

## Academic bank of credits (ABC)

Our institution is affiliated to **Rani Channamma University, Belagavi.**

RCU, Belagavi framed both CBCS & NEP-2022 syllabus and it included ABC.

The **CBCS** provides choice for students to select from the prescribed courses (core, elective or soft skill etc. courses).

**Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core Course.

**Elective Course:** Generally, a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline.

**Discipline Specific Elective (DSE) Course:** Elective courses that may be offered by the main discipline/ subject of study is referred to as Discipline Specific Elective.

**Ability Enhancement Course (AEC):** Ability Enhancement Course (AEC) may be of two kinds: **Ability Enhance Compulsory Course (AECC) and Skill Enhancement Course (SEC)**

**AE Compulsory Course (AECC) :** AECC courses are the courses based upon the content that leads to knowledge enhancement: (i) Environment Studies, (ii) Indian Constitution, and (iii) English and Kannada/Modern Indian Languages (MIL)/Communication. These courses are mandatory for all disciplines

**Skill Enhancement Course (SEC):** SEC courses are value-based and / or skill-based and are aimed at providing hands-on-training, competencies, skills etc. so as to increase their employability.

## CBCS COURSE PATTERNS, SCHEMES OF EXAMINATIONS AND CREDITS FOR B.Sc. PROGRAMES (T: Theory, P: Practical, CC/EA: Co-curricular/Extension Activities

### CHOICE BASED CREDIT SYSTEM [CBCS] B.Sc. Program with Optional Subject: PHYSICS

B.Sc., PHYSICS Syllabus as per CBCS (With effect from the academic year 2022-23 onwards)								
Sem	Part	Paper Code	Title of Paper	Hours/Week	Marks			Subject Credits
					IA	Exam	Total	
V	Part – 1 DSE	PHYDSET5.1	Mathematical Physics – I, Nuclear and Particle Physics and Classical Mechanics	4	20	80	100	3
		PHYDSEP5.1	Practical V	3	10	40	50	1
		PHYDSET5.2A (Elective I)	Quantum Mechanics – I, Electronics and Optoelectronics	4	20	80	100	3
		PHYDSEP5.2A (Elective I)	Practical VIA	3	10	40	50	1
		PHYDSET5.2B (Elective II)	Modern Physics - I	4	20	80	100	3
		PHYDSEP5.2B (Elective II)	Practical VIB	3	10	40	50	1
		Part – 2 SEC	PHYSECT5.3	Basic Instrumentation Skills	2	10	40	50
	Total : Hours / Credits				16			350
Note: Students have to choose either Elective-I or Elective-II								
VI	Part – 1 DSE	PHYDSET6.1	Mathematical Physics – II, Atomic, Molecular and Optical Physics and Atmospheric Physics.	4	20	80	100	3
		PHYDSEP6.1	Practical VII	3	10	40	50	1
		PHYDSET6.2A (Elective III)	Quantum Mechanics – II, Condensed Matter Physics and Nanomaterials	4	20	80	100	3
		PHYDSEP6.2A (Elective III)	Practical VIIIA	3	10	40	50	1
		PHYDSET6.2B (Elective IV)	Modern Physics - II	4	20	80	100	3
		PHYDSEP6.2B (Elective IV)	Practical VIIIB	3	10	40	50	1
		Part – 2 SEC	PHYSECT6.3	Electrical Circuits And Network Skills	2	10	40	50
	Total : Hours / Credits				16			350
Note: Students have to choose either Elective-III or Elective-IV								

T: Theory, P: Practical, CC/EA: Co-curricular/Extension Activities. AECC: Ability Enhancement Compulsory Course, DSC: Discipline Specific Course, DSE: Discipline Specific Elective, SEC: Skill Enhancement Course)

Note: Duration of examinations is 03 Hrs for 80 Marks theory and 02 hrs for 40 marks theory. For practical's duration of examination is 03 Hrs.

I - IV - 21 X 4 = 84 / 750 Marks

V - VI - 26 X 2 = 52 / 950 Marks

**Total Credits / Marks: 136 / 4900**

**IN NEP-2022 university has made some changes in the credit system & it is different from subject to subject.**

For example:

**RANI CHANNAMMA UNIVERSITY**

**VidyaSangam, NH-4, Belagavi. -591156**

**Proposed Curricular and Credits Structure under Choice Based Credit System [CBCS] of Biotechnology Major & One Minor Discipline Scheme for the Four Years Chemistry B.Sc. Undergraduate Honors Programme with effect from 2021-22**

<b>SEMESTER-I</b>										
Category	Course code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
			IA	SE	Total	L	T	P		
L1	21BSC1L1LK1	Kannada	30	70	100	4	-	-	3	3
	21BSC1L1LFK1	Functional Kannada								
L2	21BSC1L2LEN2	English	30	70	100	4	-	-	3	3
	21BSC1L2LHI2	Hindi								
	21BSC1L2LSN2	Sanskrit								
	21BSC1L2LTE2	Telugu								
	21BSC1L2LUR2	Urdu								
DSC1	21BSC1C1ZOO1L	Cytology, Genetics and Infectious Diseases	30	70	100	4	-	-	4	3
	21BSC1C1ZOO1P	Cell Biology and Genetics	15	35	50	-	-	4	2	4
DSC1	Another Department Code	Another Department Course Title	30	70	100	4	-	-	4	3
			15	35	50	-	-	4	2	4
SEC1	21BSC1S1CSI/ 21BSC1S1ZOO1	Digital Fluency/ Aquarium Fish Keeping	15	35	50	0	-	4	2	4/2
VBC1	21BSC1V1PE1	Physical Education: Yoga	15	35	50	-	-	2	1	2
VBC2	21BSC1V2HW1	Health & Wellness	15	35	50	-	-	2	1	2
OEC1	21BSC1O1ZOO1	Economic Zoology	30	70	100	3	-	-	3	3
<b>Total Marks</b>			750			<b>Semester Credits</b>			25	

SEMESTER-II										
Category	Course code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
			IA	SEE	Total	L	T	P		
L3	21BSC2L3LK2	Kannada	30	70	100	4	-	-	3	3
	21BSC2L3FKL2	Functional Kannada								
L4	21BSC2L4EN2	English	30	70	100	4	-	-	3	3
	21BSC2L4HI2	Hindi								
	21BSC2L4SN2	Sanskrit								
	21BSC2L4TE2	Telugu								
	21BSC2L4UR2	Urdu								
DSC2	21BSC2C2ZOO2L	Biochemistry and Physiology	30	70	100	4	-	-	4	3
	21BSC2C2ZOO2P	Physiological, Biochemical & Hematology	15	35	50	-	-	4	2	4
DSC2	Another Department Code	Another Department Course Title	30	70	100	4	-	-	4	3
			15	35	50	-	-	4	2	4
AECG I	21BSC2AE1ES2	Environmental Studies	15	35	50	1	-	2	2	2
VBC3	21BSC2V3PE2	Physical Education- Sports	15	35	50	-	-	2	1	2
VBC4	21BSC2V4NC1	NCC/NSS/R&R(S&G)/ Cultural	15	35	50	-	-	2	1	2
OE2	21BSC2O2ZOO2	Parasitology	30	70	100	3	-	-	3	3
<b>Total Marks</b>				<b>750</b>	<b>Semester Credits</b>			<b>25</b>		

*Note: All skill enhancement course (SEC) syllabus and title should be selected time to time notice from the university and/ or NEP committee accordingly.*

SECOND YEAR; SEMESTER-III										
Category	Course code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
			IA	SEE	Total	L	T	P		
L5	21BSC3L5LK3	Kannada	40	60	100	4	-	-	3	2
	21BSC3L5LFK3	Functional Kannada								
L6	21BSC3L6EN3	English	40	60	100	4	-	-	3	2
	21BSC3L6HI3	Hindi								
	21BSC3L6SN3	Sanskrit								
	21BSC3L6TE3	Telugu								
	21BSC3L6UR3	Urdu								
DSC3	21BSC3C3PHY1L	Wave motion and Optics	40	60	100	4	-	-	4	2
	21BSC3C3PHY1P	Practical III	25	25	50	-	-	4	2	4
DSC3	Another Department Code	Another Department Course Title	40	60	100	4	-	-	4	2
			25	25	50	-	-	4	2	4
SEC2	21BSC3SEC2AI1	Artificial Intelligence	25	25	50	1	-	2	2	2
VBC5	21BSC3V5PE3	Yoga/ Sports	25	--	25	-	-	2	1	--
VBC6	21BSC3V6NC3	H&W/NCC/NSS/R&R/CA	25	--	25	-	-	2	1	--
OEC3	21BSC3O3PHY3	Climate Science	40	60	100	3	-	-	3	2
<b>Total Marks</b>					<b>700</b>	<b>Semester Credits</b>			<b>25</b>	

SEMESTER-IV										
Category	Course code	Title of the Paper	Marks			Teaching hours/week			Credit	Duration of exams (Hrs)
			IA	SEE	Total	L	T	P		
L7	21BSC4L7LK4	Kannada	40	60	100	4	-	-	3	2
	21BSC4L7LFK4	Functional Kannada								
L8	21BSC4L8EN4	English	40	60	100	4	-	-	3	2
	21BSC4L8HI4	Hindi								
	21BSC4L8SN4	Sanskrit								
	21BSC4L8TE4	Telugu								
	21BSC4L8UR4	Urdu								
DSC4	21BSC4C2PHY4L	Thermal Physics And Electronics	40	60	100	4	-	-	4	2
	21BSC4C2PHY4P	Practical IV	25	25	50	-	-	4	2	4
DSC4	Another Department Code	Another Department Course Title	40	60	100	4	-	-	4	2
			25	25	50	-	-	4	2	4
AEC2	21BSC4AE1Col1	Constitution of India	25	25	50	1	-	2	2	2
VBC7	21BSC4V5PE4	Yoga/ Sports	25	--	25	-	-	2	1	--
VBC8	21BSC4V6NC4	H&W,/NCC/NSS/R&R/CA	25	--	25	-	-	2	1	--
OEC4	21BSC4O4PHY4	Electrical Instruments	40	60	100	3	-	-	3	2
<b>Total Marks</b>					<b>700</b>	<b>Semester Credits</b>			<b>25</b>	