

**MSc credit system structure and syllabus**

**With Effect from Academic Year 2020-21**

<b>Department of Computer Science, SPPU</b>		
<b>Course: M.Sc. (Computer Science)</b>		
<b>Duration: 02 Years</b>		
<b>Total No. of credits for the Course:</b>		
<b>Semester</b>	<b>Core Course Credits</b>	<b>Elective Course Credits</b>
<b>1</b>	<b>20</b>	<b>0</b>
<b>2</b>	<b>20</b>	<b>0</b>
<b>3</b>	<b>8</b>	<b>12</b>
<b>4</b>	<b>4</b>	<b>16</b>
<b>Total Credits (80)</b>	<b>52</b>	<b>28</b>
<b>M.Sc. (Computer Science) Semester I</b>		
<b>Subject Code</b>	<b>Subject Title</b>	<b>Number of Credits</b>
<b>CS-101</b>	<b>Programming – 1</b>	<b>4</b>
<b>CS-102</b>	<b>Systems- 1</b>	<b>4</b>
<b>CS-103</b>	<b>Mathematics of Computation– 1</b>	<b>4</b>
<b>CS-104</b>	<b>Mathematics of Computation- 2</b>	<b>4</b>
<b>CS-105</b>	<b>Database Management System</b>	<b>4</b>
<b>UGC recommended</b>	<b>Skill Development I and II</b>	<b>2</b>
<b>UGC recommended</b>	<b>HRE I</b>	<b>1</b>
<b>Total Credits</b>		<b>20+3</b>
<b>M.Sc. (Computer Science) Semester II</b>		
<b>Core Courses</b>		
<b>Subject Code</b>	<b>Subject Title</b>	<b>Number of Credits</b>
<b>CS-201</b>	<b>Programming – 2</b>	<b>4</b>
<b>CS-202</b>	<b>Programming – 3</b>	<b>4</b>
<b>CS-203</b>	<b>Systems-2</b>	<b>4</b>
<b>CS-204</b>	<b>Systems-3</b>	<b>4</b>
<b>CS-205</b>	<b>Theory of Computation</b>	<b>4</b>
<b>UGC recommended</b>	<b>Skill Development III and IV</b>	<b>2</b>
<b>UGC recommended</b>	<b>HRE II</b>	<b>1</b>
<b>Total Credits</b>		<b>20+3</b>

**Department of Computer Science, SPPU****Course: M.Sc. (Computer Science)****M.Sc. (Computer Science) Semester III****Core Courses**

<b>Subject Code</b>	<b>Subject Title</b>	<b>Number of Credits</b>
<b>CS-301</b>	<b>Systems-4</b>	<b>4</b>
<b>CS-302</b>	<b>Formal Methods-1</b>	<b>4</b>
<b>CS-303</b>	<b>Elective-1</b>	<b>4</b>
<b>**CS-MCP/CS-304</b>	<b>Degree Project-1/Elective-2</b>	<b>4</b>
<b>**CS-MCP/CS-305</b>	<b>Degree Project-1/Elective-3</b>	<b>4</b>
<b>UGC recommended</b>	<b>Cyber Security - 1 and 2</b>	<b>2</b>
<b>Total Credits</b>		<b>20+2</b>

**\*\*The candidate is permitted to choose either 0/1/2 elective courses or can work on degree project for 0/4/8 credits. The total number of credits for degree project are 8 (Eight) and the same are distributed across the second year of degree program.**

**M.Sc. (Computer Science) Semester IV****Core Courses**

<b>Subject Code</b>	<b>Subject Title</b>	<b>Number of Credits</b>
<b>CS-401</b>	<b>Formal Methods - 2</b>	<b>4</b>
<b>**CS-MCP/CS-402</b>	<b>Degree Project-2/Elective-4</b>	<b>4</b>
<b>**CS-MCP/CS-403</b>	<b>Degree Project-2/Elective-5</b>	<b>4</b>
<b>CS-404</b>	<b>Elective-6</b>	<b>4</b>
<b>CS-405</b>	<b>Elective-7</b>	<b>4</b>
<b>UGC recommended</b>	<b>Cyber Security - 3 and 4</b>	<b>2</b>
<b>Total Credits</b>		<b>20+2</b>