#### Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/ Bachelor of Science (Basic/ Hons.)/ Bachelor of Commerce (Basic/Hons.)/ Bachelor of Business Administration (Basic/Hons.)/Bachelor of Social Works (Basic/Hons.)/ Bachelor of Computer Applications (Basic/Hons.) etc.

The Government of India has notified NEP-2020 on July 29, 2020 based on Dr. Kasturirangan Committee's Report. The objective is to bridge the gap between the current system of education and what is required in the 21<sup>st</sup> century. It is to have Holistic and Multidisciplinary UG Education to produce employable graduates with integrated personality.

The Government of Karnataka had constituted a Task to suggest an Implementation Framework for NEP-2020. It had also constituted two sub-committees, one on Curriculum Reforms in Higher Education and the other on Governance and Regulations.

The Task Force has suggested NEP-2020 Implementation Framework for Karnataka. The State Government has accepted the action plan and taken steps to implement NEP-2020, as per the Implementation Roadmap suggested by the Task Force.

The Sub-committee on Curriculum Reforms in Higher Education had suggested a Draft Curriculum Framework for Undergraduate Programs in various disciplines. The State Govt. had also constituted Faculty-wise Committees to consider this draft framework to formulate program structures in their faculties. These Committees have submitted their reports. The latter were considered in the meetings of all the Vice Chancellors. The following Model Program Structures were designed for various Under-Graduate Programs in Arts, Science, Commerce and Management. The Subject Committees constituted to design and draft the curriculum in their subjects have to follow these Model Program Structures. The Terminology used in these Program Structures are s.

Discipline Core (DSC) refers to Core Papers in a Subject or Discipline

Discipline Elective (DSE) refers to Elective Papers in the core Subject or Discipline.

Open Elective (OE) refers to Elective Papers in a non-core Subject across all disciplines.

Program Structures also contain Ability Enhancement Compulsory Courses (AECC), Languages, Skill Enhancement Courses (SEC) (Both skills and value based). Pedagogy involves L+T+P model. Generally subjects with practicals involve L+P, while the subjects without practicals involve L+T model. The numbers in parentheses indicate credits allotted to various courses/papers as per definitions of Choice Based Credit System (CBCS). Generally 1 hour of Lecture or 2 hours of practicals per week in a semester is assigned one credit. Generally core subject theory papers will have 3 or 4 credits, while practicals are assigned 2 or 3 credits.

## IA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Commerce (Basic/Hons.)/Bachelor of Business Administration (Basic/Hons.)/Bachelor of Social Works (Basic/Hons.) etc.

Sem.	<b>Discipline Core</b>	Discipline Elective(DSE)	Ability Enhanceme	ent Compulsory	Skill Enhancem	ent Courses (SEC)	Total
	(DSC) (Credits)	/ Open Elective (OE)	Courses (AECC), La	inguages	Skill based (Credits)	Value based (Credits)	Credits
	(L+T+P)	(Credits)	(Credits) (L+T+P)		(L+T+P)	(L+T+P)	
I	DSC-1 (4)	OE-1 (3)	L1-1 (3), L2-1		SEC-1: Digital		23
	DSC-2 (4)		(3)(3+1+0 each)		Fluency (2) (1+0+2)		
	DSC-3 (4)						
П	DSC-4 (4)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	DSC-5 (4)		(3+1+0 each)	Studies (2)		Social & Emotional	
	DSC-6 (4)					Learning (2) (1+0+2)	
	Exi	t option with Certificate	e in Commerce/Bu	siness Administra	tion/Computer Applica	itions etc. (48 credits)	
Ш	DSC-7 (4)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	DSC-8 (4)		(3+1+0 each)		elligence (2)(1+0+2)		
	DSC-9 (4)						
IV	DSC-10 (4)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	DSC-11 (4)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	DSC-12 (4)						
	Ex	it option with Diploma	in Commerce/Busi	ness Administrati	on/ Computer Applicat	tions etc. (96 credits)	
V	DSC-13 (4)	DSE-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	DSC-14 (4)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	DSC-15 (4)						
VI	DSC-16 (4)	DSE-2 (3)			SEC-4: Professional		20
	DSC-17 (4)	Vocational-2 (3)			Communication (2)		
	DSC-18 (4)						
Exit C	ption with Bac	helor of Commerce/Bac	chelor of Business	Administration/B	achelor of Computer A	pplications Degree (136	credits)
VII	DSC-19 (4)	DSE-3 (3)					20
	DSC-20 (4)	Vocational-3 (3)					
	DSC-21 (3)	Res. Methodology(3)					
VIII	DSC 22 (4)	DSE-4 (3)					20
	DSC 23 (4)	Vocational-4 (3)					
		Research Project(6)*		1			

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

## IB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Commerce (Basic/Hons.) with Commerce as core subject

Sem.	<b>Discipline Core</b>	Discipline Elective(DSE)	Ability Enhanceme	ent Compulsory	Skill Enhancem	ent Courses (SEC)	Total
		/ Open Elective (OE) (Credits)	Courses (AECC), La (Credits) (L+T+P)	inguages	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Com-C1 (4)	OE-1 (3)	L1-1 (3), L2-1		SEC-1: Digital		23
	Com-C2 (4)		(3)(3+1+0 each)		Fluency (2) (1+0+2)		
	Com-C3 (4)						
Ш	Com-C4 (4)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Com-C5 (4)		(3+1+0 each)	Studies (2)		Social & Emotional	
	Com-C6 (4)					Learning (2) (1+0+2)	
	Exit	t option with Certificate	in Commerce/Bu	siness Administra	tion/Computer Applica	tions etc. (48 credits)	
Ш	Com-C7 (4)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	Comj-C8 (4)		(3+1+0 each)		elligence (2)(1+0+2)		
	Com-C9 (4)						
IV	Com-C10 (4)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Com-C11 (4)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	Com-C12 (4)						
	Exi	it option with Diploma i	n Commerce/Busi	ness Administrati	on/ Computer Applicat	tions etc. (96 credits)	
V	Com-C13 (4)	Com-E1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Com-C14 (4)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	Com-C15 (4)						
VI	Com-C16 (4)	Com-E2 (3)			SEC-4: Professional		20
		Vocational-2 (3)			Communication (2)		
	Com-C18 (4)						
Exit O	ption with Bacl	helor of Commerce/Bac	chelor of Business	Administration/B	achelor of Computer A	pplications Degree (136 o	credits)
VII	Com-C19 (4)	Com-E3 (3)					20
	Com-C20 (4)	Vocational-3 (3)					
	Com-C21 (3)	Res. Methodology(3)					
VIII	Com-C22 (4)	Com-E4 (3)					20
	Com-C23 (4)	Vocational-4 (3)					
		Research Project(6)*					
Awa	ard of Bachelor	of Commerce/Bachelor	of Business Admi	nistration/Bachel	or of Computer Applica	ations Honours Degree (	176 credits),

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered

## IC. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Computer Applications (Basic/Hons.) with Computer Applications as core subject

Sem.	Discipline Core	Discipline Elective	Ability Enhancem	ent Compulsory	Skill Enhancer	ment Courses (SEC)	Total
	(DSC) (Credits) (L+T+P)	(DSE) / Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), La (Credits) (L+T+P)	anguages	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	CA C-1 (3+2) CA C-2 (3+2)	OE-1 (3)	L1-1 (3), L2-1 (3)(3+1+0 each)	Environmental Studies (2)			24
II	CA C-3 (3) CA C-4 (3+2) CA C-5 (3+2) CA C-6 (3)	OE-2 (3)	L1-2(3), L2-2 (3) (3+1+0 each)		SEC-1: ? (2)	Health & Wellness/ Social & Emotional Learning (2) (1+0+2)	24
	` '	ontion with Certificate	l e in Commerce/Ru	  siness Administra	<u> </u> ation/Computer Applic	ations etc. (48 credits)	
III	CA C-7 (3+2) CA C-8 (3+2) CA C-9 (3)	OE-3 (3)	L1-3 (3), L2-3(3) (3+1+0 each)	Constitution of India (2)	actory compared Applie	ditions etc. (10 credits)	24
IV	CA C-10 (3+2) CA C-11 (3+2) CA C-12 (3)	OE-4 (3)	L1-4 (3), L2-4(3) (3+1+0 each)		SEC-2: ? (2))	Sports/NCC/NSS etc. (2) (1+0+2)	24
Į.	• • •	Exit	option with Diplor	na in Computer A	pplications (96 credits	)	1
V	CA C-13 (3+2) CA C-14 (3+2) CA C-15 (3)	CA E-1 (3) Vocational-1 (3)			SEC-3: Cyber Security (2) (1+0+2)	Ethics & Self Aware-ness (2) (1+0+2)?	21
VI	CA C-16 (3+2) CA C-17 (3+2) CA C-18 (3)	CA E-2 (3) Vocational-2 (3)			SEC-4: Professional Communication (2)		21
		Exit Option with	Bachelor of Com	puter Application	s Degree, BCA Degree	(136 credits)	
VII	CA C-19(3+2) CA C-20(3+2)	CA E-3 (3) Vocational-3 (3) Res.methodology (3)					19
VIII	CA C-21 (4) CA C-22 (3)	CA E-4 (3) Vocational-4 (3) Research Project(6)*					19
		Award of Bachelor of	Computer Applica	ations Honours De	egree, BCA (Hons.) Deg	ree (176 credits)	

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

### IIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/ Bachelor of Science (Basic/ Hons.) etc. (for subjects with practicals) with one major and one minor

Sem.	Discipline Core	Discipline Elective(DSE) /	Ability Enhancem	ent Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
		Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), L (L+T+P)	anguages (Credits)	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
ı	Discipline A1(4+2)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital Fluency		23
	Discipline B1(4+2)		(3+1+0 each)		(2) (1+0+2)		
Ш	Discipline A2(4+2)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health and Wellness/	25
	Discipline B2(4+2)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
			Exit option wit	th Certificate (48 cr	edits)		
Ш	Discipline A3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	Discipline B3(4+2)		(3+1+0 each)		elligence (2)(1+0+2)		
IV	Discipline A4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B4(4+2)		(3+1+0 each)	India (2)		(2) (1+0+2)	
			Exit option w	ith Diploma (96 cre	dits)		
		Choose	any one Disciplin	ne as Major, the oth	er as the Minor		
V	Discipline A5(3+2)	DSE A-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline A6(3+2)				(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline B5(3+2)						
VI	Discipline A7(3+2)	DSE A-2 (3)			SEC-4: Professional/		20
	Discipline A8(3+2)				Societal		
	Discipline B6(3+2)				Communication (2)		
		Exit option with Bachelo	or of Arts, B.A. / B	achelor of Science,	B. Sc. Basic Degree (136	credits)	
VII	Discipline A9(3+2)	DSE A-3 (3)					20
	Discipline A10(3+2)	Res. Methodology (3)					
	Discipline A11(4)						
VIII	Discipline A12(4)	DSE A-4 (3)					20
	Discipline A13(4)	Research Project (6)*					
	Discipline A14(3)						
	Award of Bachelor	of Arts Honours, B.A. (H	ons.)/ Bachelor o	f Science Honours,	B.Sc. (Hons) degree in a o	discipline etc. (176 credit	ts)

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

### IIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Science (Basic/ Hons.) etc. (with Botany & Zoology as subjects with practicals) with one major and one minor

Sem.	Discipline Core	Discipline Elective(DSE) /	Ability Enhancem	ent Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
		Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), L (L+T+P)	anguages (Credits)	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Botany A1(4+2)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital Fluency		23
	Zoology B1(4+2)		(3+1+0 each)		(2) (1+0+2)		
П	Botany A2(4+2)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Zoology B2(4+2)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
			Exit option wit	th Certificate (48 cr	edits)		
Ш	Botany A3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	Zoology B3(4+2)		(3+1+0 each)		elligence (2)(1+0+2)		
IV	Botany A4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Zoology B4(4+2)		(3+1+0 each)	India (2)		(2) (1+0+2)	
		E	xit option with Di	ploma in Science (9	96 credits)		
		Choose	any one Disciplin	ne as Major, the oth	er as the Minor		
V	Botany A5(3+2)	Botany E-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Botany A6(3+2)				(2) (1+0+2)	ness (2) (1+0+2)?	
	Zoology B5(3+2)						
VI	Botany A7(3+2)	Botany E-2 (3)			SEC-4: Professional/		20
	Botany A8(3+2)				Societal		
	Zoology B6(3+2)				Communication (2)		
		Exit option with Bachelo	r of Science Degre	ee, B. Sc. Degree in	Botany and Zoology (136	credits)	
VII	Botany e A9(3+2)	Botany E-3 (3)					20
	Botany A10(3+2)	Res. Methodology (3)					
	Botany e A11(4)						
VIII	Botany e A12(4)	Botany E-4 (3)					20
	Botany A13(4)	Research Project (6)*					
	Botany A14(3)						
		Award of Bachelor of S	cience Honours D	egree, B.Sc. (Hons.)	Degree in Botany (176 o	credits)	

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

#### IIB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/ Bachelor of Science (Basic/ Hons.) etc. (for subjects without practicals) with one major and one minor

Sem.	Discipline Core (DSC)	Discipline Elective(DSE) /	Ability Enhanceme	nt Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
	(Credits) (L+T+P)	Open Elective (OE)	Courses (AECC), La	nguages (Credits)	Skill based (Credits)	Value based (Credits)	Credits
		(Credits) (L+T+P)	(L+T+P)		(L+T+P)	(L+T+P)	
1	Discipline A1(3), A2(3)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital		23
	Discipline B1(3), B2(3)		(3+1+0 each)		Fluency (2) (1+0+2)		
Ш	Discipline A3(3), A4(3)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B3(3), B4(3)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
		E	xit option with Ce	rtificate (48 credi	its)		
Ш	Discipline A5(3), A6(3)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2:Artificial Intel-		23
	Discipline B5(3), B6(3)		(3+1+0 each)		ligence (2)(1+0+2)		
IV	Discipline A7(3), A8(3)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B7(3), B8(3)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	Exit op	tion with Diploma (96 ci	redits)/ Choose an	y one Discipline a	as Major, the other as t	he Minor	
V	Discipline A 9(4)	DSE A-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline A10(4)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline B 9(4)						
VI	Discipline A11(4)	DSE A-2 (3)			SEC-4: Professional/		20
	Discipline A12(4)	Vocational-2 (3)			Societal		
	Discipline B10(4)				Communication (2)		
	Exit	option with Bachelor of	Arts, B.A. / Bache	lor of Science, B.	Sc. Basic Degree (136 c	redits)	
VII	Discipline A-13(4)	DSE A-3 (3)					20
	Discipline A-14(4)	DSE A-4 (3)					
	Discipline A-15(3)	Res.Methodology (3)					
VIII	Discipline A-16(4)	DSE A-5 (3)					20
	Discipline A-17(4)	Research Project (6)*					
	Discipline A-18(3)						
	Award of Bachelor of A	rts Honours, B.A. (Hons.	)/ Bachelor of Scie	ence Honours, B.S	Sc. (Hons) degree in a d	iscipline etc. (176 credi	ts)

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

#### IIB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.) (for subjects without practicals) with Economics as major and History as minor

Sem.	Discipline Core (DSC)	Discipline Elective(DSE) /	<b>Ability Enhanceme</b>	nt Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
	(Credits) (L+T+P)	Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), La (L+T+P)	nguages (Credits)	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
ı	History C1(3), C2(3)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital		23
	Economics C1(3), C2(3)		(3+1+0 each)		Fluency (2) (1+0+2)		
Ш	History C3(3), C4(3)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Economics C3(3), C4(3)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
		E	xit option with Ce	rtificate (48 credi	ts)		•
Ш	History C5(3), C6(3)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2:Artificial Intel-		23
	Economics C5(3), C6(3)		(3+1+0 each)		ligence (2)(1+0+2)		
IV	History C7(3), C8(3)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Economics C7(3), C8(3)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	Exit option	with Diploma in Arts (9	6 credits) OR Cho	ose any one subje	ect as Major and the ot	her as Minor	•
V	History C 9(4)	Economics E-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Economics C 9(4)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	Economics C10(4)						
VI	History C10(4)	Economics E-2 (3)			SEC-4: Professional/		20
	Economics C11(4)	Vocational-2 (3)			Societal		
	Economics C12(4)				Communication (2)		
		Exit option with Bachelo	r of Arts, B.A. Deg	ree in History an	d Economics (136 credi	ts)	
VII	Economics C13(4)	Economics E-3 (3)					20
	Economics C14(4)	Economics E-4 (3)					
	Economics C15(3)	Res.Methodology (3)					
VIII	Economics C16(4)	Economics E-5 (3)					20
	Economics C17(4)	Research Project (6)*					
	Economics C18(3)						
	Aw	ard of Bachelor of Arts I	Honours Degree, E	B.A. (Hons.) Degre	e in Economics (176 cr	edits)	

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

### IIC. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/ Bachelor of Science (Basic/ Hons.) etc. (for one subject with practicals and the other without practicals) with one major and one minor

Sem.	Discipline Core (DSC)	Discipline Elective(DSE) /	<b>Ability Enhanceme</b>	nt Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
	(Credits) (L+T+P)	Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), La (Credits) (L+T+P)	nguages	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
ı	Discipline A1(4+2)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital		23
	Discipline B1(3), B2(3)		(3+1+0 each)		Fluency (2) (1+0+2)		
П	Discipline A2(4+2)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B3(3), B4(3)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
		Exi	it option with Cert	ificate (48 credit	ts)		
Ш	Discipline A3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2:Artificial Intel-		23
	Discipline B5(3), B6(3)		(3+1+0 each)		ligence (2)(1+0+2)		
IV	Discipline A4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B7(3), B8(3)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	Exit opti	on with Diploma (96 cre	dits)/ Choose any	one Discipline a	s Major, the other as t	he Minor	•
V	Discipline A 5(3), A6(3)	DSE A-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline A 7(2)(P)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline B 9(4)						
VI	Discipline A 8(3), A9(3)	DSE A-2 (3)			SEC-4: Professional/		20
	Discipline A10(2)(P)	Vocational-2 (3)			Societal		
	Discipline B10(4)				Communication (2)		
	Exit o	ption with Bachelor of A	rts, B.A. / Bachelo	r of Science, B. S	Sc. Basic Degree (136 o	credits)	
VII	Discipline A11(3), A12(3)	DSE A-3 (3)					20
	Discipline A13(3)	DSE A-4 (3)					
	Discipline A14(2)(P)	Res.Methodology (3)					
VIII	Discipline A15(3), A16(3)	DSE A-5 (3)					20
	Discipline A17(3)	Research Project (6)*					
	Discipline A18(2)(P)						
	Award of Bachelor of Art	s Honours, B.A. (Hons.)	Bachelor of Scien	ce Honours, B.S	c. (Hons) degree in a d	liscipline etc. (176 credi	ts)

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

### IIC. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/ Bachelor of Science (Basic/ Hons.) etc. (for Physics with practicals and Mathematics without practicals) with Physics as major and Mathematics as minor

Sem.	Discipline Core (DSC)	Discipline Elective(DSE) /	<b>Ability Enhanceme</b>	nt Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
	(Credits) (L+T+P)	Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), Laı (Credits) (L+T+P)	nguages	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
ı	Physics C1(4+2)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital		23
	Maths C1(3), C2(3)		(3+1+0 each)		Fluency (2) (1+0+2)		
Ш	Physics C2(4+2)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Maths C3(3), C4(3)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
		Exi	it option with Cert	ificate (48 credi	ts)		
Ш	Physics C3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2:Artificial Intel-		23
	Maths C5(3), C6(3)		(3+1+0 each)		ligence (2)(1+0+2)		
IV	Physics C4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Maths C7(3), C8(3)		(3+1+0 each)	India (2)		(2) (1+0+2)	
Exit c	ption with Diploma (96 c	redits) OR Choose any on	e Discipline as Ma	jor and the othe	er as Minor, if Physics i	s major and Maths is m	inor then
V	Physics C5(3), C6(3)	Physics E-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Physics C7(2) (P)	Vocational-1 (3)			(2) (1+0+2)	ness (2) (1+0+2)?	
	Maths C9(4)						
VI	Physics C8(3), C9(3)	Physics E-2 (3)			SEC-4: Professional/		20
	Physics C10(2)(P)	Vocational-2 (3)			Societal		
	Maths C10(4)				Communication (2)		
		Exit option with Bach	elor of Science Deg	gree, B. Sc. Basio	Degree (136 credits)		•
VII	Physics C11(3), C12(3)	Physics E-3 (3)					20
	Physics C13(3)	Physics E-4 (3)					
	Physics C14(2)(P)	Res.Methodology (3)					
VIII	Physics C15(3), C16(3)	Physics E-5 (3)					20
	Physics C17(3)	Research Project (6)*					
	Physics C18(2)(P)						
	Awa	ard of Bachelor of Science	e Honours Degree	, B.Sc. (Hons) de	gree in Physics (176 cr	edits)	•

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

## IIIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/Hons.)/Bachelor of Science (Basic/Hons.) (for subjects with practicals with both subjects as majors in 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)	<b>Ability Enhanceme</b>	nt Compulsory	Skill Enhancem	ent Courses (SEC)	Total
	(Credits) (L+T+P)	/ Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), Lar (L+T+P)	nguages (Credits)	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Discipline A1(4+2)	OE-1 (3)	L1-1 (3), L2-1		SEC-1: Digital		23
	Discipline B1(4+2)		(3)(3+1+0 each)		Fluency (2) (1+0+2)		
Ш	Discipline A2(4+2)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B2(4+2)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
			Exit option with	Certificate (48 cre	edits)		
Ш	Discipline A3(4+2)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	Discipline B3(4+2)		(3+1+0 each)		elligence (2)(1+0+2)		
IV	Discipline A4(4+2)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B4(4+2)		(3+1+0 each)	India (2)		(2) (1+0+2)	
			Exit option wit	h Diploma (96 cre	dits)		
V	Discipline A5(3+2)	DS-B Elective 1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline A6(3+2)				(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline B5(3+2)						
VI	Discipline A7(3+2)	DS-A Elective 1 (3)			SEC-4: Professional/		20
	Discipline B6(3+2)				Societal		
	Discipline B7(3+2)				Communication (2)		
	E	xit option with Bachel	or of Arts, B.A. / Ba	chelor of Science,	B. Sc. Basic Degree (13	6 credits)	
			Choose any o	ne Discipline as Ma	ajor		
VII	Discipline A/B-8(3+2)	1					20
	-	Res. Methodology(3)					
	Discipline A/B-10(4)						
VIII	Discipline A/B-11(4)	• • • • • • • • • • • • • • • • • • • •					20
	Discipline A/B-12(4)	DS-A/B Elective 4(3)					
		Research Project (6)*					
	Award of Bachelor of	of Arts Honours, B.A. (F	Ions.)/ Bachelor of	Science Honours,	B.Sc. (Hons) degree in a	a discipline etc. (176 cred	dits)

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

### IIIB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/ Hons.)/Bachelor of Science (Basic/ Hons.) etc. (for subjects without practicals with both subjects as majors in 3<sup>rd</sup> yr)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)	Ability Enhancem	ent Compulsory	Skill Enhanceme	ent Courses (SEC)	Total
	(Credits) (L+T+P)	/ Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), L (Credits) (L+T+P)	anguages	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Discipline A1(3), A2(3)	OE-1 (3)	L1-1 (3), L2-1(3)		SEC-1: Digital		23
	Discipline B1(3), B2(3)		(3+1+0 each)		Fluency (2) (1+0+2)		
Ш	Discipline A3(3), A4(3)	OE-2 (3)	L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B3(3), B4(3)		(3+1+0 each)	Studies (2)		Social & Emotional	
						Learning (2) (1+0+2)	
		E	xit option with Ce	rtificate (48 credi	its)		
Ш	Discipline A5(3), A6(3)	OE-3 (3)	L1-3 (3), L2-3(3)		SEC-2:Artificial Intel-		23
	Discipline B5(3), B6(3)		(3+1+0 each)		li-gence (2)(1+0+2)		
IV	Discipline A7(3), A8(3)	OE-4 (3)	L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B7(3), B8(3)		(3+1+0 each)	India (2)		(2) (1+0+2)	
		I	Exit option with D	iploma (96 credit	s)		
V	Discipline A9(4), A10(4)	Vocational-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline B9(4), B10(3)				(2) (1+0+2)	ness (2) (1+0+2)?	
VI	Discipline A11(4), A12(3)	Vocational-2 (3)			SEC-4: Professional/		20
	Discipline B11(4), B12(4)				Societal Commun(2)		
	Exit o	ption with Bachelor of	Arts, B.A. / Bache	lor of Science, B.	Sc. Basic Degree (136 c	credits)	
			Choose any one [	Discipline as Majo	r		
VII	Discipline A/B-13(4)	DS-A/B Elective 1(3)					20
	Discipline A/B-14(4)	DS-A/B Elective 2(3)					
	Discipline A/B-15(3)	Res. Methodology(3)					
VIII	Discipline A/B-16(4)	DS-A/B Elective 3(3)					20
	Discipline A/B-17(4)	DS-A/B Elective 4(3)					
		Research Project (6)*					
-	Award of Bachelor of Art	ts Honours, B.A. (Hons.	)/ Bachelor of Sci	ence Honours, B.	Sc. (Hons) degree in a c	discipline etc. (176 credi	its

<sup>\*</sup>In lieu of the research Project, two additional elective papers/ Internship may be offered.

## IV. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Science (Basic/Hons.) etc. (for three subjects with practicals with one major and one minor subjects in the 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)	Ability Enhanceme	nt Compulsory	Skill Enhancem	ent Courses (SEC)	Total
	(Credits) (L+T+P)	/ Open Elective (OE)	Courses (AECC), La	nguages (Credits)	Skill based (Credits)	Value based (Credits)	Credits
		(Credits) (L+T+P)	(L+T+P)		(L+T+P)	(L+T+P)	
ı	Discipline A1(3+2)		L1-1 (3), L2-1		SEC-1: Digital		23
	Discipline B1(3+2)		(3)(3+1+0 each)		Fluency (2) (1+0+2)		
	Discipline C1(3+2)		,		, , , , ,		
Ш	Discipline A2(3+2)		L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B2(3+2)		(3+1+0 each)	Studies (2)		Social & Emotional	
	Discipline C2(3+2)		,	, ,		Learning (2) (1+0+2)	
			Exit option with	n Certificate (48 cr	edits)		
Ш	Discipline A3(3+2)		L1-3 (3), L2-3(3)		SEC-2: Artificial Inte-		23
	Discipline B3(3+2)		(3+1+0 each)		elligence (2)(1+0+2)		
	Discipline C3(3+2)		,		, , ,		
IV	Discipline A4(3+2)		L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc.	25
	Discipline B4(3+2)		(3+1+0 each)	India (2)		(2) (1+0+2)	
	Discipline C4(3+2)		,	, ,		, , ,	
	Exit option with	Diploma (96 credits) or	r choose one of the	e subjects as majo	r and the second as the	minor for the third year	-
V	Discipline A5(3+2)	OE-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline A6(3+2)				(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline B5(3+2)						
VI	Discipline A7(3+2)	OE-2 (3)			SEC-4: Professional/		20
	Discipline A8(3+2)				Societal		
	Discipline B6(3+2)				Communication (2)		
	Exit option with Ba	achelor of Science, B. S	c. Basic Degree (13	6 credits) or Choo	se any one Discipline a	s Major for the fourth ye	ear
VII	Discipline A9(3+2)	DS-A Elective 1(3)					22
	Discipline A10(3+2)	DS-A Elective 2(3)					
	Discipline A11(3)	Res.methodology(3)					
VIII	Discipline A12(3)	DS-A Elective 3(3)					18
	Discipline A13(3)	DS-A Elective 4(3)					
		Research Project (6)*					
		Award of Bachelor of S	cience Honours, B	Sc. (Hons) degree	in a discipline etc. (176	credits)	

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

## IV. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Science (Basic/Hons.) etc. (for three subjects with practicals with Physics as major and Chemistry as minor in the 3<sup>rd</sup> year)

	ue based (Credits) Credit
(Credits) (L+T+P) (L+T+P) (L+T+P) (L+T+P)	_
(ereally (ereal)	Γ+P)
Physics A1(3+2) L1-1 (3), L2-1 SEC-1: Digital Fluency	23
Chemistry B1(3+2) (3)(3+1+0 each) (2) (1+0+2)	
Maths C1(3+2)	
Physics A2(3+2) L1-2(3), L2-2 (3) Environmental Hea	lth & Wellness/ 25
Chemistry B2(3+2) (3+1+0 each) Studies (2) Soci	ial & Emotional
Maths C2(3+2) Lear	rning (2) (1+0+2)
Exit option with Certificate (48 credits)	
Physics A3(3+2) L1-3 (3), L2-3(3) SEC-2: Artificial Inte-	23
Chemistry B3(3+2) (3+1+0 each) elligence (2)(1+0+2)	
Maths C3(3+2)	
Physics A4(3+2) L1-4 (3), L2-4(3) Constitution of Spor	rts/NCC/NSS etc. (2) 25
Chemistry B4(3+2) (3+1+0 each) India (2) (1+0	0+2)
Maths C4(3+2)	
Exit option with Diploma (96 credits) or choose one of the subjects as major and the second as the mine	or for the third year
Physics A5(3+2) OE-1 (3) SEC-3: Cyber Security Ethi	cs & Self Aware- 20
Physics A6(3+2) (2) (1+0+2) ness	s (2) (1+0+2)?
Chemistry B5(3+2)	
Physics A7(3+2) OE-2 (3) SEC-4: Professional/	20
Physics A8(3+2) Societal	
Chemistry B6(3+2) Communication (2)	
Exit option with Bachelor of Science, B. Sc. Basic Degree (136 credits) or Choose any one Discipline as Maj	jor for the fourth year
Physics A9(3+2) Physics Elective-1(3)	22
Physics 10(3+2) Physics Elective-2(3)	
Physics A11(3) Res.methodology(3)	
Physics A12(3) Physics Elective-3(3)	18
Physics A13(3) Physics Elective-4(3)	
Research Project (6)*	
Award of Bachelor of Science Honours, B.Sc. (Hons) degree in a discipline etc. (176 cred	dits)

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

### V. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Science (Basic/Hons.) etc. (for three subjects with practicals with two subjects as majors in the 3<sup>rd</sup> year)

Credits) (L+T+P)  Discipline A1(3+2) Discipline B1(3+2)	/ Open Elective (OE) (Credits) (L+T+P)		anguages (Credits)	Skill based (Credits)	Value based (Credita)	
		Courses (AECC), Languages (Credits) (L+T+P)		(L+T+P)	Value based (Credits) (L+T+P)	Credits
Discipline C1(3+2)		L1-1 (3), L2-1 (3)(3+1+0 each)		SEC-1: Digital Fluency (2) (1+0+2)		23
Discipline A2(3+2) Discipline B2(3+2) Discipline C2(3+2)		L1-2(3), L2-2 (3) (3+1+0 each)	Environmental Studies (2)		Health & Wellness/ Social & Emotional Learning (2) (1+0+2)	25
		Exit option wit	h Certificate (48 cr	edits)		
Discipline A3(3+2) Discipline B3(3+2) Discipline C3(3+2)		L1-3 (3), L2-3(3) (3+1+0 each)		SEC-2: Artificial Inte- elligence (2)(1+0+2)		23
Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)		L1-4 (3), L2-4(3) (3+1+0 each)	Constitution of India (2)		Sports/NCC/NSS etc. (2) (1+0+2)	25
	Exit option with Di	ploma (96 credits)	or choose any two	subjects for the third	year	
Discipline A5(3+2) Discipline A6(3+2) Discipline B5(3+2)	OE-1 (3)			SEC-3: Cyber Security (2) (1+0+2)	Ethics & Self Awareness (2) (1+0+2)?	20
Discipline A7(3+2) Discipline B6(3+2) Discipline B7(3+2)	OE-2 (3)			SEC-4: Professional/ Societal Communication (2)		20
Exit option with Ba	achelor of Science, B. S	c. Basic Degree (1	36 credits) or Choc	se any one Discipline a	s Major for the fourth ye	ar
Discipline A/B-8(3+2) Discipline A/B-9(3+2) Discipline A/B-10(3)	DS-A/B Elective 2(3) DS-A/B Elective 3(3) Res. Methodology(3)					22
Discipline A/B-11(3) Discipline A/B-12(3)	DS-A/B Elective 4(3) DS-A/B Elective 5(3) Research Project (6)*					18
	Discipline C2(3+2)  Discipline A3(3+2) Discipline B3(3+2) Discipline C3(3+2) Discipline C3(3+2) Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)  Discipline A5(3+2) Discipline A6(3+2) Discipline B5(3+2) Discipline B6(3+2) Discipline B7(3+2) Discipline B7(3+2) Exit option with Babe Discipline A/B-8(3+2) Discipline A/B-9(3+2) Discipline A/B-10(3) Discipline A/B-11(3) Discipline A/B-12(3)	Discipline C2(3+2)  Discipline A3(3+2) Discipline B3(3+2) Discipline C3(3+2)  Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)  Exit option with Di  Discipline A5(3+2) Discipline A6(3+2) Discipline B5(3+2) Discipline B6(3+2) Discipline B7(3+2)  Exit option with Bachelor of Science, B. S  Discipline A/B-8(3+2) Discipline A/B-9(3+2) Discipline A/B-10(3) Discipline A/B-11(3) Discipline A/B-12(3) DS-A/B Elective 4(3) DS-A/B Elective 5(3) Research Project (6)*	Discipline C2(3+2)  Discipline A3(3+2) Discipline B3(3+2) Discipline C3(3+2)  Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)  Exit option with Diploma (96 credits)  Discipline A5(3+2) Discipline A6(3+2) Discipline B5(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline A7(3+2) Discipline B7(3+2) Discipline A7(3+2) Disciplin	Discipline C2(3+2)  Exit option with Certificate (48 cm  Discipline B3(3+2) Discipline B3(3+2) Discipline C3(3+2)  Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)  Exit option with Diploma (96 credits) or choose any two Discipline A5(3+2) Discipline A6(3+2) Discipline A6(3+2) Discipline B7(3+2) Discipline B6(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline A/B-8(3+2) Discipline A/B-9(3+2) Discipline A/B-9(3+2) Discipline A/B-12(3) Discipline A/B-11(3) DS-A/B Elective 4(3) Discipline A/B-12(3) DS-A/B Elective 5(3) Research Project (6)*	Discipline C2(3+2)  Discipline A3(3+2) Discipline B3(3+2) Discipline C3(3+2) Discipline C3(3+2) Discipline C3(3+2) Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2) Discipline A5(3+2) Discipline A5(3+2) Discipline A6(3+2) Discipline A6(3+2) Discipline A6(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B6(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline B7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline A7(3+2) Discipline A7(3+2) Discipline B7(3+2) Discipline A7(3+2) Discipline A	Discipline C2(3+2)  Discipline A3(3+2) Discipline B3(3+2) Discipline B4(3+2) Discipline B4(3+2) Discipline A4(3+2) Discipline A4(3+2) Discipline A4(3+2) Discipline B4(3+2) Discipline C4(3+2)  Exit option with Diploma (96 credits) or choose any two subjects for the third year  Discipline A5(3+2) Discipline A5(3+2) Discipline B5(3+2) Discipline B6(3+2) Discipline B6(3+2) Discipline B6(3+2) Discipline B7(3+2) Discipline A7(3+2) Di

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

# V. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka Bachelor of Science (Basic/Hons.) etc. (for three subjects with practicals with Physics & Chemistry as major subjects in the 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)	E) Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P)		Skill Enhancement Courses (SEC)		
	(Credits) (L+T+P)	/ Open Elective (OE) (Credits) (L+T+P)			Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Physics A1(3+2) Chemistry B1(3+2) Maths C1(3+2)		L1-1 (3), L2-1 (3)(3+1+0 each)		SEC-1: Digital Fluency (2) (1+0+2)		23
II	Physics A2(3+2) Chemistry B2(3+2) Maths C2(3+2)		L1-2(3), L2-2 (3) (3+1+0 each)	Environmental Studies (2)		Health & Wellness/ Social & Emotional Learning (2) (1+0+2)	25
			Exit option wit	h Certificate (48 cr	edits)		
III	Physics A3(3+2) Chemistry B3(3+2) Maths C3(3+2)		L1-3 (3), L2-3(3) (3+1+0 each)		SEC-2: Artificial Inte- elligence (2)(1+0+2)		23
IV	Physics A4(3+2) Chemistry B4(3+2) Maths C4(3+2)		L1-4 (3), L2-4(3) (3+1+0 each)	Constitution of India (2)		Sports/NCC/NSS etc. (2) (1+0+2)	25
		Exit option with Di	ploma (96 credits	) or choose any two	o subjects for the third	year	
V	Physics A5(3+2) Physics A6(3+2) Chemistry B5(3+2)	OE-1 (3)			SEC-3: Cyber Security (2) (1+0+2)	Ethics & Self Awareness (2) (1+0+2)?	20
VI	Physics A7(3+2) Chemistry B6(3+2) Chemistry B7(3+2)	OE-2 (3)			SEC-4: Professional/ Societal Communication (2)		20
	Exit option with Ba	achelor of Science, B. S	c. Basic Degree (1	36 credits) or Choc	se any one Discipline a	s Major for the fourth ye	ar
VII	Chemistry B-8 (3+2) Chemistry B-9 (3+2) Chemistry B-10(3)	Chemistry Elective-1(3) Chemistry Elective-2(3) Res. Methodology(3)					22
VIII	Chemistry B-11(3) Chemistry B-12(3)	Chemistry Elective-4(3) Chemistry Elective-5(3)					18

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

## VI. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Science (Basic/Hons.) etc. (for three subjects with practicals with all the three subjects in the 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)	Courses (AECC), Languages (Credits) (L+T+P)		Skill Enhancen	Total	
	(Credits) (L+T+P)	/ Open Elective (OE) (Credits) (L+T+P)			Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
1	Discipline A1(3+2)	(0.00.0) (2.0.0)	L1-1 (3), L2-1		SEC-1: Digital Fluency	(2.1.1)	23
•	Discipline B1(3+2)		(3)(3+1+0 each)		(2) (1+0+2)		
	Discipline C1(3+2)		(5)(5 1 2 1 5 5 5 5 1.1)				
Ш	Discipline A2(3+2)		L1-2(3), L2-2 (3)	Environmental		Health & Wellness/	25
	Discipline B2(3+2)		(3+1+0 each)	Studies (2)		Social & Emotional	
	Discipline C2(3+2)			, ,		Learning (2) (1+0+2)	
			Exit option wit	h Certificate (48 cr	edits)		
Ш	Discipline A3(3+2)		L1-3 (3), L2-3(3)	,	SEC-2: Artificial Inte-		23
	Discipline B3(3+2)		(3+1+0 each)		elligence (2)(1+0+2)		
	Discipline C3(3+2)		,				
IV	Discipline A4(3+2)		L1-4 (3), L2-4(3)	Constitution of		Sports/NCC/NSS etc. (2)	25
	Discipline B4(3+2)		(3+1+0 each)	India (2)		(1+0+2)	
	Discipline C4(3+2)			, ,			
			Exit option wi	th Diploma (96 cre	edits)		
V	Discipline A5(3+2)	OE-1 (3)			SEC-3: Cyber Security	Ethics & Self Aware-	20
	Discipline B5(3+2)				(2) (1+0+2)	ness (2) (1+0+2)?	
	Discipline C5(3+2)						
VI	Discipline A6(3+2)	OE-2 (3)			SEC-4: Professional/		20
	Discipline B6(3+2)				Societal		
	Discipline C6(3+2)				Communication (2)		
	Exit option with B	achelor of Science, B. S	c. Basic Degree (1	36 credits) or Choc	se any one Discipline a	s Major for the fourth ye	ar
VII	Discipline A7(3+2)	DS-A Elective 1(3)					22
	Discipline A8(3+2)	DS-A Elective 2(3)					
	Discipline A9(3)	Res. Methodology(3)					
VIII	Discipline A10(3)	DS-A Elective 3(3)					21
	Discipline A11(3)	DS-A Elective 4(3)					
	Discipline A12(3)	Research Project (6)*					
		Award of Bachelor of S	cience Honours, E	3.Sc. (Hons) degree	in a discipline etc. (179	eredits)	

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered.

## VIA. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Science (Basic/Hons.) etc. (with all three subjects with practicals (Physics, Chemistry & Maths) in the 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE)   Ability Enhancement Compulsory		Skill Enhancement Courses (SEC)			
	(Credits) (L+T+P)	/ Open Elective (OE) Courses (AECC), Languages (Credits) (L+T+P) (L+T+P)	anguages (Credits)	Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits	
I	Physics A1(3+2) Chemistry B1(3+2) Maths C1(3+2)		L1-1 (3), L2-1 (3)(3+1+0 each)		SEC-1: Digital Fluency (2) (1+0+2)		23
II	Physics A2(3+2) Chemistry B2(3+2) Maths C2(3+2)		L1-2(3), L2-2 (3) (3+1+0 each)	Environmental Studies (2)		Health & Wellness/ Social & Emotional Learning (2) (1+0+2)	25
			Exit option wit	h Certificate (48 cr	edits)		
III	Physics A3(3+2) Chemistry B3(3+2) Maths C3(3+2)		L1-3 (3), L2-3(3) (3+1+0 each)		SEC-2: Artificial Inte- elligence (2)(1+0+2)		23
IV	Physics A4(3+2) Chemistry B4(3+2) Maths C4(3+2)		L1-4 (3), L2-4(3) (3+1+0 each)	Constitution of India (2)		Sports/NCC/NSS etc. (2) (1+0+2)	25
	· · · · · ·	1	Exit option w	ith Diploma (96 cre	edits)		
V	Physics A5(3+2) Chemistry B5(3+2) Maths C6(3+2)	OE-1 (3)	,		SEC-3: Cyber Security (2) (1+0+2)	Ethics & Self Awareness (2) (1+0+2)?	20
VI	Physics A6(3+2) Chemistry B6(3+2) Maths C6(3+2)	OE-2 (3)			SEC-4: Professional/ Societal Communication (2)		20
	Exit option with Ba	achelor of Science, B. S	c. Basic Degree (1	36 credits) or Choo	se any one Discipline a	s Major for the fourth ye	ar
VII	Physics A7(3+2) Physics A8(3+2) Physics A9(3)	Physics Elective-1(3) Physics Elective-2(3) Res. Methodology(3)					22
VIII	Physics A10(3) Physics A11(3)	Physics Elective-3(3) Physics Elective-4(3) Research Project (6)*					21

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered

## VIB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Science (Basic/Hons.) etc. (with all three subjects with practicals (Chemistry, Botany and Zoology) in the 3<sup>rd</sup> year)

Sem.	Discipline Core (DSC)	Discipline Elective(DSE) Ability Enhancement Compulsory		Skill Enhancement Courses (SEC)			
	(Credits) (L+T+P)	/ Open Elective (OE) (Credits) (L+T+P)	Courses (AECC), Languages (Credits) (L+T+P)		Skill based (Credits) (L+T+P)	Value based (Credits) (L+T+P)	Credits
I	Chemistry A1(3+2) Botany B1(3+2) Zoology C1(3+2)		L1-1 (3), L2-1 (3)(3+1+0 each)		SEC-1: Digital Fluency (2) (1+0+2)		23
II	Chemistry A2(3+2) Botany B2(3+2) Zoology C2(3+2)		L1-2(3), L2-2 (3) (3+1+0 each)	Environmental Studies (2)		Health & Wellness/ Social & Emotional Learning (2) (1+0+2)	25
			Exit option wit	h Certificate (48 cr	edits)		
III	Chemistry A3(3+2) Botany B3(3+2) Zoology C3(3+2)		L1-3 (3), L2-3(3) (3+1+0 each)		SEC-2: Artificial Inte- elligence (2)(1+0+2)		23
IV	Chemistry A4(3+2) Botany B4(3+2) Zoology C4(3+2)		L1-4 (3), L2-4(3) (3+1+0 each)	Constitution of India (2)		Sports/NCC/NSS etc. (2) (1+0+2)	25
			Exit option w	ith Diploma (96 cre	edits)		•
V	Chemistry A5(3+2) Botany B5(3+2) Zoology C6(3+2)	OE-1 (3)	·		SEC-3: Cyber Security (2) (1+0+2)	Ethics & Self Awareness (2) (1+0+2)?	20
VI	Chemistry A6(3+2) Botany B6(3+2) Zoology C6(3+2)	OE-2 (3)			SEC-4: Professional Communication (2)		20
	Exit option with Ba	achelor of Science, B. S	c. Basic Degree (1	36 credits) or Choc	se any one Discipline a	s Major for the fourth ye	ar
VII	Chemistry A7(3+2) Chemistry A8(3+2) Chemistry A9(3)	Chemistry Elective-1(3) Chemistry Elective-2(3) Res. Methodology(3)					22
VIII	Chemistry A10(3) Chemistry A11(3)	Chemistry Elective-3(3) Chemistry Elective-4(3)					21

<sup>\*</sup>In lieu of the research project, two additional elective papers/ Internship may be offered