

**CENTRE FOR DISTANCE AND ONLINE EDUCATION  
ANNA UNIVERSITY**

**MASTER OF SCIENCE (COMPUTER SCIENCE)**

**Admission**

Candidates selected are eligible for admission to MBA/MCA/MSc Degree Programme in any one of the immediate two successive batches of administration (i.e.) Academic year (AY) batch or Calendar Year (CY) batch.

M.Sc. (Computer Science) Programme imparts a high level of "Industry Readiness" to the students and helps to address the needs of the IT industry. This is a two year Programme which aims at acquiring knowledge in the areas of Programming, Data structures and algorithm Design to solve real word applications and computer systems. It will provide the ability to create, collect, process, view, organize, store and mine data.

It helps to build the ability to apply the skills and techniques in Information Technology and interdisciplinary domains for providing solutions in a global, economic, environmental and societal context, retrieve information both in local and remote locations in a secure and effective manner. This course will suit both academics and industry so that the students can go for Software Development, Research and Teaching careers.

**Eligibility**

1. A pass in any Bachelor Degree\*.
2. The candidate should have studied Mathematics/Statistics as one of the subjects at the degree level or Mathematics at +2 level.

\*\*\*\*\* The Bachelor Degree must have been obtained after +2 or equivalent. Candidate applying for administration to M.Sc. (CS) programme will be directly called for administration. Duration - 4 semesters

**REGULATIONS - 2023**  
**CURRICULUM SEMESTER - I**

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8101	Computer Organization	4	100
DCS8102	Python Programming	3	100
DCS8103	Advanced Database Technology	4	100
DCS8104	Object Oriented Software Engineering	3	100
DCS8105	Mathematical Foundations of Computer Science	4	100
DCS8111	Python Programming Lab	3	100
DCS8112	Advanced Database Technology Lab	3	100
	<b>TOTAL</b>	<b>24</b>	<b>700</b>

**SEMESTER - II**

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8201	Computer Networks	4	100
DCS8202	Advanced Java Programming	3	100
DCS8203	Advanced Data Structures and Algorithms	4	100
DCS8204	Operating System	4	100
E1	Elective I	3	100
DCS8211	Advanced Java Programming Lab	3	100
DCS8212	Advanced Data Structures and Algorithms Lab	3	100
	<b>TOTAL</b>	<b>24</b>	<b>700</b>

**SEMESTER - III**

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8301	Web Design	4	100
DCS8302	Data Warehousing and Data Mining	4	100
DCS8303	Mobile Application Development	3	100
DCS8304	Object Oriented Analysis and Design	4	100
E2	Elective II	3	100
DCS8311	Software Development Lab	3	100
DCS8312	Mobile Application Development Lab	3	100
	<b>TOTAL</b>	<b>24</b>	<b>700</b>

**SEMESTER - IV**

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
E3	Elective III	3	100
E4	Elective IV	3	100
DCS8411	Project Work	12	400
	<b>TOTAL</b>	<b>18</b>	<b>600</b>
	<b>Total No. of Credits and Marks</b>	<b>90</b>	<b>2700</b>

\*Each credit is equivalent to 30 hours of student study comprising of all learning activities.

### ELECTIVE – I

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8001	Open Source Systems	3	100
DCS8002	Soft Computing	3	100
DCS8003	Cryptography and Network Security	3	100

### ELECTIVE – II

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8004	Cloud Computing Technologies	3	100
DCS8005	Ethical Hacking and Cyber Forensics	3	100
DCS8006	Software Testing and Quality Assurance	3	100

### ELECTIVE – III

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8007	Social Network Analysis	3	100
DCS8008	Data Science	3	100
DCS8009	Big Data Analytics	3	100

### ELECTIVE – IV

<b>Code No.</b>	<b>Course Title</b>	<b>Credits*</b>	<b>Marks</b>
DCS8010	Artificial Intelligence	3	100
DCS8011	E-Commerce	3	100
DCS8012	Machine Learning	3	100