

SYMBIOSIS INSTITUTE OF COMPUTER STUDIES AND RESEARCH
BACHELOR OF COMPUTER APPLICATIONS
PROGRAM STRUCTURE 2014-17

- 1. OBJECTIVES** BCA offers the pre-qualification for professionals heading for smart career in the IT field, which measures up to international standards. On completing this program one can also go in for higher studies such as MCA, MBA etc.

- 2. DURATION** Three Years Full Time

- 3. INTAKE** 90 Students

- 4. RESERVATION**
 - I. Within the sanctioned intake:
 - a) Scheduled Castes - 15%
 - b) Scheduled Tribes - 7.5%
 - c) Differently abled -3%
 - d) Serving/Retired Defense Personnel and their Children - 5%

 - II. Over and above the sanctioned intake:
 - a) Kashmiri Migrants: 2 Seats
 - b) International Students 15%

- 5. ELIGIBILITY** XII pass from any stream OR equivalent Diploma in Engineering/Technology with minimum 50% marks (45% for SC/ ST category candidates).

- 6. SELECTION PROCEDURE** Symbiosis Entrance Test Score (SET), Personal Interaction and Writing Ability Test (PI-WAT)

- 7. MEDIUM OF INSTRUCTION** English

- 8. PROGRAM PATTERN** Semester Pattern - 6 Semesters

- 9. COURSES & SPECIALIZATION** As per Annexure A

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| 10. FEE | <p>Indian Students</p> <p>Academic Fee p.a. Rs. 1, 35, 000</p> <p>Institute Deposit Rs. 10,000</p> <p>Total Rs. 1, 45, 000</p> <p>International Students</p> <p>Academic Fee p.a. Rs. 2, 02, 500</p> <p>Institute Deposit Rs. 10,000</p> <p>Total Rs. 2, 12, 500</p> |
| 11. ASSESSMENT | <p>All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 40% internal component and 60% external component [University] examination. Practical Courses-Practical assessment will cover the assignments and lab examination.</p> |
| 12. STANDARD OF PASSING | <p>The assessment of students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 4.000 corresponding to A+. For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 2.000 corresponding to Grade D. 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 2.000 out of maximum of 4.000 for the program.</p> |
| 13. AWARD OF DEGREE | <p>Bachelor of Computer Applications (BCA) will be awarded at the end of semester VI examination by taking into consideration the performance of all semester examinations after obtaining minimum 2.000 CGPA out of 4.000.</p> |

Annexure A

Semester I

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3211	030121101	Digital Electronics	C	2	20	30	50
T3198	030121102	Introduction to Python	C	2	20	30	50
T3207	030121103	Computer Fundamentals	C	2	20	30	50
T3196	030121104	Foundation Web Technology	C	4	40	60	100
T3256	030121105	IT Tools for Statistics-I	C	2	20	30	50
T3214	030121106	Logic Development and Programming Concepts	C	2	50	-	50
T3213	030121107	Introduction to Operating System	C	2	20	30	50
T3247	030121108	Business Automation Tools	C	2	50	-	50
T2495	030121109	Business Communication	C	2	50	-	50
		Total		20	290	210	500
T4005	030121110	*Integrated Disaster Management	C	-	-	-	Letter Grade

Semester II

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3215	030121201	Microprocessors	C	4	40	60	100
T3224	030121202	Network Essentials	C	2	20	30	50
T3194	030121203	Client Side Web Technology	C	4	40	60	100
T3206	030121204	Advanced Programming in Python	C	2	20	30	50
T3257	030121205	IT Tools for Statistics-II	C	2	20	30	50
T3209	030121206	Data Structures	C	2	20	30	50
T3244	030121207	Introduction to Database Management System	C	2	20	30	50
Electives: Select any one course from OPT-1 and OPT-2							
T6197	030121208	German	OPT-1	4	100	-	100
T6191	030121209	French	OPT-2	4	100	-	100
		Total		22	280	270	550

Semester III

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3208	030121301	Computer Organization	C	4	40	60	100
T3236	030121302	Concepts of Object Oriented Paradigm	C	2	20	30	50
T7508	030121303	Object Oriented Analysis and Design Lab	C	1	25	-	25
T3203	030121303	Programming in C	C	4	40	60	100
T3240	030121304	Software Practices	C	4	40	60	100
T3204	030121305	Server Side Web Technology	C	4	40	60	100
T3210	030121306	Design and Implementation of Algorithms	C	2	20	30	50
T3239	030121307	Relational Database Management System	C	4	40	60	100
T3231	030121308	Social Issues in Computing	C	2	20	30	50
		Total		27	275	390	675

Semester IV

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3202	030121401	Object Oriented Programming	C	4	40	60	100
T2206	030121402	Fundamental of Operations Research	C	3	30	45	75
T3205	030121403	Web Development using CMS	C	2	20	30	50
T3243	030121404	Verification and Validation Techniques	C	4	40	60	100
T3197	030121405	Introduction to Best Programming Practices	C	4	40	60	100
T8000	030121406	Service Learning	C	4	100	-	100
Electives: Select any one course of Liberal Arts from OPT-1 to OPT- 9							
T6099	030121407	An Overview of World Literature	OPT-1	2	50	-	50
T6181	030121408	Understanding Cinema	OPT-2	2	50	-	50
T6182	030121409	Appreciating Cinema	OPT-3	2	50	-	50
T6246	030121410	Music in Media I	OPT-4	2	50	-	50
T6255	030121411	Introduction to Theatre	OPT-5	2	50	-	50
T6307	030121412	Basic Psychology	OPT-6	2	50	-	50
T6334	030121413	Basic Sociology	OPT-7	2	50	-	50
T6274	030121414	Foundations of Ethics	OPT-8	2	50	-	50
T6096	030121415	Creative Writing	OPT-9	2	50	-	50
T3258	030121416	Current Trends and Practices in IT	C	3	75	-	75
T3803	030121417	Project	C	3	75	-	75
Total				29	470	255	725

Semester V

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3220	030121501	Information Security	C	2	20	30	50
T3241	030121502	Software Project Practices	C	4	40	60	100
T3199	030121503	Java Enterprise Technologies	C	4	40	60	100
T3237	030121504	Foundations of Data Warehousing and Data Mining	C	4	40	60	100
T3701	030121505	Dissertation	C	2	50	-	50
T3229	030121506	Enterprise Resource Planning	C	4	40	60	100
T1234	030121507	Information Technology and Regulatory Compliance	C	2	20	30	50
Electives: Select any two courses from OPT-1 to OPT-5							
T3223	030121508	Mobile Communications	OPT-1	2	20	30	50
T3248	030121509	Computer Animation	OPT-2	2	20	30	50
T3212	030121510	Distributed Computing	OPT-3	2	20	30	50
T3225	030121511	Network Planning and Design	OPT-4	2	20	30	50
T2339	030121512	Introduction to Entrepreneurship	OPT-5	2	20	30	50
T3238	030121513	Human Computer Interaction	C	2	20	30	50
		Total		28	310	390	700

Semester VI

Temporary Course Code	Course Code	Course Title	Category	Credits	Internal Marks	External Marks	Total Marks
T3242	030121601	Software Quality Management and Standards	C	4	40	60	100
T3197	030121602	Introduction to Best Programming Practices	C	4	40	60	100
T3805	030121603	Project	C	8	80	120	200
Electives: Select any two courses from OPT-1 and OPT-5							
T3201	030121604	Mobile Programming	OPT-1	4	40	60	100
T3195	030121605	Computer Game Design	OPT-2	4	40	60	100
T3221	030121606	Introduction to Cloud Computing	OPT-3	4	40	60	100
T3222	030121607	Introduction to Vulnerability Assessment Penetration Testing	OPT-4	4	40	60	100
T2352	030121608	Business Modeling and Business Plan	OPT-5	4	40	60	100
Total				24	240	360	600

Summary

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester I	06	14	20	500
Semester II	04	18	22	550
Semester III	01	26	27	675
Semester IV	12	17	29	725
Semester V	02	26	28	700
Semester VI	-	24	24	600
Total	25	125	150	3750