*

**V Semester**



Course Code	Course	CMRU Category	CMRU Subcategory	UGC Category	School/Dept	Contact Hours/Week	Credit Distribution L-T-P-C
<b>Program Core</b>							
8CSGC2061	Design and Analysis of Algorithms	Foundation	Advanced	Major core	SSCS	3	3-0-0-3
8CSGC2101	Data Warehousing and Mining	Foundation	Advanced	Major core	SSCS	3	3-0-0-3
8CSDS3171	Machine Learning using Python and Lab	Foundation	Advanced	Major core	SSCS	7	3-0-2-5
8CSGC2491 / 8CSAI3111	<b>Elective 1:</b> Web Analytics and Lab/ Internet of Things and Lab	Foundation	Advanced	Major core	SSCS	7	3-0-2-5
8INTS3010	Internship I <sup>†</sup> (SIP)	Internship	-	CC	SSCS		
<b>Common Core</b>							
CKSAM1021	Environment and Sustainability	KSC	CC	AECC	DCCC	2	2-0-0-2
CCSAE1011	Disaster Management	KSC	CC	AECC	DCCC	2	2-0-0-2
<b>GR</b>	Training and Placement		GR				
<b>Total</b>						<b>25</b>	<b>20</b>

**†† Internship I- Summer Internship Program (SIP) credits are reflected in the VI Semester**



## VI Semester

Course Code	Course	CMRU Category	CMRU Subcategory	UGC Category	School /Dept	Contact Hours/ Week	Credit Distribution L-T-P-C
<b>Program Core</b>							
8CSDS4041	Data Modeling & visualization and Lab	Foundation	Advanced	Major	SSCS	7	3-0-2-5
CKSHA1011	Indian Traditions: Values and Critical Inquiry					2	2-0-0-2
8INTS3010	Internship I <sup>††</sup> (SIP)	Internship	IC	CC	SSCS	-	0-0-4-4 <sup>††</sup>
8CSDS3161 8CSDS4191	<b>Elective :</b> Big Data Analytics and Lab / Text Mining and Analytics and Lab	Foundation	Advanced	Major	SSCS	7	3-0-2-5
8CAPS40101	Capstone	Project	Project	DSE	SSCS	12	0-0-6-6
GCSCD1011	Community Service Programme -I (COS-I)*	CS	-	-	DCCC	-	0-0-1-1*
GCSCD1021	Community Service Programme - II (COS-II)*	CS	-	-	DCCC	-	0-0-1-1*
GCSCD1031	Community Service Programme - III (COS-III)*	CS	-	-	DCCC	-	0-0-1-1*





<b>Total</b>	<b>28</b>	<b>25</b>
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†† The credits of Internship I - - Summer Internship Program (SIP) taken up after the IV Semester is reflected in the VI Semester

\* The credit of Community Service Programme- I (COS-I) / Community Service Programme- II (COS-II) / Community Service Programme- III (COS-III) of 30 hours each that was carried out in the I / II and III Semesters respectively is reflected in the Semester

