

SYMBIOSIS INSTITUTE OF COMPUTER STUDIES AND RESEARCH**MASTER OF SCIENCE (SYSTEM SECURITY)****PROGRAM STRUCTURE- 2017-19**

1	Objectives	<p>Government IT projects and Corporates are on alert to amplify and elevate their infrastructure and data security due to threats from hackers and cyber-terrorists. In this view, the customers have increased the requirements of security procedures dramatically.</p> <p>With the growing demand of data and cyber security, we are aiming to develop the workforce with skill set to satisfy the need of this rapidly expanding, dynamic field.</p> <p>The course will cover various aspect of security such as Network Security, Information Security, Regulations and compliance.</p>
2	Duration	Two-year full time program.
3	Proposed Intake	30 Seats
4	Reservation of Seats	<p>I. Within the sanctioned intake:</p> <p>a) Scheduled Castes - 15%</p> <p>b) Scheduled Tribes - 7.5%</p> <p>c) Differently abled - 3%</p> <p>II. Over and above the sanctioned intake:</p> <p>a) Kashmiri Migrants - 2 Seats</p> <p>b) International students - 15%</p>
5	Eligibility	Graduate in any discipline of any statutory/recognized university with minimum of 50% marks (45% for SC/ST candidates).
6	Selection Procedure	SICSR entrance test followed by Personal Interaction and Writing Ability Test (GE-PIWAT)

7	Medium of Instruction	English
8	Pattern of Program	Semester Pattern- 4 Semesters
9	Courses & Specialization	As per Annexure A
10	Fee Structure	Rs. 2 lakhs p.a
11	Assessment	All fully internal courses will have 100% component as continuous evaluation at the institute level. All other courses will have 60% continuous evaluation at institute and 40% component as term end evaluation by the University.
12	Standard of Passing	The assessment of the student for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10 CGPA for the program.
13	Award of Degree	Master of Science (System Security) M.Sc. (SS) will be awarded at the end of semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10 CGPA examinations.

Annexure A

Semester I						
Course Code	Course Name	Category	Credits	Internal	External	Total
T3338	Linux Essentials	C	2	60	40	100
T3337	Windows Essentials	C	2	60	40	100
T3335	Network Essentials	C	2	60	40	100
	Information Security Essentials	C	2	60	40	100
	Introduction to Cloud Technology	C	2	60	40	100
	Cyber law	C	2	60	40	100
	Introduction to RDBMS	C	2	60	40	100
T3017	Python Programming	C	3	90	60	150
	Fundamentals of Web Technologies	C	3	90	60	150
	Secure Software Engineering	C	3	90	60	150
T3097	Green IT	C	1	50	-	50
Semester I Total Credits/Marks			24	740	460	1200

Semester II						
Course Code	Course Name	Category	Credits	Internal	External	Total
	Linux Server Essentials	C	3	90	60	150
	Windows Server Essentials	C	3	90	60	150
T3336	Advanced Networks	C	3	90	60	150
T3015	Network Programming	C	3	90	60	150
	Web CMS	C	3	90	60	150
	Linux - Shell Programming	C	2	60	40	100
	Awk Scripting	C	2	60	40	100
	Dissertation	C	2	100	-	100
T3022	Cryptography	OPT1	3	90	60	150
T3279	Database Administration I		3	90	60	150
	Information Technology Infrastructure Library	OPT2	2	60	40	100
	Asset Management		2	60	40	100
	Essentials of Vulnerability Assessment and Penetration Testing		2	60	40	100
	Computer Forensic - Detection & Prevention of Frauds		2	60	40	100
	Integrated Disaster Management Program*	C	-	-	-	Letter Credit
	Semester II Total Credits/Marks		28	880	520	1400

*** Integrated Disaster Management Program is mandatory for the award of degree**

Courses in category "C" are compulsory for all the students. Students have to choose any one subject from OPT1 and any two subjects from OPT2.

Semester III						
Course Code	Course Name	Category	Credits	Internal	External	Total
T3343	Linux Security	C	2	60	40	100
T3341	Windows Security	C	2	60	40	100
	Infrastructure Security	C	2	60	40	100
	Cloud Security	C	3	90	60	150
	Embedded Systems Security	C	2	60	40	100
	Storage Management and Security	C	2	60	40	100
T3031	BCM DR and Crisis Response Management	C	2	60	40	100
	IT Project Management	C	2	60	40	100
	Foundations of Distributed Systems	C	2	60	40	100
	Pilot Project	C	2	100	-	100
T3278	Applied Cryptography	OPT1	3	90	60	150
	Database Security & Performance Tuning		3	90	60	150
	System Audit	OPT2	2	60	40	100
	IS Risk Analysis		2	60	40	100
	Advanced Vulnerability Assessment and Penetration Testing		2	60	40	100
	Mobile and digital forensics		2	60	40	100
Semester III Total Credits/Marks			28	880	520	1400
Courses in category "C" are compulsory for all the students. Students have to choose any one subject from OPT1 and any two subjects from OPT2.						

Semester IV

Catalog Course Code	Course Code	Course Name	Category	Credits	Internal Marks	External Marks	Total Marks
T3911	030142401	Industry Internship	C	20	600	400	1000
			Total	20	600	400	1000

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester I	1	23	24	1200
Semester II	2	26	28	1400
Semester III	2	26	28	1400
Semester IV	-	20	20	1000
Total	5	95	100	5000

Note: The above programme structure is subject to change with respect to Symbiosis International University norms.