Faculty of Interdiciplinery JK-2024-2026 Circulars File

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DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPATI SAMBHAJINAGAR.



Circular No./Acad-SU/UG/NEP-2020/Course Structure/78/2024.

It is hereby inform to all concerned that on the recommendation of Board of Dean's the Academic Council at it's meeting held on **08 April**, **2024 has accepted the** "Revised Course Structure" for University Campus, Sub-Campus & all Afiliated Colleges at (Three/Four Years Honrs & Honars with Research) Degree Programme Under Graduate Level as Per Guidelines of National Education Policy-2020, as per Government letter dated 13 march, 2024 for all the Faculties.

This is effective from the **Academic Year 2024-2025** and Onwads as appended herewith.

This Circular is also available on the University Website www.bamu.ac.in
All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus, Chhatrapati Sambhajinagar.-431004. Ref.No.SU/UG/Course Structure/NEP/ AC.AOB.I.04/2024/26/06-19 Date:- 26-04-2024.

Deputy Registrar, Academic Section

Copy forwarded with compliments to :-

- 1] The Head /Director, all Concerned University Campus & Sub-Centere, Dharashiv, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 2] The Principals All affiliated Colleges, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- The Director of Recognized Institutions, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 4] The Director, Board of Examinations & Evaluation, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 5] The Librarian, University Library, Dr. Babasaheb Ambedkar Marathwada University,
- 6] The Director, University Network & Information Centre, UNIC, with <u>a request to</u> upload the Circular along with its enclosures on University Website.
- 7 The Public Relation Officer.
- 8 The Deputy Registrar, Post Graduate Section,
- 9] The In-charge, [E-Suvidha Kendra],
- 10] The Record Keeper,

Copy for information to :-

- 1] All Heads of Section, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 2] The P.A. to the Vice-Chancellor, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 3] The P.A. to the Pro. Vice-Chancellor, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 4] The P.A. to the Registrar, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

JK*26042024/



Dr. Babasaheb Ambedkar Marathwada University Chhatrapati Sambhajinagar- 431001



Three Years B.A./ B. Com. / B.Sc.
Four Years B.A./ B. Com. / B.Sc. (Hons)
And

Four Years B.A./ B. Com. / B.Sc. (Hons with Research)

Degree Programme

Course Structure

(Revised)

(AS PER NEP-2020)

Subject:

Effective from 2024-25

28/03/2024

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EM6

Illustrative credit distribution Structure for B.A./B.Com./ B. Sc. (Three / Four Years Honours / Honours with Research) Degree Programme with Multiple Entry and Exit Options

B.A./B.Com./B.Sc. First Year (1st and 2nd Semester)

Sr. No.	Course Type	First Semes	iter	Total Credits	Second Semeste	r	Total Credits
		Course Code	Credits		Course Code	Credits	
1	Major 1 (Core) M1 Mandatory	DSC-1	4	12	DSC-4	4	12
	Major 2 (Core) M2 Mandatory	DSC-2	4		DSC-5	4	
	Major 3 (Core) M3 Mandatory	DSC-3	4		DSC-6	4	
2	Major Electives (Choose any one from pool of courses)						
3	Minor (Choose any one from pool of courses) It is from different discipline of the same faculty						
4	GE/OE (Generic / Open Elective) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major	GE/OE-1	2	2	GE/OE-2	2	2
5	VSC (Vocational Skill Courses) (Choose any one from pool of courses)			2	VSC-1	2	
6	SEC (Skill Enhancement Courses) (Choose any one from pool of courses)	SEC-1	2	7 () (2
7	AEC (Ability Enhancement Courses) (Common for all faculty)	AEC-1 (English)	2		AEC-2 (English)	2	·
8	VEC (Value Education Courses) (Common for all faculty)		1	4	VEC-1 (Constitution of India)	2	4
9	IKS (Indian Knowledge System) Courses (Common for all faculty)	IKS-1	2				
10	OJT (On Job Training)						
11	FP (Field Project)						
12	CEP (Community Engagement Project) (Common for all faculty)			2			
13	CC (Co-curricular Courses) (Common for all faculty)	CC-1 (Health and Wellness)	2	G12:71	CC-2 (Yoga education / Sports & Fitness)	2	2
14	RM (Research Methodology) Course						
15	RP (Research Project)						
	it Option : Award of UG Certificate in 3			22			22

Internship OR continue with Major and Minor

Students will have to choose any three subjects as a Major 1, Major 2, Major 3, from Basket 1 under the respective faculty.

Students will be having three subject options of equal credits (instead of Major and / or minor verticals) in the first year. Students will have to select / declare choice of one subject as a major subject in the beginning of second year out of three major options M1, M2 and M3 (which were opted in the first year).

Courses to be designed for the students from other faculty

1) Generic /Open Elective Courses for other faculty

GE/OE-1: This is a 2 credit theory course to be designed for other faculty GE/OE-2: This is a 2 credit theory course to be designed for other faculty

Detailed Illustration of Courses included in 1st and 2nd semester:

1) Major 1 (Core) subject are mandatory.

DSC-1: This is a 4 credit theory course) OR 2 credit theory and 2 credit practical course corresponding to Major 1 (core) subject

2) Major 2 (Core) subject are mandatory.

DSC-2: This is a 4 credit theory course) OR 2 credit theory and 2 credit practical course corresponding to Major 2 (core) subject

3) Major 3 (Core) subject are mandatory.

DSC-3: This is a 4 credit theory course) OR 2 credit theory and 2 credit practical course corresponding to Major 3 (core) subject

4) Generic / Open Elective (GE/OE): (Needs to be chosen (any one) from pool of courses available at respective college). These courses should be chosen compulsorily from faculty other than that of Major.

GE/OE -1: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

GE/OE -2 : This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

5) **SEC** (Skill Enhancement Courses): Choose any one from pool of courses. These courses needs to be designed to enhance the technical skills of the students in specific area.

SEC-1: This is a 2 credit theory / practical course to enhance the technical skills of the students in specific area.



6) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

VSC-1: This is a 2 credit theory / practical course based Hands on Training corresponding to Major (core) subject.

 AEC (Ability Enhancement courses): The focus of these courses should be based on linguistic and communication skills. It will be common for all the faculty.

AEC-1: English

This is a 2 credit theory course based on linguistic proficiency. It will be common for all the faculty.

AEC-2: English

This is a 2 credit theory course based on linguistic proficiency. It will be common for all the faculty.

8) **IKS** (Indian Knowledge System): The courses related to traditional and ancient culture of India will be included in this section. The respective college will have to choose one of the courses from the pool of courses designed by the University.

IKS-1: To be chosen from the pool of courses designed by the University

This is a 2 credit theory course based on Indian Knowledge System. It will be common for all the faculty

9) VEC (Value Education Courses): The courses such as understanding India, Environmental Science / Education, Digital and Technological solutions etc will be part of Value Education Courses. It will be common for all the faculty.

VEC-1: Constitution of India

This is a 2 credit theory course based on value education. It will be common for all the faculty

10) CC (Curricular Courses): The courses such as Health and wellness, Yoga education, Sports and Fitness, Cultural activities, NSS/NCC, Preforming Arts. In the first semester it will be Health and wellness and will be common for all the faculty.

CC-1: Health and Wellness

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

CC-2: Yoga education / Sports and Fitness

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

B.A./B.Com./B.Sc. Second Year (3rd and 4th Semester)

Sr. No.	Course Type	Third Seme	ster	Total Credits	Fourth S	emester	Total Credits	
		Course Code	Credits		Course Code	Credits		
1	Major (Core)	DSC-7	4	8	DSC-9	4	8	
	Mandatory (Student will be choosing one subject as a major out of 3 major subjects and one subject as a minor)	DSC-8	4		DSC-10	4		
2	Major Electives (Choose any one from pool of courses)							
3	Minor (Choose any two from pool	M-1	2		M-3	2		
	of courses) It is from different discipline of the same faculty	M-2	2	4	M-4	2	4	
4	GE/OE (Generic / Open Elective) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major	GE/OE-3	2	2	GE/OE-4	2	2	
5	VSC (Vocational Skill Courses) (Choose any one from pool of courses)	VSC-2	2	2			2	
6	SEC (Skill Enhancement Courses) (Choose any one from pool of courses)				SEC-2	2		
7	AEC (Ability Enhancement Courses)	AEC-3*	2		AEC-4*	2		
100	(Choose any one from pool of language courses)	A P L N		4		1 7 8 5 1	2	
8	VEC (Value Education Courses) (Common for all faculty)	VEC-2 Environme ntal Studies	2					
9	IKS (Indian Knowledge System) Courses (Common for all faculty)							
10	OJT (On Job Training)							
11	FP (Field Project)							
12	CEP (Community Engagement				FP-1	2		
	Project) (Common for all faculty)			2				
13	CC (Co-curricular Courses) (Common for all faculty)	CC-3	2		CC-4	2	4	
14	RM (Research Methodology) Course	2.77 44.7.11		= 1-77				
15	RP (Research Project)				1000			
				22			22	

Exit Option : Award of UG Diploma in Major and Minor with 88 credits and an additional 4 credits of core

NSQF course / Internship OR continue with Major and Minor

*AEC-3 and AEC-4 : Hindi/ Marathi/ Pali & Buddhism/ Sanskrit/ Urdu



Courses to be designed for other Discipline / faculty

1) Minor Courses for other Discipline

Mn-1: This is a 2 credit theory course to be designed for other discipline Mn-2: This is a 2 credit theory course to be designed for other discipline Mn-3: This is a 2 credit theory course to be designed for other discipline Mn-4: This is a 2 credit theory course to be designed for other discipline

2) Generic /Open Elective Courses for other faculty

GE/OE-5: This is a 2 credit theory course to be designed for other faculty GE/OE-6: This is a 2 credit theory course to be designed for other faculty

Detailed Illustration of Courses included in 3rd and 4th semester:

1) Major (Core) subject are mandatory.

DSC-7: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-8: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-9: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-10: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

2) Minor: (Choose any two from pool of courses) It is from different discipline of the same faculty

Mn-1: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-2: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-3: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-4: This is a 2 credit course to be chosen from other discipline of the same faculty

3) Generic / Open Elective (GE/OE): (Needs to be chosen (any one) from pool of courses available at respective college). These courses should be chosen compulsorily from faculty other than that of Major.

GE/OE -3: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

GE/OE -4: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

4) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject. **VSC-2:** This is a 2 credit theory / practical course based Hands on Training corresponding to Major (core) subject.

- 5) **SEC** (Skill Enhancement Courses): Choose any one from pool of courses. These courses needs to be designed to enhance the technical skills of the students in specific area.
 - **SEC-2**: This is a 2 credit theory / practical course to enhance the technical skills of the students in specific area.
- 6) **AEC** (Ability Enhancement courses): The focus of these courses should be based on linguistic and communication skills. It will be common for all the faculty.

AEC-3: Modern Indian Language MIL-1 (Hindi/ Marathi/ Pali & Buddhism/ Sanskrit/ Urdu)

This is a 2 credit theory course based on linguistic proficiency. Students will have to choose one of the above mentioned language.

AEC 4: Modern Indian Language MIL-2 (Hindi/ Marathi/ Pali & Buddhism/ Sanskrit/ Urdu)

This is a 2 credit theory course based on linguistic proficiency. Students will have to choose one of the above mentioned language.

7) VEC-2 - Environmental Studies

This is a 2 credit theory course. It will be common for all the faculty.

- 8) **FP-1 : Field Project**: This is a 2 credit course, should be corresponding to Major core) subject
- CC (Curricular Courses): The courses such as Health and wellness, Yoga education, Sports and Fitness, Cultural activities, NSS/NCC, Preforming Arts.

CC-3: Cultural Activity / NSS, NCC

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

CC-4: Fine/ Applied/ Visual/ Performing Arts

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty



B.A./B.Com./B.Sc. Third Year (5th and 6th Semester)

Sr. No.	Course Type	Fifth Sem	ester	Total Credits	Sixth Se	emester	Total Credits
		Course Code	Credits		Course Code	Credits	
1	Major (Core)	DSC-11	4	8	DSC-13	4	10
	Mandatory	DSC-12	4		DSC-14	4	
					DSC-15	2	
2	Major Electives (Choose any two	DSE-1	2	4	DSE-3	2	4
	from pool of courses)	DSE-2	2		DSE-4	2	
3	Minor (Choose any two from pool	M-5	2		M-7	2	
	of courses) It is from different discipline of the same faculty	M-6	2	4	M-8	2	4
4	GE/OE (Generic / Open Elective) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major						
-	VSC	VSC-3					
5	(Vocational Skill Courses)	VSC-3	2	1 1			
	(Choose any one from pool of courses)	VSC-4	2	4			
6	SEC (Skill Enhancement Courses) (Choose any one from pool of courses)			802.5			
7	AEC (Ability Enhancement Courses) (Common for all faculty)			110			
8	VEC (Value Education Courses) (Common for all faculty)	L					
9	IKS (Indian Knowledge System) Courses (Common for all faculty)			2011			
10	OJT (On Job Training)				OJT-1	4	
11	FP (Field Project)	FP-2	2				
12	CEP (Community Engagement Project) (Common for all faculty)	CEP-2	2	2			
13	CC (Co-curricular Courses) (Common for all faculty)			(FP-2 / CEP-2)			4
14	RM (Research Methodology) Course						
15	RP (Research Project)						
	* /			22			22

Courses to be designed for other Discipline / faculty

1) Minor Courses for other Discipline

Mn-5: This is a 2 credit theory course to be designed for other discipline Mn-6: This is a 2 credit theory course to be designed for other discipline Mn-7: This is a 2 credit theory course to be designed for other discipline Mn-8: This is a 2 credit theory course to be designed for other discipline

Detailed Illustration of Courses included in 5th and 6th semester:

1) Major (Core) subject are mandatory.

DSC-11: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-12: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-13: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-14: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-15: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

2) Major Electives (Choose any two from pool of courses in respective semester)

DSE-1: This is a 2 credit course corresponding to Major (elective) subject DSE-2: This is a 2 credit course corresponding to Major (elective) subject DSE-3: This is a 2 credit course corresponding to Major (elective) subject DSE-4: This is a 2 credit course corresponding to Major (elective) subject

3) Minor: (Choose any two from pool of courses) It is from different discipline of the same faculty

Mn-5: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-6: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-7: This is a 2 credit course to be chosen from other discipline of the same faculty Mn-8: This is a 2 credit course to be chosen from other discipline of the same faculty

4) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

VSC-3: This is a 2 credit course based Hands on Training corresponding to Major (core) subject.

VSC-4: This is a 2 credit course based Hands on Training corresponding to Major (core) subject.



- 5) **FP-2 : Field Project** : This is a 2 credit course, should be corresponding to Major core) subject
- 6) **CEP-2**: Community engagement and service: This is a 2 credit course related to community engagement and service
- 7) OJT-1: This is a 4 credit course related to On job Training

B.A./B.Com./B.Sc. Fourth Year : UG Honours Degree (7^{th} and $8^{th}\,$ Semester)

Sr. No.	Course Type	Seventh Se	emester	Total Credits	Eighth Semester		Total Credits
		Course Code	Credits		Course Code	Credits	
1	Major (Core)	DSC-16	4	14	DSC-20	4	14
	Mandatory	DSC-17	4		DSC-21	4	
	30 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	DSC-18	4		DSC-22	4	
		DSC-19	2		DSC-23	2	
2	Major Electives (Choose any two	DSE-5	2	4	DSE-7	2	4
	from pool of courses)	DSE-6	2		DSE-8	2	
3	Minor (Choose any one from pool					-	
	of courses) It is from different discipline of the same faculty		-	-		-	
4	GE/OE (Generic / Open Elective) (Choose any one from pool of						
	courses) It should be chosen compulsorily from the faculty other than that of Major						
5	VSC (Vocational Skill Courses)						
	(Choose any one from pool of courses)				'		
6	SEC (Skill Enhancement Courses) (Choose any one from pool of courses)						
7	AEC (Ability Enhancement Courses) (Common for all faculty)						
8	VEC (Value Education Courses) (Common for all faculty)				A		
9	IKS (Indian Knowledge System) Courses (Common for all faculty)						
10	OJT (On Job Training)				OJT-2	4	
11	FP (Field Project)		-				
12	CEP (Community Engagement Project) (Common for all faculty)		-	4			
13	CC (Co-curricular Courses) (Common for all faculty)						4
14	RM (Research Methodology) Course	RM-1	4				
15	RP (Research Project)						
				22			22



Detailed Illustration of Courses included in 7th and 8th semester:

1) Major (Core) subject are mandatory.

DSC-16: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-17: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-18: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-19: This is a 2 credit course corresponding to Major (core) subject

DSC-20: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-21: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-22: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-23: This is a 2 credit course corresponding to Major (core) subject

2) Major Electives (Choose any two from pool of courses)

DSE-5: This is a 2 credit course corresponding to Major (elective) subject DSE-6: This is a 2 credit course corresponding to Major (elective) subject DSE-7: This is a 2 credit course corresponding to Major (elective) subject DSE-8: This is a 2 credit course corresponding to Major (elective) subject

- 3) Research Methodology: RM-1: This is a 4 credit theory course based on Research Methodology
- 4) OJT-2: This is a 4 credit course related to On job Training

B.A./B.Com./B.Sc. Fourth Year : UG Honours with Research Degree (7^{th} and $8^{th}\,$ Semester)

		Seventh Semester		Total Credits	Eighth Semester		Total Credits	
1		Course Code	Credits		Course Code	Credits		
1	Major (Core)	DSC-16	4	10	DSC-19	4	10	
	Mandatory	DSC-17	4		DSC-20	4		
		DSC-18	2		DSC-21	2		
2	Major Electives (Choose any two	DSE-5	2	4	DSE-7	2	4	
	from pool of courses)	DSE-6	2		DSE-8	2		
3	Minor (Choose any one from pool					-		
	of courses) It is from different discipline of the same faculty		-	-		-		
4	GE/OE (Generic / Open Elective) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major							
5	VSC (Vocational Skill Courses)							
	(Choose any one from pool of courses)							
6	SEC (Skill Enhancement Courses) (Choose any one from pool of courses)							
7	AEC (Ability Enhancement Courses)							
	(Common for all faculty)							
8	VEC (Value Education Courses) (Common for all faculty)							
9	IKS (Indian Knowledge System) Courses (Common for all faculty)							
10	OJT (On Job Training)			4500 Br 3m				
11	FP (Field Project)		-	1				
12	CEP (Community Engagement Project) (Common for all faculty)		-	8				
13	CC (Co-curricular Courses) (Common for all faculty)						8	
14	RM (Research Methodology) Course	RM-1	4					
15	RP (Research Project)	RP-1	4	1	RP-2	8		
	(1.000.00.1.0]001)		-	22		-	22	



Detailed Illustration of Courses included in 7th and 8th semester:

1) Major (Core) subject are mandatory.

DSC-16: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-17: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-18: This is a 2 credit course corresponding to Major (core) subject

DSC-19: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-20: This is a 4 credit theory course OR 2 credit theory and 2 credit practical course corresponding to Major (core) subject

DSC-21: This is a 2 credit course corresponding to Major (core) subject

2) Major Electives (Choose any two from pool of courses for each semester)

DSE-5: This is a 2 credit course corresponding to Major (elective) subject DSE-6: This is a 2 credit course corresponding to Major (elective) subject DSE-7: This is a 2 credit course corresponding to Major (elective) subject DSE-8: This is a 2 credit course corresponding to Major (elective) subject

- Research Methodology : RM-1 : This is a 4 credit theory course based on Research Methodology
- 4) Research Project:

RP-1: This is a 4 credit practical course based on Research Project RP-2: This is a 8 credit practical course based on Research Project

General Guidelines for Course Selection

- The Major subject is the discipline or course of main focus, bachelors degree shall be awarded in that discipline / subject.
- 2) Students will have to choose any three subjects as a Major 1, Major 2, Major 3, from **Basket 1** under the respective faculty (based on the available options in the respective college).
- 3) Students will be having three subject options of equal credits (instead of Major and / or minor verticals) in the first year.
- 4) In the beginning of second year, students will have to select / declare choice of one major subject and one minor subject from three major options M1, M2 and M3 (which were opted in the first year)
- 5) Once the students finalize their Major Subject and Minor Subject in the beginning of the second year of the programme, they shall pursue their further education in that particular subject as their Major and Minor subjects. Therefore, from second year onwards curriculum of the Major and Minor subjects shall be different.
- 6) Students are required to select Minor subject from other discipline of the same faculty.
- 7) Students are required to select Generic /Open Elective (vertical 3 in the credit framework) compulsorily from the faculty different than that of their Major / Minor subjects.
- 8) Vocational Skill Courses and Skill Enhancement Courses (VSC and SEC) shall be related to the Major subject
- 9) Curriculum of Ability Enhancement Courses (AEC), Value Education Courses (VEC), Indian Knowledge System (IKS), and Co-curricular Courses (CC) will be provided by the University separately.



Respective BoS should draft the syllabus as per the following template

- 1) Cover page
- 2) Preface
- 3) Structure (First year only)
- 4) Programme Educational Objectives (PEOs)
- 5) Programme Outcomes (POs)
- 6) Programme Specific Outcomes (PSOs)
- 7) Syllabus Contents of the Course / Paper

Template of Course / Paper Contents:

(Respective BoS is expected to use following template for syllabus of each course / paper)

DSC	-1 : (Title of Paper)	
Total Credits: 02	Total Contact Hours:	30 Hrs
Maximum Marks : 50	Total Contact Hours .	SOINS
Waxiiiuiii Warks . 50		
Learning Objectives of	the Course:	
i)		
ii)		
iii)		
iv)		
v)		
.,		
Course Outcomes (CO	s):	
After completion of the	course, students will be able to -	
i)		
ii)		
iii)		
iv)		
v)		
*)		
ModuleNo.		Contact
Module 1.0.	Topics / actual contents of the syllabus	Hours
I		10 Hrs
п		10 Hrs

ш	10 1	Hrs

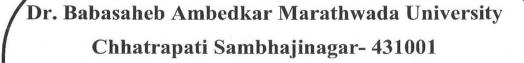
Text Books:

- 1. Name Authors (as appear on the book), "Title of text Book", Vol..., Edition, Name of Publisher, Year of Publications
- 2. ..
- 3. ..

Reference Books:

- 1. Name Authors (as appear on the book), "Title of reference Book", Vol..., Edition, Name of Publisher, Year of Publications
- 2. ..
- 3. ..
- 4. ..







B.Sc. Degree Programme

(Three Year / Four Years (Hons) / Four Years (Hons with Research)

Course Structure

(Revised)

(AS PER NEP-2020)

Subject (Major):

Effective from 2024-25

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PREFACE

As we stand on the threshold of a new era in education, the dawn of the National Education Policy 2020 illuminates our path toward a holistic, inclusive, and progressive educational landscape. The Bachelor of Science (B. Sc.) curriculum outlined herein reflects the ethos and aspirations of this transformative policy, aiming to equip learners with the knowledge, skills, and values necessary to thrive in the dynamic world of the 21st century.

At its core, the National Education Policy 2020 envisions an educational framework that is learner-centric, multidisciplinary, and geared towards fostering creativity, critical thinking, and innovation. It emphasizes the integration of knowledge across disciplines, breaking down traditional silos to encourage holistic understanding and application of concepts. The Bachelor of Science (B. Sc.) curriculum embodies these principles by offering a diverse array of courses spanning various scientific domains, while also incorporating interdisciplinary studies to nurture well-rounded graduates capable of addressing complex challenges with agility and insight.

Furthermore, the curriculum is designed to promote experiential learning, research, and handson exploration, recognizing the importance of practical engagement in deepening understanding and cultivating real-world skills. Through laboratory work, field experiences, internships, and project-based learning opportunities, students will have the chance to apply theoretical knowledge in practical settings, develop problem-solving abilities, and cultivate a spirit of inquiry and discovery.

Integral to the National Education Policy 2020 is the commitment to inclusivity, equity, and access to quality education for all. The Bachelor of Science (B. Sc.) curriculum reflects this commitment by embracing diversity in perspectives, backgrounds, and experiences, and by fostering an inclusive learning environment where every student feels valued, supported, and empowered to succeed.

Moreover, the curriculum emphasizes the cultivation of ethical values, social responsibility, and global citizenship, instilling in students a sense of accountability towards society and the environment. By integrating courses on ethics, sustainability, and social sciences, the Bachelor of Science (B. Sc.) program aims to produce graduates who are not only proficient in their respective fields but also compassionate, ethical leaders committed to making a positive impact on the world.

As we embark on this journey of educational transformation guided by the National Education Policy 2020, the Bachelor of Science (B. Sc.) curriculum stands as a testament to our collective vision of a more equitable, inclusive, and enlightened society. It is our hope that through rigorous academics, innovative pedagogy, and unwavering dedication to excellence, we can inspire the next generation of scientists, scholars, and change-makers to realize their full potential and contribute meaningfully to the advancement of knowledge and the betterment of humanity.

Structure of B. Sc. (Three / Four Years Honours / Honours with Research Degree) Programme with Multiple Entry and Exit Options

Subject (Major):

BSc First Year: 1st Semester

Course Type	Course Code	Course Name	Teaching (Hrs/W	g Scheme Veek)	Credits A	Assigned	Total Credits	
			Theory	Practical	Theory	Practical	1	
Major (Core) M1	DSC-1		2		2			
Mandatory	DSC-2	Practical based on DSC-1		4		2	2+2 = 4	
Major (Core) M2	DSC-1		2		2			
Mandatory	DSC-2	Practical based on DSC-1		4		2	2+2 = 4	
Major (Core) M3	DSC-1		2		2			
Mandatory	DSC-2	Practical based on DSC-1		4		2	2+2 = 4	
Generic / Open Elective (GE/OE) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major	GE/OE-I	To be chosen from other faculty	2		2		2	
SEC (Skill Enhancement	SEC-1	1)	1		1		2	
Courses) (Choose any one from pool of courses)	SEC-2	Practicals based on SEC-1		2		1		
	AEC-1	English (Common for all the faculty)	2		2			
AEC, VEC, IKS	IKS-1	Choose any one from pool of courses	2		2		2+2 =4	
OJT/ FP/CEP/CC/RP	CC-1	Health and Wellness (Common for all the faculty)	NC = EE	4		2	2	
			13	18	13	09	22	



BSc First Year: 2nd Semester

Course Type	Course Code	Course Name	Teaching (Hrs / W	Scheme (eek)	Credits A	Assigned	Total Credits
			Theory	Practical	Theory	Practical	
Major (Core) M1	DSC-3		2		2		
Mandatory	DSC-4	Practical based on DSC-3		4		2	2+2 = 4
Major (Core) M2	DSC-3		2		2		
Mandatory	DSC-4	Practical based on DSC-3		4		2	2+2 = 4
Major (Core) M3	DSC-3		2		2		
Mandatory	DSC-4	Practical based on DSC-3		4		2	2+2 = 4
Generic / Open Elective (GE/OE) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major	GE/OE-2	To be chosen from other faculty	2		2		2
VSC (Vocational Skill	VSC-1	1) 2)	1		1		2
Courses) (Choose any one from pool of courses)	VSC-2	Practicals based on VSC-1		2		1	
	AEC-1	English (Common for all the faculty)	2		2		
AEC, VEC, IKS	VEC-1	Constitution of India (Common for all the faculty)	2		2	1	2+2 =4
OJT/ FP/CEP/CC/RP	CC-2	Yoga Education / Sports and Fitness (Common for all the faculty)		4		2	2
			13	18	13	09	22

Exit Option : Award of UG Certificate in 3 Majors with 44 credits and an additional 4 credits of core NSQF course
/ Internship OR continue with Major and Minor

GE/OE-1: This is a 2 credit theory course to be designed for other faculty

GE/OE-2: This is a 2 credit theory course to be designed for other faculty

Students will have to choose any three subjects as a Major 1, Major 2, Major 3, from Basket 1 under the Faculty of Science and Technology.

Students will be having three subject options of equal credits (instead of Major and / or minor verticals) in the first year. Students will have to select / declare choice of one subject as a major subject in the beginning of second year out of three major options M1, M2 and M3 (which were opted in the first year).

Detailed Illustration of Courses included in 1st and 2nd semester:

1) Major (Core) subject are mandatory.

DSC-1: This is a 2 credit theory course corresponding to Major (core) subject

DSC-2: This is a 2 credit practical course based on DSC-1

DSC-3: This is a 2 credit theory course corresponding to Major (core) subject

DSC-4: This is a 2 credit practical course based on DSC-3

2) Generic / Open Elective (GE/OE): (Needs to be chosen (any one) from pool of courses available at respective college). These courses should be chosen compulsorily from faculty other than that of Major.

GE/OE -1: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

GE/OE -2: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

3) **SEC** (Skill Enhancement Courses): Choose any one from pool of courses. These courses needs to be designed to enhance the technical skills of the students in specific area.

SEC-1: This is a 1 credit theory course to enhance the technical skills of the students in specific area.

SEC-2: This is a 1 credit practical course based on SEC-1.

4) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

VSC-1: This is a 1 credit theory course based Hands on Training corresponding to Major (core) subject.

VSC-2: This is a 1 credit practical course based on VSC-1

AEC (Ability Enhancement courses): The focus of these courses should be based on linguistic and communication skills.

AEC-1: English

This is a 2 credit theory course based on linguistic proficiency. It will be common for all the faculty.

AEC-2: English

This is a 2 credit theory course based on linguistic proficiency. It will be common for all the faculty.

- 6) IKS (Indian Knowledge System): The courses related to traditional and ancient culture of India will be included in this section. The respective college will have to choose one of the courses from the pool of courses designed by the University.
 - IKS-1: To be chosen from the pool of courses designed by the University
 This is a 2 credit theory course based on Indian Knowledge System. It will be common for all the faculty
- 7) VEC (Value Education Courses): The courses such as understanding India, Environmental Science / Education, Digital and Technological solutions etc will be part of Value Education Courses.

VEC-1: Constitution of India

This is a 2 credit theory course based on value education. It will be common for all the faculty

8) CC (Curricular Courses): The courses such as Health and wellness, Yoga education, Sports and Fitness, Cultural activities, NSS/NCC, Preforming Arts.

CC-1: Health and Wellness

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

CC-2: Yoga education / Sports and Fitness

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

BSc Second Year: 3rd Semester

Students will have to select / declare choice of **one major subject** and **one minor subject** from three major options M1, M2 and M3 (which were opted in the first year)

Course Type	Course Code	Course Name	Teaching (Hrs / W	g Scheme Veek)	Credits A	Assigned	Total Credits	
			Theory	Practical	Theory	Practical		
Major (Core)	DSC-5		2		2		2+2+2+2 =	
Mandatory	DSC-6		2		2		08	
	DSC-7	Practical based on DSC-5		4		2		
	DSC-8	Practical based on DSC-6		4		2		
Minor (Choose any two from pool of courses) It is from different	Mn-1	To be chosen from other discipline of same faculty	2		2		2+2 = 04	
discipline of the same faculty	Mn-2	To be chosen from other discipline of same faculty	2		2		7	
Generic / Open Elective (GE/OE) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other than that of Major	GE/OE-3	To be chosen from other faculty	2		2		02	
VSC (Vocational Skill	VSC-3	1) 2)	1		1		1+1 =02	
Courses) (Choose any one from pool of courses)	VSC-4	Practicals based on VSC-3		2		1		
AEC, VEC, IKS	AEC-3	Modern Indian Language (MIL-1) (Choose any one from pool of language courses)	2		2		2 + 2 = 04	
	VEC-2	Environmental Studies	2		2			
OJT/ FP/CEP/CC/RP	CC-3	Cultural Activity / NSS,NCC (Common for all the faculty)		4		2	02	
			15	14	15	07	22	

Minor Courses for other Discipline

Mn-1: This is a 2 credit theory course to be designed for other discipline

Mn-2: This is a 2 credit theory course to be designed for other discipline

Generic /Open Elective Courses for other faculty

GE/OE-3: This is a 2 credit theory course to be designed for other faculty



BSc Second Year: 4th Semester

Course Type	Course Code	Course Name	Teaching (Hrs/W	g Scheme Veek)	Credits A	Assigned	Total Credit
			Theory	Practical	Theory	Practical	
Major (Core)	DSC-9		2		2		2+2+2+2 =
Mandatory	DSC-10		2		2		08
	DSC-11	Practical based on DSC-9		4		2	
	DSC-12	Practical based on DSC-10	1 1 1 2 2 2	4		2	
Minor (Choose any two from pool of courses) It is from different discipline of the same faculty	Mn-3	To be chosen from other discipline of same faculty	2		2		2+2 = 04
	Mn-4	To be chosen from other discipline of same faculty	2		2		
Generic / Open Elective (GE/OE) (Choose any one from pool of courses) It should be chosen compulsorily from the faculty other	GE/OE-4	To be chosen from other faculty	2		2		02
than that of Major						1000	
SEC (Skill Enhancement	SEC-3	1) 2)	1		1		1+1 =02
Courses) (Choose any one from pool of courses)	SEC-4	Practicals based on SEC-3	1,147	2		1	
AEC, VEC, IKS	AEC-4	Modern Indian Language (MIL-2) (Choose any one from pool of language courses)	2		2		02
	FP-1	Field Project		4		2	2+2= 04
OJT/ FP/CEP/CC/RP	CC-4	(Fine/ Applied/ Visual/ Performing Arts) (Common for all the faculty)		4		2	
			13	18	13	09	22

Exit Option: Award of UG Diploma in major and minor with 88 credits and an additional 4 credits NSQF course (related to major / minor) / Internship during summer vacation OR Continue with Major and Minor

Minor Courses for other Discipline

Mn-3: This is a 2 credit theory course to be designed for other discipline

Mn-4: This is a 2 credit theory course to be designed for other discipline

Generic /Open Elective Courses for other faculty

GE/OE-4: This is a 2 credit theory course to be designed for other faculty

Detailed Illustration of Courses included in 3rd and 4th semester:

1) Major (Core) subject are mandatory.

DSC-5: This is a 2 credit theory course corresponding to Major (core) subject

DSC-6: This is a 2 credit theory course corresponding to Major (core) subject

DSC-7: This is a 2 credit practical course based on DSC-5

DSC-8: This is a 2 credit practical course based on DSC-6

DSC-9: This is a 2 credit theory course corresponding to Major (core) subject

DSC-10: This is a 2 credit theory course corresponding to Major (core) subject

DSC-11: This is a 2 credit practical course based on DSC-9

DSC-12: This is a 2 credit practical course based on DSC-10

2) Minor: It is from different discipline of the same faculty

Mn1: This is a 2 credit theory from different discipline of the same faculty

Mn2: This is a 2 credit theory from different discipline of the same faculty

Mn3: This is a 2 credit theory from different discipline of the same faculty

Mn4: This is a 2 credit theory from different discipline of the same faculty

3) Generic / Open Elective (GE/OE): (Needs to be chosen (any one) from pool of courses available at respective college). These courses should be chosen compulsorily from faculty other than that of Major.

GE/OE -3: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

GE/OE -4: This is a 2 credit theory course should be chosen compulsorily from faculty other than that of Major.

4) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

VSC-3: This is a 1 credit theory course based Hands on Training corresponding to Major (core) subject.

VSC-4: This is a 1 credit practical course based on VSC-3

5) SEC (Skill Enhancement Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

SEC-3: This is a 1 credit theory course based Hands on Training corresponding to Major (core) subject.

SEC-4: This is a 1 credit practical course based on SEC-3

6) **AEC** (Ability Enhancement courses): The focus of these courses should be based on linguistic and communication skills.



AEC-3: Modern Indian Language MIL-1 (Hindi/ Marathi/ Pali & Buddhism/ Sanskrit/ Urdu)

This is a 2 credit theory course based on linguistic proficiency. Students will have to choose one of the above mentioned language.

AEC 4 : Modern Indian Language MIL-2 (Hindi/ Marathi/ Pali & Buddhism/ Sanskrit/ Urdu)

This is a 2 credit theory course based on linguistic proficiency. Students will have to choose one of the above mentioned language.

- 7) VEC-2: Environmental Studies
- 8) FP-1: Field Project: This is a 2 credit course, should be corresponding to Major (core) subject
- 9) CC (Curricular Courses): The courses such as Health and wellness, Yoga education, Sports and Fitness, Cultural activities, NSS/NCC, Preforming Arts. In the 3rd semester it will be either cultural activities OR NSS/NCC and will be common for all the faculty.

CC-3: Cultural Activity / NSS, NCC

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

CC-4: Fine/ Applied/ Visual/ Performing Arts

This is a 2 credit practical course based on Co-curricular activities. It will be common for all the faculty

BSc Third Year: 5th Semester

Course Type	Course Code	Course Name	Teaching (Hrs / W	g Scheme /eek)	Credits A	Assigned	Total Credits
			Theory	Practical	Theory	Practical	
Major (Core)	DSC-13		2		2		2+2+2+2=
Mandatory	DSC-14		2		2		08
	DSC-15	Practical based on DSC-13		4		2	
	DSC-16	Practical based on DSC-14		4		2	
Discipline Specific Electives (DSE) (Choose any one from pool of courses)	DSE-1	1) 2)	2		2		2+2=4
	DSE-2	Practical based on DSE-1		4		2	
Minor (Choose any two from pool of courses) It is from different discipline of the	Mn-5	To be chosen from other discipline of same faculty	2		2		2+2 = 04
same faculty	Mn-6	To be chosen from other discipline of same faculty					
VSC (Vocational Skill	VSC-5	1) 2)	2		2		2+2 =04
Courses) (Choose any one from pool of courses)	VSC-6	Practicals based on VSC-5		4		2	
OJT/ FP/CEP/CC/RP (Choose any one from pool of courses)	FP/CEP-2	Field Project / community engagement and service		4		2	02
	51 F		12	20	12	10	22

Minor Courses for other Discipline

Mn-5: This is a 2 credit theory course to be designed for other discipline

Mn-6: This is a 2 credit theory course to be designed for other discipline



BSc Third Year: 6th Semester

Course Type	Course Co	Course Name	Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major (Core)	DSC-17		2		2		2+2+2+2+2
Mandatory	DSC-18		2		2		= 10
•	DSC-19	Practical based on DSC-17		4		2	
	DSC-20	Practical based on DSC-18		4		2	en 1941 or unionen la
	DSC-21	IKS-2 (Indian Knowledge System related to Major)	2		2	-1	
Discipline Specific Electives (DSE)	DSE-3	1) 2)	2		2		2+2=4
(Choose any one from pool of courses)	DSE-4	Practical based on DSE-3		4		2	
Minor (Choose any one from pool of courses) It is from different discipline of the	Mn-7	To be chosen from other discipline of same faculty	2		2		2+2 = 04
same faculty	Mn-8	To be chosen from other discipline of same faculty	2		2	1	
OJT/ FP/CEP/CC/RP (Choose any one from pool of courses)	OJT-1	On Job Training		8	ay 1	4	04
			12	20	12	10	22

Exit option: Award of UG degree in Major with 132 credits OR continue with Major and Minor

Minor Courses for other Discipline

Mn-7: This is a 2 credit theory course to be designed for other discipline

Mn-8: This is a 2 credit theory course to be designed for other discipline

Detailed Illustration of Courses included in 5th and 6th semester:

1) Major (Core) subject are mandatory.

DSC-13: This is a 2 credit theory course corresponding to Major (core) subject

DSC-14: This is a 2 credit theory course corresponding to Major (core) subject

DSC-15: This is a 2 credit practical course based on DSC-13

DSC-16: This is a 2 credit practical course based on DSC-14

DSC-17: This is a 2 credit theory course corresponding to Major (core) subject

DSC-18: This is a 2 credit theory course corresponding to Major (core) subject

DSC-19: This is a 2 credit practical course based on DSC-17

DSC-20: This is a 2 credit practical course based on DSC-18

DSC-21 (IKS-2): This is a 2 credit theory course corresponding to Indian Knowledge System related to Major

 Discipline Specific Electives (DSE): (Needs to be chosen any one from pool of courses available at respective college). These courses should be chosen related to Major.

DSE-1: This is a 2 credit discipline specific course (elective) related to Major

DSE-2: This is a 2 credit practical course based on DSE-1

DSE-3: This is a 2 credit discipline specific course (elective) related to Major

DSE-4: This is a 2 credit practical course based on DSE-3

3) Minor: It is from different discipline of the same faculty

Mn5: This is a 2 credit theory from different discipline of the same faculty

Mn6: This is a 2 credit theory from different discipline of the same faculty

Mn7: This is a 2 credit theory from different discipline of the same faculty

Mn8: This is a 2 credit theory from different discipline of the same faculty

9) VSC (Vocational Skill Courses): Choose any one from pool of courses. These courses should be based on Hands on Training corresponding to Major (core) subject.

VSC-5: This is a 1 credit theory course based Hands on Training corresponding to

Major (core) subject.

VSC-6: This is a 1 credit practical course based on VSC-5

10) **FP / CEP-2**: Field Project / Community engagement and service: This is a 2 credit course related to Field Project / community engagement and service

11) OJT-1: This is a 4 credit course related to On job Training



BSc Fourth Year (UG Honours Degree): 7th Semester

Course Type	Course Course	Course Name	Course Name Teaching Scheme (Hrs / Week)		Credits A	Assigned	Total Credits
	HARLEST COLOR		Theory	Practical	Theory	Practical	
Major (Core)	DSC-22		2		2		2+2+2+2 =
Mandatory	DSC-23		2		2		08
	DSC-24	Practical based on DSC-22		4		2	
	DSC-25	Practical based on DSC-23		4		2	
	DSC-26		2		2		2+2+ 2=06
	DSC-27		2		2		
	DSC-28	Practical based on DSC-26 and DSC-27		4		2	
Discipline Specific Electives (DSE)	DSE-5	1) 2)	2		2		2+2=04
(Choose any one from pool of courses)	DSE-6	Practical based on DSE-5		4		2	
Research Methodology	RM	Research Methodology	4		4	= = =	04
			14	16	14	08	22

BSc Fourth Year (UG Honours Degree): 8th Semester

Course Type	Course Course Nati	Course Name	Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits
	aparawasan		Theory	Practical	Theory	Practical	
Major (Core)	DSC-29		2		2		2+2+2+2 =
Mandatory	DSC-30		2	14	2		08
	DSC-31	Practical based on DSC-29		4		2	
	DSC-32	Practical based on DSC-30		4	- JUL C TO	2	
	DSC-33		2		2		
	DSC-34		2		2		2+2+2=06
	DSC-35	Practical based on DSC-33 and DSC-34		4		2	
Discipline Specific Electives (DSE)	DSE-7	1) 2)	2		2		2+2=04
(Choose any one from pool of courses)	DSE-8	Practical based on DSE-7		4	i in	2	
OJT	OJT-2	On job training		8		4	04
			10	24	10	12	22

Detailed Illustration of Courses included in 7th and 8th semester:

1) Major (Core) subject are mandatory.

DSC-22: This is a 2 credit theory course corresponding to Major (core) subject

DSC-23: This is a 2 credit theory course corresponding to Major (core) subject

DSC-24: This is a 2 credit practical course based on DSC-22

DSC-25: This is a 2 credit practical course based on DSC-23

DSC-26: This is a 2 credit theory course corresponding to Major (core) subject

DSC-27: This is a 2 credit theory course corresponding to Major (core) subject

DSC-28: This is a 2 credit practical course based on DSC-26 and DSC-27

DSC-29: This is a 2 credit theory course corresponding to Major (core) subject

DSC-30: This is a 2 credit theory course corresponding to Major (core) subject

DSC-31: This is a 2 credit practical course based on DSC-29

DSC-32: This is a 2 credit practical course based on DSC-30

DSC-33: This is a 2 credit theory course corresponding to Major (core) subject

DSC-34: This is a 2 credit theory course corresponding to Major (core) subject

DSC-35: This is a 2 credit practical course based on DSC-33 and DSC-34

 Discipline Specific Electives (DSE): (Needs to be chosen any one from pool of courses available at respective college). These courses should be chosen related to Major.

DSE-5: This is a 2 credit discipline specific course (elective) related to Major

DSE-6: This is a 2 credit practical course based on DSE-5

DSE-7: This is a 2 credit discipline specific course (elective) related to Major

DSE-8: This is a 2 credit practical course based on DSE-7

3) Research Methodology

RM: This is a 4 credit theory course based on Research Methodology

4) On Job Training

OJT-2: This is a 4 credit course based on On Job Training



BSc Fourth Year (UG Honours with Research Degree): 7th Semester

Course Type	Course Name Code		Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits
	THE STREET		Theory	Practical	Theory	Practical	
Major (Core)	DSC-22	Gel a war and a control of the control	2	Mary S. C. L.	2		2+2+2+2 =
Mandatory	DSC-23		2		2		08
	DSC-24	Practical based on DSC-22		4	21-74-12	2	
	DSC-25	Practical based on DSC-23		4		2	
	DSC-26	y - rene - and	2	- Top	2		02
Discipline Specific Electives (DSE)	DSE-5	1) 2)	2		2		2+2=04
(Choose any one from pool of courses)	DSE-6	Practical based on DSE-5		4		2	
Research Methodology	RM	Research Methodology	4	age In the	4		04
Research Project	RP-1	Research Project		8		4	04
			12	20	12	10	22

BSc Fourth Year (UG Honours with Research Degree): 8th Semester

Course Type	Course Code	Course Name	Teaching Scheme (Hrs / Week)		Credits Assigned		Total Credits
			Theory	Practical	Theory	Practical	
Major (Core)	DSC-27		2		2		2+2+2+2 =
Mandatory	DSC-28		2		2		08
	DSC-29	Practical based on DSC-27	100000000000000000000000000000000000000	4		2	
	DSC-30	Practical based on DSC-28		4	Upacy 1	2	
	DSC-31		2		2		02
Discipline Specific Electives (DSE)	DSE-7	1) 2)	2	n Tuke-14	2		2+2=04
(Choose any one from pool of courses)	DSE-8	Practical based on DSE-7		4		2	
Research Project	RP-2	Research Project		16		8	08
			08	28	08	14	22



Detailed Illustration of Courses included in 7th and 8th semester:

1) Major (Core) subject are mandatory.

DSC-22: This is a 2 credit theory course corresponding to Major (core) subject

DSC-23: This is a 2 credit theory course corresponding to Major (core) subject

DSC-24: This is a 2 credit practical course based on DSC-22

DSC-25: This is a 2 credit practical course based on DSC-23

DSC-26: This is a 2 credit theory course corresponding to Major (core) subject

DSC-27: This is a 2 credit theory course corresponding to Major (core) subject

DSC-28: This is a 2 credit theory course corresponding to Major (core) subject

DSC-29: This is a 2 credit practical course based on DSC-27

DSC-30: This is a 2 credit practical course based on DSC-28

DSC-31: This is a 2 credit theory course corresponding to Major (core) subject

 Discipline Specific Electives (DSE): (Needs to be chosen any one from pool of courses available at respective college). These courses should be chosen related to Major.

DSE-5: This is a 2 credit discipline specific course (elective) related to Major

DSE-6: This is a 2 credit practical course based on DSE-5

DSE-7: This is a 2 credit discipline specific course (elective) related to Major

DSE-8: This is a 2 credit practical course based on DSE-7

3) Research Methodology

RM: This is a 4 credit theory course based on Research Methodology

4) Research Project (RP):

RP-1: This is a 4 credit practical course based on Research Pr

RP-2: This is a 8 credit practical course based on Research Methodology



General Guidelines for Course Selection

- The Major subject is the discipline or course of main focus, bachelors degree shall be awarded in that discipline / subject.
- 2) Students will have to choose any three subjects as a Major 1, Major 2, Major 3, from Basket 1 under the Faculty of Science and Technology (based on the available options in the respective college).
- Students will be having three subject options of equal credits (instead of Major and / or minor verticals) in the first year.
- 4) In the beginning of second year, students will have to select / declare choice of one major subject and one minor subject from three major options M1, M2 and M3 (which were opted in the first year)
- 5) Once the students finalize their Major Subject and Minor Subject in the beginning of the second year of the programme, they shall pursue their further education in that particular subject as their Major and Minor subjects. Therefore, from second year onwards curriculum of the Major and Minor subjects shall be different.
- 6) Students are required to select Minor subject from other discipline of the same faculty
- 7) Students are required to select Generic /Open Elective (vertical 3 in the credit framework) compulsorily from the faculty different than that of their Major / Minor subjects.
- 8) Vocational Skill Courses and Skill Enhancement Courses (VSC and SEC) shall be related to the Major subject
- 9) Curriculum of Ability Enhancement Courses (AEC), Value Education Courses (VEC), Indian Knowledge System (IKS), and Co-curricular Courses (CC) will be provided by the University separately.

Programme Educational Objectives (PEOs):

Programme Educational Objectives (PEOs) for the Bachelor of Science Curriculum under the National Education Policy 2020:

- Mastery of Discipline-Specific Knowledge: Graduates of the Bachelor of Science
 program will demonstrate a deep understanding of fundamental principles, theories, and
 methodologies in their chosen scientific discipline, enabling them to analyze complex
 problems, propose innovative solutions, and contribute to advancements in their field.
- Interdisciplinary Proficiency: Graduates will possess the ability to integrate knowledge
 and skills from multiple scientific disciplines, fostering a holistic approach to problemsolving and innovation. They will be equipped to address multifaceted challenges by
 drawing upon diverse perspectives and methodologies.
- 3. Critical Thinking and Analytical Skills: Graduates will develop strong critical thinking abilities, enabling them to evaluate information rigorously, analyze data effectively, and make informed decisions based on evidence. They will demonstrate proficiency in applying logical reasoning and scientific methods to solve problems and generate new knowledge.
- 4. Leadership and Innovation: Graduates will demonstrate leadership qualities and entrepreneurial mindset, capable of initiating and driving positive change in their organizations and communities. They will exhibit creativity, resilience, and adaptability, harnessing innovation to address complex challenges and seize opportunities for growth and advancement.
- 5. Global Citizenship and Cultural Sensitivity: Graduates will possess a global perspective and cultural sensitivity, recognizing the interconnectedness of diverse communities and the importance of collaboration across borders. They will engage in cross-cultural dialogue, embrace diversity, and contribute to the advancement of knowledge and understanding on a global scale.

These Programme Educational Objectives serve as guiding principles for the Bachelor of Science curriculum, reflecting our commitment to nurturing well-rounded graduates who are prepared to excel in their careers, contribute to society, and lead meaningful lives in a rapidly changing world.



Programme Outcomes (POs):

The National Education Policy (NEP) 2020 for India emphasizes several key aspects for Bachelor of Science (B.Sc.) programs, aiming to produce graduates who are not only well-versed in their respective disciplines but also equipped with skills necessary for holistic development and employability. While specific program outcomes may vary between institutions and disciplines within B.Sc. programs, here are some common outcomes aligned with NEP 2020:

- ➤ PO1. The citizenship and society: Apply broad understanding of ethical and professional skill in science subjects in the context of global, economic, environmental and societal realities while encompassing relevant contemporary issues.
- ➤ PO2. Environment and sustainability: Apply broad understanding of impact of science subjects in a global, economic, environmental and societal context and demonstrate the knowledge of, and need for sustainable development.
- > PO3. Ethics: Apply ability to develop sustainable practical solutions for science subject related problems within positive professional and ethical boundaries.
- > PO4. Individual and team work: Function effectively as a leader and as well as team member in diverse/ multidisciplinary environments.
- PO5. Communication: Communicate effectively on complex science subject related activities with the scientific community in particular and with the society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO6. Project management and finance: Demonstrate knowledge and understanding of the first principles of science and apply these to one's own work as a member and leader in a team, to complete project in any environment.
- PO7. Life-long learning: Recognize the need for lifelong learning and have the ability to engage in independent and life-long learning in the broadest context of technological change.

These program outcomes align with the broader goals of NEP 2020 to transform higher education in India and prepare students for the challenges and opportunities of the 21st century. Board of Studies designing B.Sc. curricula are encouraged to incorporate these outcomes into their program objectives and learning outcomes.

Programme Specific Outcomes (PSOs):

(Programme specific outcomes are discipline / major specific. Different major will have different PSOs. Following is the example of PSOs for Electronics Major. Respective BoS is expected to draft PSOs related to their Major)

PSO1. **Domain knowledge:** Apply the knowledge of electronics fundamental, and advanced areas of Electronics to provide comprehensive solution of problems in complex electronics.

PSO2. **Problem Analysis:** Identify electronics related problems at varied complexity and analyze the same to formulate/ develop substantiated conclusion using first principles of Electronics

PSO3. **Design Development of solutions:** Design/ develop solutions for problems at varied complexity in various areas of Electronics to address changing challenges put forward by market demand/ stakeholder

PSO4. Conduct Investigation of complex problems: Use established knowledge and methods to design of experiments, analyze resulting data and interpret the same to provide valid conclusions.

PSO5. **Modern tools:** Create, select, and apply appropriate techniques, resources, and modern electronics and relevant IT tools including prediction and modeling to complex electronics technology related activities with clear understanding of the limitations.



Template of Course / Paper:

(Respective BoS is expected to use following template for syllabus of each course / paper)

DSC	-1 : (Title of Paper)		
Total Credits: 02 Maximum Marks: 50		Total Contact Ho	urs : 30 Hrs
Learning Objectives	s of the Course:	la avendada eda a	
ii) iii)			
Course Outcomes (COs):		
ii) iii) iv)	Topics / actual contents of t	the syllabus	Contac Hours
I			10 Hrs
п			10 Hrs
ш			10 Hrs
Text Books:			
	e Authors (as appear on the boo ., Edition, Name of Publisher,		

3. ..

Reference Books:

- Name Authors (as appear on the book), "Title of reference Book", Vol..., Edition, Name of Publisher, Year of Publications
- 2. ..
- 3. ..
- 4. ..



Basket 1: List of Major subjects in Science (DSC)

Students willing to pursue their bachelors in the **Faculty of Science and Technology** shall choose any three subjects (from the following options) as Major 1, Major 2 and Major 3 (Based on the available options in the respective college)

Semester	Sr No	BOS / Ad hoc Board proposing the course	Title of the Corse
	1	BOS in Botany	Botany
1st and 2nd	2	BOS in Chemistry	Chemistry
Semester	_	Haran I Harington	Analytical Chemistry
(Students shall			Polymer Chemistry
choose any three	3	BOS in Mathematics	Mathematics
subjects (from	4	BOS in Physics	Physics
these options) as Major 1, Major 2			Non-Conventional and Conventional Energy
and Major 3		2001.5	Instrumentation Practice
(Based on the	5	BOS in Zoology	Zoology
available options	6	BOS in Electronics	Electronics
in the respective	7	BOS in Fishery Science	Fishery Science
college)	8	BOS in Microbiology	Microbiology
	9	Ad Hoc Board in Statistics	Statistics
	10	Ad hoc Board in Industrial Chemistry	Industrial Chemistry
	11	Ad hoc Board in Dairy Science & Technology	Dairy Science & Technology
	12	Ad hoc Board in Biotechnology and Bioinformatics	Biotechnology Bioinformatics
	13	Ad hoc Board in Biochemistry	Biochemistry
	14	Ad hoc Board in Home Science	Home Science
	15	Ad Hoc Board in Agrochemical	Agrochemical Fertilizers
		Fertilizers, Horticulture, Dry land Agriculture	Horticulture
	16	Ad hoc Board in Forensic Science	Forensic Science
			Forensic Science & Cyber Security
	17	Ad Hoc Board in Computer Science	Computer Science
			Computer Application
			Information Technology
			Data Science
	18	Ad Hoc Board in Networking and Multimedia	Networking and Multimedia
	19	Ad Hoc Board in Environmental Science	Environmental Science
	20	BOS in Fishery Science	Fishery Science
	21	Ad hoc Board in Automobile Technology	Automobile Technology
		/ Workshop Technology / Refrigerator	Workshop Technology
		and Air Conditioning	Refrigerator and Air

		Conditioning
22	Ad hoc Board in Geology	Geology

The students from Faculty of Science and Technology will be selecting GE/OE from the Basket 2 of either of other three faculty (i.e i) Faculty of Humanities, ii) Faculty of Commerce and Management iii) Faculty of Interdisciplinary Studies)

Basket 2: List of Major subjects in Science (DSC): for the students from other Faculty

Students from other three faculty i.e. i) Faculty of Humanities, ii) Faculty of Commerce and Management iii) Faculty of Interdisciplinary Studies may select GE/OE from the following list in respective semester.

Basket 2 (for 1st Semester)

Semester	Sr No	BOS / Ad hoc Board proposing the course	Title of the Corse
	1	BOS in Botany	
	2	BOS in Chemistry	
	3	BOS in Mathematics	
	4	BOS in Physics	
	5	BOS in Zoology	
	6	BOS in Electronics	
1st Semester	7	BOS in Fishery Science	
1 Semester	8	BOS in Microbiology	
	9	Ad Hoc Board in Statistics	
	10	Ad hoc Board in Industrial Chemistry	
	11	Ad hoc Board in Dairy Science & Technology	
	12	Ad hoc Board in Biotechnology and Bioinformatics	
	13	Ad hoc Board in Biochemistry	
	14	Ad hoc Board in Home Science	
	15	Ad Hoc Board in Agrochemical Fertilizers, Horticulture, Dry land Agriculture	
	16	Ad hoc Board in Forensic Science	



17	Ad Hoc Board in Computer Science	
18	Ad Hoc Board in Networking and Multimedia	
19	Ad Hoc Board in Environmental Science	
20	BOS in Fishery Science	CO. 1011 C. 114
21	Ad hoc Board in Automobile Technology / Workshop Technology / Refrigerator and Air Conditioning	
22	Ad hoc Board in Geology	

Basket 2 (for 2nd Semester)

Semester	Sr No	BOS / Ad hoc Board proposing the course	Title of the Corse
	1	BOS in Botany	
	2	BOS in Chemistry	
	3	BOS in Mathematics	
	4	BOS in Physics	
	5	BOS in Zoology	
	6	BOS in Electronics	and a second
2 nd Semester	7	BOS in Fishery Science	
2 Semester	8	BOS in Microbiology	
	9	Ad Hoc Board in Statistics	
	10	Ad hoc Board in Industrial Chemistry	
	11	Ad hoc Board in Dairy Science & Technology	
	12	Ad hoc Board in Biotechnology and Bioinformatics	
	13	Ad hoc Board in Biochemistry	
	14	Ad hoc Board in Home Science	
	15	Ad Hoc Board in Agrochemical Fertilizers, Horticulture, Dry land Agriculture	
	16	Ad hoc Board in Forensic Science	
	17	Ad Hoc Board in Computer Science	

18	Ad Hoc Board in Networking and Multimedia	
19	Ad Hoc Board in Environmental Science	
20	BOS in Fishery Science	
21	Ad hoc Board in Automobile Technology / Workshop Technology / Refrigerator and Air Conditioning	
22	Ad hoc Board in Geology	

Basket 3: Ability Enhancement Course (AEC)

This Basket will have list of Ability Enhancement Courses (AEC) which will be common for all the faculty

Basket 4 : Value Education Courses (VEC) / Indian Knowledge System (IKS)

This Basket will have list of Value Education Courses (VEC) and Indian Knowledge System (IKS) courses which will be common for all the faculty

Basket 5: Co-curricular Courses (CC)

This Basket will have list of co-curricular courses which will be common for all the faculty



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