JHARKHAND RAKSHA SHAKTI UNIVERSITY

RANCHI

Regulation for B.Sc. (Hons.) Course in Computer Application & Cyber Security (BCACS)

1. INTRODUCTION

The Bachelor of Computer Application & Cyber Security (BCACS) Programme of Jharkhand Raksha Shakti University follows the Semester Mode.

(1) PREAMBLE:

(a) The regulation herein specified applies to full-time Bachelor Honours-course in Computer Application & Cyber Security (BCACS) Programme under Grading Semester System by the Jharkhand Raksha Shakti University, Ranchi, hereinafter, referred to as the University.

(b) 'Full–time programme' are those programmes where the participants devote their entire available time for the studies as per schedule and are not employed.

(c) 'Course' means a theory or practical subject that is described in Syllabus.

(d) 'University' means Jharkhand Raksha Shakti University.

(e) The 'Academic Year' of the courses shall or ordinarily be from July to June.

(f) An academic year is divided into two semesters. In each semester courses are offered in 15 teaching weeks and the remaining 5 weeks are to be utilized for the conduct of examinations and evaluation purposes. Each week has minimum 30 working hours spread over 6 days of week.

(2) STRUCTURE OF SEMESTER SYSTEM AND ACADEMIC YEAR:

(a) There shall be two semester in every academic year.

(b) The whole BCACS Programme will consist of six semesters.

(c) The Bachelor of Computer Application & Cyber Security (BCACS) Programme of Jharkhand Raksha Shakti University shall consist of 144 credits in six semester divided into core/elective general and ability enhancement courses.

i. Core Course:- It is a compulsory paper to be studied by a candidate to complete the requirements of a degree. The core component is based on papers that are unique to the programme.

ii. Discipline Specific Elective:- This course adds generic proficiency to the students. An elective may be 'Discipline Specific Elective' (DSE).

iii. Ability Enhancement Compulsory Course (AECC) :- 'AECC' are the courses based upon the content that leads to knowledge enhancement.

iv. Skill Enhancement Course:- Skill enhancement course are focused around training that combines the best practices from education, social work, counseling and technology training.

v. Generic Elective:- An elective course is chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called 'Generic Elective'.

vi. SWAYAM (Massive Open Online Course): SWAYAM course is introduced in the curriculum as per the UGC (Credit Framework for Online Learning Courses through the SWAYAM) Regulation, 2016 as published in Extraordinary Gazette of India dated July 19, 2016. The course is introduced as compulsory AECC (Ability Enhancement Compulsory Course) in the second semester of the curriculum. SWAYAM Course is also introduced as an elective under SEC (Skill Enhancement Course) and GE (Generic Elective) in which the students will have the option to choose from the existing pool of subjects offered.

Credit distribution in each semester:-

Semester	Core Course	General Elective	Discipline Specific Elective	Skill Enhancement Course	Ability Enhancement	SWAYAM MOOC	Total Credits
I	12	6	0	0	4		22
II	12	6	0	0	0	2	22
III	18	6	0	2	0		26
IV	18	6	0	2	0		26
V	12	0	12	0	0		24
VI	12	0	12	0	0		24

Total Credits	84	24	24	4	8		144

2.1 **Duration of the course**

The BCACS as mentioned above shall cover a period of three full-time academic years and shall be known as the Bachelor Hons. Degree in Computer Application and Cyber Security.

2.2 **Course Fee**

A candidate found eligible for admission in BCACS course, shall have to pay a fee of the course in each semester in addition to the University examination fee, the quantum of which shall be decided by the Jharkhand Raksha Shakti University administration subject to revision from time to time, The University shall issue guidelines for the purpose in the beginning of each academic session.

2.3 **Admission Procedure.**

The admission process will start in the month of May.

The admission of eligible students in this course will be done through an "Entrance Test".

The "Entrance Test" will be conducted by the University for admission in Semester- I in the beginning of each academic session.

The Reservation rules will be same as per University rule. Only eligible students will be considered.

2.4 **Eligibility for admission**

A student may be admitted to the BCACS course for the degree of Bachelor Hons. in Computer Application and Cyber Security, if he/she has passed the Intermediate examination (I.Sc. /I.Com/I.A./10+2) of a Board/University established and incorporated by law, or any other examination recognized by the university as equivalent thereto with minimum 45% marks in aggregate.

Provided that for admission to the BCACS course it shall be necessary for a student to have obtained qualifying marks in the 'Admission Entrance Test'.

2.5 **Medium of Instruction and Examination**

The medium of instruction and the medium of examination in all the subjects shall be Hindi/ English.

(3) CREDIT VALUE AND CONTACT HOUR SYSTEM

1) For the maintenance of a standard teaching- learning system, Credit Value and Contact Hours shall be followed for assessment of the level of learners.

2) A Contact Hour (CH) is in correspondence to the Credit value; for example, a topic having 4 Credits shall have a minimum of 4 Contact Hours in a week. For Practical classes, every Two Hours shall make 1 (one) Contact hour.

3) One Contact Hour shall normally be of 60 minutes duration.

4) Taking into consideration 15 working weeks in a semester, a paper having 4 Credits shall have a total of 15 X 4= 60 contact hours.

5) There are total 122 credit in six semesters.

Table- 1: Summarized Credits for the BCACS Course

Semester	Course	Full Marks	Mid- Sem Full Marks	End-Sem Full Marks	Credits
I.	BCACS 101 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 102 Theory/ Practical	70 30	20 10	50 20	4 2
	AECC 101 Theory	100	30	70	2
	AECC 102 Theory	100	30	70	2
	GE* Theory/ SWAYAM Course	100	30	70	6

*The marks distribution of the subject will change if the student opts for a practical paper.

Semester	Course	Full Marks	Mid-Sem Full Marks	End-Sem Full Marks	Credits

II.	BCACS 201 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 202 Theory/ Practical	70 30	20 10	50 20	4 2
	AECC 201 Theory	100	30	70	2
	GE* Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	4 2

*The marking distribution of the subject will change if the student opts for a practical paper.

Semester	Course	Full Marks	Mid-Sem Full Marks	End-Sem Full Marks	Credits
III.	BCACS 301 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 302 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 303 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS-SEC Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	1 1
	GE* Theory/ SWAYAM Course	100	30	70	6

*The marking distribution of the subject will change if the student opts for a practical paper.

Semester	Course	Full Marks	Mid-Sem Full Marks	End-Sem Full Marks	Credits
IV.	BCACS 401 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 402 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 403 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS-SEC Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	1 1
	GE* Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	4 2

*The marking distribution of the subject will change if the student opts for a practical paper.

Semester	Course	Full Marks	Mid-Sem Full Marks	End-Sem Full Marks	Credits
V.	BCACS 501 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 502 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS-DSE Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	4 2
	BCACS-DSE Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	4 2

Semester	Course	Full Marks	Mid-Sem Full Marks	End-Sem Full Marks	Credits
VI.	BCACS 601 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS 602 Theory/ Practical	70 30	20 10	50 20	4 2
	BCACS-DSE Theory/ Practical/ SWAYAM Course	70 30	20 10	50 20	4 2
	BCACS-DSE Project / Dissertation	100	-	-	6

Total Credits- 144

Legends:

AECC- Ability Enhancement Compulsory Course

SEC- Skill Enhancement Course

DSE- Discipline Specific Elective

GE- Generic Elective

SWAYAM MOOC (Massive Open Online Course)

FM- Full Marks

PM- Pass Marks

Note:

There are five theory courses in each semester except in second, fifth and sixth semester. In semester two there is one MOOC course offered on SWAYAM portal. In semester five and six there will be on the Job project and dissertation. The breakup of marks for this course is; 50 marks for Project Preparation and 50 marks for Viva-Voce. There shall be no internal assessment in this course.

(4)   EXAMINATION, EVALUATION AND DECLARATION OF RESULTS

4.1 Conduct of examinations: University shall conduct the End-Semester Examinations. Internal Assessment shall be conducted by the Department. For the End-Semester examinations, questions papers shall be presented by the University.

4.2 Examination Routine for End- Semester Examination shall be notified by the University which shall be normally of 3 hours duration.

4.3 Student Assessment and Progression: The performance of a student shall be evaluated on 30:70 basis i.e. 30 Marks for Internal Assessment and 70 marks for End-Semester Examination.

4.4 Activities for Internal Assessment Tests (Mid Semester Examinations): The Internal Assessment for 30 marks shall be made in the following categories of activities:

Class Tests/Unit Test	=	10 Marks
Project Submission	=	10 Marks
Performance Based Evaluation	=	05 Marks
Attendance	=	05 Marks
Total	=	30 Marks

Attendance: - 5 marks, on the basis of following tabulated scheme:

Attendance %	Marks
75-80	1
81-85	2
86-90	3
91-95	4
96-100	5

a. The internal assessment in theory papers of the BCACS be based on Mid-Semester Examination of **one hour** duration per paper to be conducted by the Department. Mid-semester Examination shall be conducted usually in the month of March-April and August-September.

b. If a student misses the Mid-Semester Examination due to some valid reasons (to be ascertained the University on the basis of documental proof provided by the student), the Department may arrange a special Mid-Semester Examination. It shall be held for all such cases and it will be conducted within one fortnight from the date of completion

of the mid-semester examination on payment of special examination fee fixed by the University.

c. Re-evaluation of the answer script shall not be ordinarily allowed.

d. A student can apply for the scrutiny of his/her answer script, after paying the required fee for it, within 15 days of the publication of the results. The paper shall be scrutinized by the Examination Board of the University to see if any question (or part thereof) has been left unmarked or, whether marks obtained have been transcribed correctly.

4.5 Award of Grades, SGPA and CGPA

i. Grade Letter:- It will indicate performance of the students in a particular course/paper. It is actually the transformation of actual marks secured by student in a course paper.

Range of Marks Percentage	Grade Letter	Grade Point
85-100	O	10
70-84	A	9
60-69	B	8
55-59	C	7
50-54	D	6
40-49	E	5
Less than 40	F	0

ii. Semester Grade Point Average (SGPA) :- It would be computed only when a candidate passes in all the papers and gets a minimum of 'E' Grade. SGPA will show the performance of student in a given semester. It would be calculated by dividing the total credit points earned by a student in all courses by total number of credits assigned to the courses/papers in a semester.

iii. Cumulative Grade Point Average (CGPA):- It would be obtained by the dividing the total credits points in all the semesters by the total number of credits in all the semesters.

The final result of the candidate would be declared in the form of CGPA.

(CGPA will be calculated only when the candidate passes in all paper of all the semesters.)

4.6 Eligibility criteria for End-Semester Examination: A Student shall be deemed qualified to appear at the End-Semester Examinations only if he/she secures minimum qualifying marks in the internal assessment Tests and maintains 75% attendance

separately in every subject. For valid reasons, 5% relaxation of the attendance may be considered by the University Authority.

4.7 The Students shall carry their respective Identity-cards to the examination hall and the same shall be produced on demand. Non production of the identify may result in expulsion from the examination.

4.8 No candidate will be permitted to appear in the examination without a valid Admit Card. The **Admit card** should be presented to the invigilators/ others authorized officials for verification. The candidate's identity will be verified in respect of his/her details on the Admit Card. If the identity is in doubt, the candidate may not be allowed to appear in the examination.

4.9 Question Paper Setting and Evaluation :
University shall submit a list of the panel of Question Paper Setters and Answer Script Evaluators preferably in the beginning of each Semester. University shall update this panel to ensure that the right person does the right job at the right time.

4.10 Completion of Internal Assessment:
Internal Assessment shall be completed well before commencement of the End – Semester Examination.

4.11 Evaluation
1. Internal Evaluation of Answer Scripts shall be completed at the University level after the conduct of examination for a particular paper and each evaluator shall submit the marks sheet within the stipulated period to the University for tabulation of Marks.
2. Answer Scripts of End –semester Examinations shall be submitted to the University for completion of the necessary coding formalities and evaluation process.

4.12 Improvement:
Improvement may be allowed to desirous student by surrendering their previous Marks- Sheet. This Option may be exercised within three academic years only. In case the students fail to improve his / her score, marks secured in the previous examination shall be retained.

4.13 The nature and type of question

The examination Question papers shall have multiple choice questions and descriptive type questions. The descriptive question will be divided into short answer questions and long answer questions.

4.14 Publication of Result.

1. Only those students who have a minimum 22 credits in the concerned semester will be declared Pass.
2. Students who have cleared 3 or more papers and having minimum 18 credits in the concerned semester will be promoted to next semester.
3. Before appearing in VIth semester all backlog paper of previous semesters must be cleared. Without clearing all the papers of back semester, he or she may not allowed to appear in VIth semester.
4. Any Student who does not clear at least three papers in any semester shall be declared fail and may appear in commencement of corresponding semester examination next session. He/She will be back to previous semester.
5. There is no provision of supplementary exam.
6. The University shall announce results semester wise.
7. The results will be declared semester wise in SGPA scale. In the last semester results will be declared in CGPA scale.