## 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 $21^{\text {st }}$ century. It is to have Holistic and Multidisciplinary Under-Graduate 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 UnderGraduate 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.

Discipline Core (DSC) refers to Core Courses/Papers in a Core Discipline/ Subject
Discipline Elective (DSE) refers to Elective Courses/Papers in the Core Subject or Discipline.
Open Elective (OE) refers to Elective Courses/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 practical involve L+P, while the subjects without practical 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 practical per week in a semester is assigned one credit. Generally core subject theory courses/papers will have 3 or 4 credits, while practical are assigned 2 or 3 credits.

## I-A. 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. | Discipline Core <br> (DSC) (Credits) <br> (L+T+P) <br> DSC-1 | Discipline Elective(DSE)/ Open Elective (OE) (Credits) ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) (L+T+P) | Value based | (Credits) (L+T+P) |  |
| 1 | $\begin{aligned} & \hline \text { DSC-1 (4) } \\ & \text { DSC-2 (4) } \\ & \text { DSC-3 (4) } \\ & \hline \end{aligned}$ | OE-1 (3) | $\begin{array}{\|c\|} \hline \text { L1-1(3), L2-1(3) } \\ (4 \text { hrs. each }) \end{array}$ |  | SEC-1: Digital Fluency (2) (1+0+2) | Physical Education Yoga (1) ( $0+0+2$ ) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | $\begin{aligned} & \hline \text { DSC-4 (4) } \\ & \text { DSC-5 (4) } \\ & \text { DSC-6 (4) } \\ & \hline \end{aligned}$ | OE-2 (3) | $\begin{array}{\|l\|} \hline \text { L1-2(3), L2-2(3) } \\ (4 \text { hrs. each) } \end{array}$ | Environmental Studies (2) |  | Physical EducationSports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural(1) (0+0+2) } \end{aligned}$ | 25 |
| Exit option with Certificate in Commerce/Business Administration/Computer Applications etc. (50 credits) |  |  |  |  |  |  |  |  |
| III | $\begin{aligned} & \hline \text { DSC-7 (4) } \\ & \text { DSC-8 (4) } \\ & \text { DSC-9 (4) } \\ & \hline \end{aligned}$ | OE-3 (3) | $\begin{gathered} \text { L1-3(3), L2-3(3) } \\ (4 \text { hrs each }) \end{gathered}$ |  | SEC-2: Artificial InteIligence (2) (1+0+2) | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| IV | $\begin{aligned} & \hline \text { DSC-10 (4) } \\ & \text { DSC-11 (4) } \\ & \text { DSC-12 (4) } \\ & \hline \end{aligned}$ | OE-4 (3) | $\begin{aligned} & \text { L1-4(3), L2-4(3) } \\ & (4 \text { hrs each) } \end{aligned}$ | Constitution of India (2) |  | Physical Education- <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Diploma in Commerce/Business Administration/Computer Applications etc. (100 credits) |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \hline \text { DSC-13 (4) } \\ & \text { DSC-14 (4) } \\ & \text { DSC-15 (4) } \\ & \hline \end{aligned}$ | DSE-1 (3) <br> Vocational-1 (3) |  |  | SEC-3: SEC such as Cyber Security (2) (1+0+2) | Physical EducationSports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural(1) (0+0+2) } \end{aligned}$ | 22 |
| VI | $\begin{aligned} & \hline \text { DSC-16 (4) } \\ & \text { DSC-17 (4) } \\ & \text { DSC-18 (4) } \\ & \hline \end{aligned}$ | DSE-2 (3) <br> Vocational-2 (3) <br> Internship (2) |  |  | SEC-4: Professional Communication (2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) ( $0+0+2$ ) | 24 |
| Exit Option with Bachelor of Commerce/Bachelor of Business Administration/Bachelor of Computer Applications Degree (144 credits) |  |  |  |  |  |  |  |  |
| VII | $\begin{aligned} & \hline \text { DSC-19 (4) } \\ & \text { DSC-20 (4) } \\ & \text { DSC-21 (4) } \\ & \hline \end{aligned}$ | DSE-3 (3) <br> Vocational-3 (3) <br> Res. Methodology(3) |  |  |  |  |  | 21 |
| VIII | $\begin{aligned} & \text { DSC } 22(4) \\ & \text { DSC } 23(4) \end{aligned}$ | DSE-4 (3) <br> Vocational-4 (3) <br> Research Project(6)* |  |  |  |  |  | 20 |

Award of Bachelor of Commerce/Bachelor of Business Administration/Bachelor of Computer Applications Honours Degree (185 credits),
*In lieu of the research Project, two additional elective papers/Internship may be offered.

I-B. 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. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE) / Open Elective (OE) (Credits) (L+T+P) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) (L+T+P) | Value based ( | (Credits) (L+T+P) |  |
| I | $\begin{aligned} & \text { Com-C1 (4) } \\ & \text { Com-C2 (4) } \\ & \text { Com-C3 (4) } \end{aligned}$ | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs. each) |  | SEC-1: Digital Fluency (2) (1+0+2) | Physical Education Yoga (1)(0+0+2) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | $\begin{aligned} & \text { Com-C4 (4) } \\ & \text { Com-C5 (4) } \\ & \text { Com-C6 (4) } \\ & \hline \end{aligned}$ | OE-2 (3) | L1-2(3), L2-2(3) <br> (4 hrs. each) | Environmental Studies (2) |  | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Certificate in Commerce/Business Administration/Computer Applications etc. (50 credits) |  |  |  |  |  |  |  |  |
| III | $\begin{aligned} & \text { Com-C7 (4) } \\ & \text { Com-C8 (4) } \\ & \text { Com-C9 (4) } \end{aligned}$ | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs each) |  | SEC-2: Artificial Intelligence (2)(1+0+2)/ Alternative SEC | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 25 |
| IV | $\begin{aligned} & \hline \text { Com-C10 (4) } \\ & \text { Com-C11 (4) } \\ & \text { Com-C12 (4) } \\ & \hline \end{aligned}$ | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs each) | Constitution of India (2) |  | Physical Education -Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 25 |
| Exit option with Diploma in Commerce/Business Administration/Computer Applications etc. (100 credits) |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \hline \text { Com-C13 (4) } \\ & \text { Com-C14 (4) } \\ & \text { Com-C15 (4) } \\ & \hline \end{aligned}$ | Com-E1 (3) Vocational-1 (3) |  |  | SEC-3: Cyber Security <br> (2) $(1+0+2) /$ <br> Alternative SEC | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 22 |
| VI | $\begin{aligned} & \hline \text { Com-C16 (4) } \\ & \text { Com-C17 (4) } \\ & \text { Com-C18 (4) } \\ & \hline \end{aligned}$ | $\begin{array}{\|l} \hline \text { Com-E2 (3) } \\ \text { Vocational-2 (3) } \\ \text { Internship (2) } \\ \hline \end{array}$ |  |  | SEC-4: Professional Communication (2) | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 24 |
| Exit Option with Bachelor of Commerce Degree, B. Com. Degree (with a minimum of 144 credits) |  |  |  |  |  |  |  |  |
| VII | $\begin{aligned} & \hline \text { Com-C19 (4) } \\ & \text { Com-C20 (4) } \\ & \text { Com-C21 (4) } \\ & \hline \end{aligned}$ | Com-E3 (3) Vocational-3 (3) Res. Methodology(3) |  |  |  |  |  | 21 |
| VIII | $\begin{aligned} & \hline \text { Com-C22 (4) } \\ & \text { Com-C23 (4) } \end{aligned}$ | Com-E4 (3) Vocational-4 (3) Research Project(6)* |  |  |  |  |  | 20 |

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

I-C. 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 (DSC) (Credits) (L+T+P) | Discipline Elective (DSE)/ Open Elective (OE) (Credits) (L+T+P) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) $(L+T+P)$ | Value based ( |  |  |
| I | $\begin{aligned} & \text { CA C-1 }(3+2) \\ & \text { CA C-2 }(3+2) \\ & \text { CA C-3 }(3) \\ & \hline \end{aligned}$ | OE-1 (3) | $\begin{array}{\|l\|} \hline \text { L1-1(3), L2-1(3) } \\ \text { (4 hrs. each) } \end{array}$ |  | SEC-1: Alternative SEC in place of digital Fluency (2) (1+0+2) | Physical Education - <br> Yoga (1) ( $0+0+2$ ) | Health \& Wellness <br> (1) $(0+0+2)$ | 26 |
| II | $\begin{aligned} & \text { CA C-4 }(3+2) \\ & \text { CA C-5 }(3+2) \\ & \text { CA C-6 }(3) \end{aligned}$ | OE-2 (3) | $\begin{array}{\|l\|} \hline \text { L1-2(3), L2-2(3) } \\ \text { (4 hrs. each) } \end{array}$ | Environmental Studies (2) |  | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G) / Cultural (1) (0+0+2) | 26 |
| Exit option with Certificate in Computer Applications (with a minimum of 52 credits) |  |  |  |  |  |  |  |  |
| III | $\begin{aligned} & \text { CAC-7 }(3+2) \\ & \text { CA C-8 }(3+2) \\ & \text { CA C-9 }(3) \\ & \hline \end{aligned}$ | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs each) |  | SEC-2: Alternative SEC in place of Al (2) (1+0+2) | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 26 |
| IV | $\begin{aligned} & \text { CA C-10 }(3+2) \\ & \text { CA C-11 }(3+2) \\ & \text { CA C-12 }(3) \\ & \hline \end{aligned}$ | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs each) | Constitution of India (2) |  | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) ( $0+0+2$ ) | 26 |
| Exit option with Diploma in Computer Applications (with a minimum of 100 credits) |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \text { CA C-13 }(3+2) \\ & \text { CA C-14 (3+2) } \\ & \text { CA C-15 (3) } \\ & \hline \end{aligned}$ | CA E-1 (3) Vocational-1 (3) |  |  | SEC-3: Alternative SEC in place of Cyber Security (2) (1+0+2) | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 23 |
| VI | $\begin{aligned} & \text { CA C-16 (3+2) } \\ & \text { CA C-17 (3+2) } \\ & \text { CA C-18 (3) } \end{aligned}$ | CA E-2 (3) <br> Vocational-2 (3) |  |  | SEC-4: Professional Communication (2) | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 23 |
| Exit Option with Bachelor of Computer Applications Degree, BCA Degree (with a minimum of 144 credits) |  |  |  |  |  |  |  |  |
| VII | $\begin{aligned} & \hline \text { CA C-19(3+2) } \\ & \text { CA C-20(3+2) } \\ & \text { Internship (2) } \\ & \hline \end{aligned}$ | CA E-3 (3) <br> Vocational-3 (3) <br> Res. methodology (3) |  |  |  |  |  | 21 |
| VIII | $\begin{aligned} & \text { CA C-21 (3+2) } \\ & \text { CA C-22 (3) } \end{aligned}$ | CA E-4 (3) <br> Vocational-4 (3) <br> ResearchProject(6)* |  |  |  |  |  | 20 |
| Award of Bachelor of Computer Applications Honours Degree, BCA (Hons.) Degree (185 credits) |  |  |  |  |  |  |  |  |

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## 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.) in subjects with practical, with one major and one minor

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE) / Open Elective (OE) (Credits) ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) (L+T+P) | Value based (Credits) | +T+P) |  |
| 1 | Discipline A1(4+2) <br> Discipline B1 (4+2) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs each) |  | SEC-1: Digital <br> Fluency (2) $(1+0+2)$ | Physical Education - $\text { Yoga (1) }(0+0+2)$ | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | Discipline A2(4+2) <br> Discipline B2(4+2) | $\mathrm{OE}-2$ (3) | $\begin{aligned} & \text { L1-2(3), L2-2(3) } \\ & \text { (4 hrs each) } \\ & \hline \end{aligned}$ | Environmental Studies (2) |  | Physical Education Sports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G) } \\ & \text { / Cultural (1) }(0+0+2) \end{aligned}$ | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Discipline A3(4+2) <br> Discipline B3(4+2) | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs each) |  | SEC-2: Artificial Inte Iligence (2)(1+0+2) | Physical Education Sports (1) ( $0+0+2$ ) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural(1) }(0+0+2) \end{aligned}$ | 25 |
| IV | $\begin{aligned} & \hline \text { Discipline A4(4+2) } \\ & \text { Discipline B4(4+2) } \end{aligned}$ | OE-4 (3) | $\begin{aligned} & \text { L1-4(3), L2-4(3) } \\ & (4 \text { hrs each }) \end{aligned}$ | Constitution of India (2) |  | Physical Education - <br> Sports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G) } \\ & \text { Cultural(1) }(0+0+2) \end{aligned}$ | 25 |
| Exit option with Diploma (100 credits) OR Choose any one of the core subjects as Major and the other as Minor |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \hline \text { Discipline A5(3+2) } \\ & \text { Discipline A6(3+2) } \\ & \text { Discipline B5(3+2) } \end{aligned}$ | Vocational-1 (3) |  |  | SEC-3: SEC such as Cyber Security (2) (1+0+2) | Physical Education Sports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural(1) }(0+0+2) \end{aligned}$ | 22 |
| VI | $\begin{aligned} & \hline \text { Discipline A7(3+2) } \\ & \text { Discipline A8(3+2) } \\ & \text { Discipline B6(3+2) } \end{aligned}$ | Vocational-2 (3) <br> Internship (2) |  |  | SEC-4: Professional Communication (2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G) <br> Cultural (1) (0+0+2) | 24 |
| Exit option with Bachelor of Arts, B.A./Bachelor of Science, B.Sc. Basic Degree (with a minimum of 144 credits) or continue studies with the Major |  |  |  |  |  |  |  |  |
| VII | $\begin{array}{\|l} \hline \text { Discipline A9(3+2) } \\ \text { Discipline A10(3+2) } \\ \text { Discipline A11(3) } \\ \hline \end{array}$ | $\begin{array}{\|l} \hline \text { Discipline A, E-1 (3) } \\ \text { Discipline A, E-2 (3) } \\ \text { Res.Methodology (3) } \\ \hline \end{array}$ |  |  |  |  |  | 22 |
| VIII | Discipline A12(3+2) <br> Discipline A13(3) <br> Discipline A14(3) | Discipline A, E-3(3) Research Project (6)* |  |  |  |  |  | 20 |
| Award of Bachelor of Arts Honours, B.A. (Hons.)/ Bachelor of Science Honours, B.Sc. (Hons) degree in a discipline (with a minimum of 186 credits) |  |  |  |  |  |  |  |  |

*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

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

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE)/ Open Elective (OE) (Credits) ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) (L+T+P) | Value based (Credits) (L | +T+P) |  |
| 1 | Botany A1(4+2) <br> Zoology B1(4+2) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs. each) |  | SEC-1: Digital <br> Fluency (2) $(1+0+2)$ | Physical Education for fitness(1)(0+0+2) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | $\begin{aligned} & \hline \text { Botany A2(4+2) } \\ & \text { Zoology B2(4+2) } \\ & \hline \end{aligned}$ | OE-2 (3) | $\begin{array}{\|l} \hline \text { L1-2(3), L2-2(3) } \\ (4 \text { hrs. each) } \\ \hline \end{array}$ | Environmental Studies (2) |  | Physical Education - Yoga(1) (0+0+2) | NCC/NSS/R\&R(S\&G) <br> / Cultural (1)(0+0+2) | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Botany A3(4+2) <br> Zoology B3(4+2) | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs. each) |  | SEC-2: Artificial Intelligence (2)(1+0+2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G) <br> / Cultural (1) (0+0+2) | 25 |
| IV | Botany A4(4+2) <br> Zoology B4(4+2) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education - <br> Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |



Exit option with Bachelor of Science Degree, B. Sc. Degree in Science (with a minimum of 144 credits) or continue studies with the Major in the $4^{\text {th }}$ year

| VII |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Botany A9(3+2) |  |  |  |  |  |
| Botany A10(3+2) |  |  |  |  |  |
| Botanye A11(3) |  |  |  |  |  |
| Botany E-1 (3) | Botany <br> Botany E-2 (3) <br> Res. Methodology (3) |  |  |  |  |
| VIII | Botanye A12(3+2) <br> Botany E-3 (3) <br> Botany A13(3) <br> Botany A14(3) | Research Project (6)* |  |  |  |

Award of Bachelor of Science Honours Degree, B.Sc. (Hons.) Degree in Botany (with a minimum of 186 credits)
${ }^{*}$ 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.) in subjects without practical with one major and one minor

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE)/ <br> Open Elective (OE) <br> (Credits) (L+T+P) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) ( $L+T+P$ ) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) $(L+T+P)$ | Value based (Credits) | +T+P) |  |
| 1 | Discipline A1(3), A2(3) <br> Discipline B1(3), B2(3) | OE-1 (3) | $\begin{aligned} & \text { L1-1(3), L2-1(3) } \\ & (4 \mathrm{hrs} \text { each) } \end{aligned}$ |  | SEC-1: Digital <br> Fluency (2) $(1+0+2)$ | Physical Education - <br> Yoga (1)(0+0+2) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| 11 | Discipline A3(3), A4(3) <br> Discipline B3(3), B4(3) | OE-2 (3) | L1-2(3), L2-2(3) <br> (4 hrs each) | Environmental Studies (2) |  | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Discipline A5(3), A6(3) <br> Discipline B5(3), B6(3) | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs. each) |  | SEC-2: Artificial Inte Iligence (2)(1+0+2) | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| IV | Discipline A7(3), A8(3) <br> Discipline B7(3), B8(3) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |



| VII | Discipline A-13(4) <br> Discipline A-14(4) <br> Discipline A-15(4) | $\begin{array}{\|l} \hline \text { Discipline A, E-3 (3) } \\ \text { Vocational-3 (3) } \\ \text { Res. Methodology (3) } \\ \hline \end{array}$ |  |  |  |  |  | 21 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VIII | Discipline A-16(3) <br> Discipline A-17(3) <br> Discipline A-18(3) | Discipline A, E-4 (3) Vocational-4 (3) Research Project (6)* |  |  |  |  |  | 21 |

*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

Example: Bachelor of Arts (Basic/ Hons.) in subjects without practical with Economics as major and History as minor

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE)/ Open Elective (OE) (Credits) (L+T+P) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) $(L+T+P)$ | Value based (Cr | Credits) (L+T+P) |  |
| I | History C1(3), C2(3) <br> Economics C1(3), C2(3) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs each) |  | SEC-1: Digital <br> Fluency (2) (1+0+2) | Physical Education Yoga (1) (0+0+2) | Health \& Wellness (1) (0+0+2) | 25 |
| II | History C3(3), C4(3) <br> Economics C3(3), C4(3) | OE-2 (3) | $\begin{aligned} & \text { L1-2(3), L2-2(3) } \\ & (4 \text { hrs each) } \end{aligned}$ | Environmental Studies (2) |  | Physical Education <br> - Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Certificate (48 credits) |  |  |  |  |  |  |  |  |
| III | History C5(3), C6(3) <br> Economics C5(3 C6(3) | OE-3 (3) | L1-3(3), L2-3(3) (4 hrs. each) |  | SEC-2: Artificial Inte lligence (2)(1+0+2) | Physical Education <br> - Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 25 |
| IV | History C7(3), C8(3) <br> Economics C7(3), C8(3) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education <br> - Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Diploma in Arts (100 credits) OR Choose any one of the core subjects as Major and the other as Minor |  |  |  |  |  |  |  |  |
| V | History C 9(4) <br> Economics C 9(4) <br> Economics C10(4) | Economics E-1 (3) Vocational-1 (3) |  |  | SEC-3: SEC such as Cyber Security (2) (1+0+2) | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 22 |
| VI | History C10(4) <br> Economics C11(4) <br> Economics C12(4) | ```Economics E-2 (3) Vocational-2 (3) Internship (2)``` |  |  | SEC-4: Societal Communication (2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) ( $0+0+2$ ) | 24 |
| Exit option with Bachelor of Arts, B.A. Degree in History and Economics (with a minimum of 144 credits) or continue studies with the Major |  |  |  |  |  |  |  |  |
| VII | Economics C13(4) <br> Economics C14(4) <br> Economics C15(4) | Economics E-3 (3) <br> Vocational-3 (3) <br> Res. Methodology (3) |  |  |  |  |  | 21 |
| VIII | Economics C16(3) <br> Economics C17(3) <br> Economics C18(3) | Economics E-4 (3) <br> Vocational-4 (3) <br> Research Project (6)* |  |  |  |  |  | 21 |

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

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

Bachelor of Arts (Basic/Hons.)/ Bachelor of Science (Basic/Hons.) with one core subject with practical and the other without practical

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE) <br> Open Elective (OE) <br> (Credits) (L+T+P) Ability Enhancement Compulsory <br> Courses (AECC), Languages <br> (Credits) (L+T+P) <br>   |  |  | Skill Enhancement Courses (SEC) |  |  | Total credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) $(\mathrm{L}+\mathrm{T}+\mathrm{P})$ | Value based | redits) (L+T+P) |  |
| 1 | Discipline A1(4+2) <br> Discipline B1(3), B2(3) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs each) |  | SEC-1: Digital Fluency (2) (1+0+2) | Physical Education Yoga (1) (0+0+2) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | Discipline A2(4+2) <br> Discipline B3(3), B4(3) | OE-2 (3) | L1-2(3), L2-2(3) <br> (4 hrs each) | Environmental Studies (2) |  | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Certificate (48 credits) |  |  |  |  |  |  |  |  |
| III | Discipline A3(4+2) <br> Discipline B5(3), B6(3) | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs. each) |  | SEC-2: Artificial InteIligence (2)(1+0+2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| IV | Discipline A4(4+2) <br> Discipline B7(3), B8(3) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Diploma (96 credits)/ Choose any one Discipline as Major, the other as the Minor |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \hline \text { Discipline A5(3+2), } \\ & \text { Discipline A6(3+2) } \\ & \text { Discipline B9(3) } \\ & \hline \end{aligned}$ | Discipline A, E-1 (3) Vocational-1 (3) |  |  | SEC-3: SEC such as <br> Cyber Security (2) (1+0+2) | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 23 |
| VI | $\begin{aligned} & \text { Discipline A7(3+2), } \\ & \text { Discipline A8(3+2) } \\ & \text { Discipline B10(3) } \\ & \hline \end{aligned}$ | Discipline A, E-2 (3) Vocational-2 (3) |  |  | SEC-4: Professional Communication (2) | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 23 |
| Exit option with Bachelor of Arts, B.A. /Bachelor of Science, B. Sc. Basic Degree (with a minimum of 144 credits) or continue studies with the Major |  |  |  |  |  |  |  |  |
| VII | Discipline A9(3+2), <br> Discipline A10(3+2) <br> Discipline A11(3) | Discipline A, E-3 (3) <br> Internship (2) <br> Res. Methodology (3) |  |  |  |  |  | 21 |
| VIII | Discipline A12(3+2), Discipline A13(3), Discipline A14(3) | Discipline A, E-4 (3) Research Project (6)* |  |  |  |  |  | 20 |
| Award of Bachelor of Arts Honours, B.A. (Hons)/Bachelor of Science Honours, B.Sc. (Hons) degree in a discipline (with a minimum of $185 \mathrm{credits)}$ |  |  |  |  |  |  |  |  |

Award of Bachelor of Arts Honours, B.A. (Hons)/Bachelor of Science Honours, B.Sc. (Hons) degree in a discipline (with a minimum of 185 credits)
*In lieu of the research Project, two additional elective papers/Internship may be offered.

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

Example: Bachelor of Science (Basic/ Hons.) with Physics as major subject with practical and Mathematics as minor without practical

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | Discipline Elective(DSE) / <br> Open Elective (OE) <br> (Credits) (L+T+P) | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) (L+T+P) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) $(\mathrm{L}+\mathrm{T}+\mathrm{P})$ | Value based ( | (Credits) (L+T+P) |  |
| I | Physics C1(4+2) <br> Maths C1(3), C2(3) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs each) |  | SEC-1: Digital <br> Fluency (2) (1+0+2) | Physical Education Yoga (1) $(0+0+2)$ | Health \& Wellness (1) (0+0+2) | 25 |
| II | Physics C2(4+2) <br> Maths C3(3), C4(3) | OE-2 (3) | L1-2(3), L2-2(3) (4 hrs each) | Environmental Studies (2) |  | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1) $(0+0+2)$ | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Physics C3(4+2) <br> Maths C5(3), C6(3) | OE-3 (3) | L1-3(3), L2-3(3) <br> (4 hrs. each) |  | SEC-2: Artificial InteIligence (2)(1+0+2) | Physical Education - <br> Sports (1) (0+0+2) | $\begin{aligned} & \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural (1) (0+0+2) } \\ & \hline \end{aligned}$ | 25 |
| IV | Physics C4(4+2) <br> Maths C7(3), C8(3) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education - <br> Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) ( $0+0+2$ ) | 25 |
| Exit option with Diploma (100 credits) OR Choose one of the Disciplines as Major and the other as Minor, if Physics is major and Maths is minor then |  |  |  |  |  |  |  |  |
| V | Physics C5(3+2), <br> Physics C6(3+2) <br> Maths C9(3) | Physics E-1 (3) Vocational-1 (3) |  |  | SEC-3: SEC such as Cyber Security (2) (1+0+2) | Physical Education Sports (1) (0+0+2) | $\begin{aligned} & \hline \text { NCC/NSS/R\&R(S\&G)/ } \\ & \text { Cultural (1) (0+0+2) } \end{aligned}$ | 23 |
| VI | Physics C7(3+2), <br> Physics C8 (3+2) <br> Maths C10 (3) | Physics E-2 (3) <br> Vocational-2 (3) |  |  | SEC-4: Professional Communication (2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 23 |
| Exit option with Bachelor of Science Degree, B. Sc. Basic Degree (with a minimum of 144 credits) or continue studies with Physics as Major in the fourth year |  |  |  |  |  |  |  |  |
| VII | Physics C9(3+2), <br> Physics C10(3+2), <br> Physics C11(3) | Physics E-3 (3) Internship (2) <br> Res. Methodology (3) |  |  |  |  |  | 21 |
| VIII | Physics C12(3+2), <br> Physics C13(3) <br> Physics C14(3) | Physics E-4 (3) <br> Research Project (6)* |  |  |  |  |  | 20 |
| Award of Bachelor of Science Honours Degree, B.Sc. (Hons.) degree in Physics (with a minimum of 185 credits) |  |  |  |  |  |  |  |  |

*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 Science (Basic/Hons.) in subjects with practical with both subjects as majors in the $3^{\text {rd }}$ year

| Sem. | Discipline Core (DSC) | Discipline Elective(DSE)/ | Ability Enhancement Compulsory Courses (AECC), Languages(Credits ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (Credits) (L+T+P) | Open Elective (OE) (Credits) (L+T+P) |  |  | Skill based (Credits) $(L+T+P)$ | Value based (C | (redits) (L+T+P) |  |
| 1 | Discipline A1(4+2) <br> Discipline B1(4+2) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs. each) |  | SEC-1: Digital <br> Fluency (2)(1+0+2) | Physical Education Yoga (1) $(0+0+2)$ | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | Discipline A2(4+2) <br> Discipline B2(4+2) | OE-2 (3) | L1-2(3), L2-2(3) (4 hrs. each) | Environmenta Studies (2) |  | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural (1)(0+0+2) | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Discipline A3(4+2) <br> Discipline B3(4+2) | OE-3 (3) | L1-3(3), L2-3(3) (4 hrs. each) |  | SEC-2: Artificial Inte lligence (2)(1+0+2) | Physical EducationSports (1) (0+0+2) | NCC/NSS/R\&R(S\&G) /Cultural(1)(0+0+2) | 25 |
| IV | Discipline A4(4+2) <br> Discipline B4(4+2) | OE-4 (3) | L1-4(3), L2-4(3) <br> (4 hrs. each) | Constitution of India (2) |  | Physical Education Games (1) (0+0+2) | NCC/NSS/R\&R(S\&G) /Cultural(1)(0+0+2) | 25 |

Exit option with Diploma ( 100 credits) or continue the third year with both the subjects as majors

| V | Discipline A5(3+2), Discipline A6(3+2) <br> Discipline B5(3+2), Discipline B6(3+2) |  | SEC-3: SEC such as <br> Cyber Security (2) <br> $(1+0+2)$ | Physical Education <br> - Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G) <br> Cultural (1) (0+0+2) | 24 <br> Comer-4: Professional <br> Comunication (2) |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- |
| Physical Education <br> -Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G) <br> Cultural (1) (0+0+2) |  |  |  |  |  |

Exit option with Bachelor of Arts, B.A./Bachelor of Science, B. Sc. Basic Degree (with a minimum of 144 credits) or Choose one of the Disciplines as Major

| VII | Discipline A/B-9(3+2) Discipline $A / B-10(3+2)$ Discipline $A / B-11(3)$ | DS-A/B Elective-1(3) DS-A/B Elective-2(3) Res.Methodology(3) |  |  |  |  |  | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VIII | Discipline $A / B-12(3+2)$ <br> Discipline A/B-13(3) <br> Discipline A/B-14(3) | DS-A/B Elective 3(3) <br> Research Project (6)* |  |  |  |  |  | 20 |

[^1]
## IIIB. Model Program Structures for the Under-Graduate Programs in Universities and Colleges in Karnataka

Bachelor of Arts (Basic/Hons.) in subjects without practical with both subjects as majors in the $3^{\text {rd }}$ year

| Sem. | Discipline Core (DSC) (Credits) (L+T+P) | $\|$Discipline Elective(DSE) <br> / Open Elective (OE) <br> (Credits) (L+T+P) <br> Oat | Ability Enhancement Compulsory Courses (AECC), Languages (Credits) ( $\mathrm{L}+\mathrm{T}+\mathrm{P}$ ) |  | Skill Enhancement Courses (SEC) |  |  | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Skill based (Credits) (L+T+P) | Value based ( | (Credits) (L+T+P) |  |
| 1 | Discipline A1(3), A2(3) <br> Discipline B1(3), B2(3) | OE-1 (3) | L1-1(3), L2-1(3) <br> (4 hrs. each) |  | SEC-1: Digital <br> Fluency(2)(1+0+2) | Physical Education - <br> Yoga (1) (0+0+2) | Health \& Wellness <br> (1) $(0+0+2)$ | 25 |
| II | Discipline A3(3), A4(3) <br> Discipline B3(3), B4(3) | OE-2 (3) | L1-2(3), L2-2(3) <br> (4 hrs. each) | Environmental Studies (2) |  | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ Cultural(1) (0+0+2) | 25 |
| Exit option with Certificate (50 credits) |  |  |  |  |  |  |  |  |
| III | Discipline A5(3), A6(3) <br> Discipline B5(3), B6(3) | OE-3 (3) | $\begin{array}{\|l} \hline \text { L1-3(3), L2-3(3) } \\ \text { (4 hrs. each) } \\ \hline \end{array}$ |  | SEC-2: Artificial Intelligence (2)(1+0+2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| IV | Discipline A7(3), A8(3) <br> Discipline B7(3), B8(3) | OE-4 (3) | $\begin{aligned} & \hline \text { L1-4(3), L2-4(3) } \\ & \text { (4 hrs. each) } \\ & \hline \end{aligned}$ | Constitution of India (2) |  | Physical Education Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 25 |
| Exit option with Diploma (100 credits) |  |  |  |  |  |  |  |  |
| V | $\begin{aligned} & \text { Discipline A9(4), A10(4) } \\ & \text { Discipline B9(4), B10(4) } \end{aligned}$ | Vocational-1 (3) |  |  | SEC-3: SEC such as Cyber Security (2) $(1+0+2)$ | Physical Education Sports (1) ( $0+0+2$ ) | NCC/NSS/R\&R(S\&G)/ Cultural (1) (0+0+2) | 23 |
| VI | $\begin{aligned} & \hline \text { Discipline A11(4), A12(4) } \\ & \text { Discipline B11(4), B12(4) } \end{aligned}$ | Vocational-2 (3) Internship (2) |  |  | SEC-4: Professional Communication (2) | Physical Education - <br> Sports (1) (0+0+2) | NCC/NSS/R\&R(S\&G)/ <br> Cultural (1) (0+0+2) | 23 |
| Exit option with Bachelor of Arts, B.A. Degree (with a minimum of 144 credits) OR Choose one of the core Disciplines/subjects as Major in the fourth year |  |  |  |  |  |  |  |  |
| VII | Discipline A/B-13(4) <br> Discipline $A / B-14(4)$ <br> Discipline A/B-15(4) | DS-A/B Elective 1(3) DS-A/B Elective 2(3) Res. Methodology(3) |  |  |  |  |  | 21 |
| VIII | Discipline $A / B-16(3)$ <br> Discipline $A / B-17(3)$ <br> Discipline A/B-18(3) | DS-A/B Elective 3(3) DS-A/B Elective 4(3) Research Project (6)* |  |  |  |  |  | 21 |

[^2]
[^0]:    *In lieu of the research Project, two additional elective papers/Internship may be offered.

[^1]:    *In lieu of the research project, two additional elective papers/ Internship may be offered.

[^2]:    *In lieu of the research Project, two additional elective papers/Internship may be offered.

