## Model Programme Structure for 3 yrs Bachelor of Science with MEME Options (160 Credits)

| Level | SEM | Discipline Specific Core Courses (DSC) ( $\mathrm{L}+\mathrm{P}$ ) (Credits) |  | Discipline Specific Elective Courses (DSE) (L+P) <br> (Credits) | Ability <br> Enhancement Compulsory Courses (AECC) (L+P) (Credits) | Skill Enhancement Courses (SEC) (L+P) | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 1 | C1 (DSC1+DSC2) | $4+2=6$ |  | AECC-1 <br> English for Communication <br> (4) | SEC-1 (VBC-1) <br> (Democracy, Election \& Good Governance) <br> (2) | 30 |
|  |  | C2 (DSC1+DSC2) | $4+2=6$ |  |  |  |  |
|  |  | C3 (DSC1+DSC2) | $4+2=6$ |  |  |  |  |
|  |  | C4 (DSC1+DSC2) | $4+2=6$ |  |  |  |  |
|  |  | Total | 24 |  |  |  |  |
|  |  | C5 (DSC3+DSC4) | $4+2=6$ |  |  |  |  |
|  |  | C6 (DSC3+DSC4) | $4+2=6$ |  | AECC-2 | SEC-2 (VBC-2) |  |
|  | II | C7 (DSC3+DSC4) | $4+2=6$ |  | English for Communication | (Constitution of India \& Local Self Government) | 30 |
|  |  | C8 (DSC3+DSC4) | $4+2=6$ |  |  |  |  |
|  |  | Total | 24 |  |  |  |  |

Exit Option 1 (Level5) : Exit with Certificate Course in Science (with the completion of courses equal to minimum of 60 credits)

| Level | SEM | Discipline Specific Core <br> Courses (DSC) <br> (L + P) (Credits) | Discipline Specific <br> Elective Courses <br> (DSE) (L+P) | Ability <br> Enhancement <br> Compulsory <br> Courses (AECC) <br> (L+P) (Credits) | Skill Enhancement <br> Courses |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (SEC) (L+P) |  |  |  |  |  |$\quad$| Total |
| :---: |
| Credits |

Exit Option 2 (Level 6) : Exit with Diploma in Science
(with the completion of courses equal to minimum of 116 credits)

| Level | SEM | Discip <br> C <br> (L | Discip Elect (D | Specific Courses L+P) <br> its) | Ability <br> Enhancement Compulsory Courses (AECC) (L+P) (Credits) | Skill Enhancement Courses (SEC) (L+P) | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 7 | v |  | DSE 1 | $2+2=4$ | AECC-1 <br> English for Communication <br> (4) | SEC-5 <br> Multidisciplinary <br> (2) | 22 |
|  |  |  | DSE 2 | 2+2 $=4$ |  |  |  |
|  |  |  | DSE 3 | 2+2 $=4$ |  |  |  |
|  |  |  | DSE 4 | 2+2 $=4$ |  |  |  |
|  |  |  | Total | 16 |  |  |  |
|  | VI |  | DSE 5 | $2+2=4$ | AECC-2 <br> English for Communication <br> (4) | SEC-6 <br> Multidisciplinary <br> (2) | 22 |
|  |  |  | DSE 6 | $2+2=4$ |  |  |  |
|  |  |  | DSE 7 | $2+2=4$ |  |  |  |
|  |  |  | DSE 8 | $2+2=4$ |  |  |  |
|  |  |  | Total | 16 |  |  |  |

Exit Option 3 (Level 7): Exit with three years Bachelor of Science (with the completion of courses equal to minimum of 160 credits)

## OR

Continue studies for Bachelor of Science with (Honours / Research) four years Degree Programme

Fourth Year OR Level - 8

| Level | SEM | Discipline Specific Core Courses (DSC) ( $\mathrm{L}+\mathrm{P}$ ) (Credits) | Discipline Specific Elective Courses (DSE) (L+P) (Credits) | Ability Enhancement Compulsory Courses (AECC) (L+P) (Credits) | Skill Enhancement Courses (SEC) (L+P) | Total Credits |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8 | VII |  |  |  | SEC-7 <br> Multidisciplinary <br> (2) | 20 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  | VIII |  |  |  | SEC-8 <br> Multidisciplinary <br> (2) | 20 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

Exit Option 4 (Level 8): Exit with four years Bachelor of Science (Honors / Research) (With the completion of courses equal to minimum of 200 credits)

Note:

1. For First Year Semester - I, students have to select any four DSC courses available at their respective colleges. Same four courses they have to continue for Semester - II.
2. For Second Year Semester - III, students have to select any three out of four DSC courses selected for first year. Same three courses they have to continue for Semester - IV.
3. For Third Year Semester- V, students have to select any one DSC course out of three DSC courses selected for second year. Same course they have to continue for Semester - VI.
4. For semesters V\&VI there shall be Four DSE courses (papers) for each semester.
5. The DSC courses from C1 to C14 each have two papers of 50 marks each with combined passing i.e. minimum 35 marks are required to pass out of 100 marks.
a) Each DSC Course from C1 to C14 shall have two paper of 50 marks ( 40 marks semester end examination +10 marks internal assessment ) with separate passing
b) The examination of each AECC Course shall be of 50 marks ( 40 marks semester end examination +10 marks internal assessment)
c) Minimum marks for passing DSC and AECC Courses shall be as follows.
6. 14 Marks out of 40 Marks for semester end examination.
7. $\mathbf{4}$ marks out of 10 marks for internal assessment.
d) For SEC-1 and SEC-2 courses there shall be semester end examination of 50 marks whereas minimum marks required for passing these courses shall be 18. The question paper of these courses shall consist of 25 MCQs of 2 marks each.
8. For DSE courses (papers) of Semesters V \& VI, there shall be separate passing.
9. Students can exit after Level 5 with Certificate Course in Science (with the completion of courses equal to minimum of $\mathbf{6 0}$ credits).
10. Students can exit after Level 6 with Diploma in Science (with the completion of courses equal to minimum of $\mathbf{1 1 6}$ credits).
11. Students can exit after Level 7 with Bachelor of Science (with the completion of courses equal to minimum of $\mathbf{1 6 0}$ credits).
12. SEC: Skill Enhancement Courses (2 credits). Students have to select one SEC for each semester from the pool of courses available at their respective colleges
13. VBC: Value Based Courses (1 credit). Students have to study one VBC from Bahai Academy for first semester only.
14. Examination of AECC-3 (Env. Studies) (4 credits) will take place at the end of Semester-IV

## Link for the pool of SEC courses from National Skills Qualification Framework (NSOF)

(You may add or delete any courses as per available facilities)
https://drive.google.com/file/d/176Vwvx4SC2ONrt69XADruzI2qnfBPI o/view? usp=sharing ${ }_{1}$

| List of Skill Enhancement SEC Courses For all Disciplines |  |  |
| :---: | :---: | :---: |
| Performing Arts | Supply Chain Management \& Logistics | Computer Fundamental |
| Fine Arts | Digital Marketing | Basic instrumentation Skills |
| Travel and Tourism | Affiliate Marketing | Weather Forecasting |
| Digital Photography | Tally | Disaster Management |
| Video Recording | GST | IPR |
| Film Making \& Editing | Office Automation | Animation |
| Event Management | Hotel Management | Web Designing |
| Journalism \& Mass Communication | Human Resource | ICT Tools |
| DTP | Report Writing \& Presentation Skills | Packaging Design |
| - | --- | --- |
| - | --- | --- |
| Here we can add ' $n$ ' number of courses depending on availability of skilled faculty and infrastructure. |  |  |

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020) M.Sc. Programme Structure (Other than Mathematics and Statistics)
M.Sc. Part-I(Level-8)

| SEMESTER-I(Duration-Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sr. } \\ & \text { No. } \end{aligned}$ | Course Code | Teaching Scheme Theory and Practical |  |  | Examination Scheme |  |  |  |  |  |
|  |  |  |  |  |  | University Assessment(UA) |  |  | Internal Assessment(IA) |  |  |
|  |  |  | Lectures (Per week) | Hours (Per week) | Credit | Maximum Marks | Minimum Marks | Exam. Hours | Maximum Marks | Minimum Marks | Exam Hours |
| CGPA | 1 | CC-101 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-102 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-103 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-104 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CCPR-105 | 16 | 16 | 8 | 200 | 80 | -- | -- | -- | * |
| Total(A) |  |  | -- | -- | 24 | 520 | -- | -- | 80 | -- | -- |
| Non-CGPA | 1 | AEC-106 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| SEMESTER-II(Duration-Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| CGPA | 1 | CC-201 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-202 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-203 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-204 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | , |
|  | 5 | CCPR-205 | 16 | 16 | 8 | 200 | 80 | -- | 200 | 80 | * |
| Total(B) |  |  | -- | -- | 24 | 520 | -- | -- | 80 | -- | -- |
| Non-CGPA | 1 | SEC-206 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total(A+B) |  |  |  |  | 48 | 1040 | -- | -- | 160 | -- | -- |


| - Student contact hours per week:32Hours (Min.) |
| :--- |
| - TheoryandPracticalLectures:60MinutesEach |
| - CC-Core Course |
| - CCPR-Core Course Practical |
| - AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course |
| - SEC-Mandatory Non-CGPA compulsory Skill Enhancement Course |

- Requirement for Entry at Level 8:

Completed all requirements of the relevant Bachelor's degree (Level 7) with principal/major subjects.

- Exit Option at Level 8:Students can exit after Level 8 with Post Graduate Diploma in $\qquad$ if he/she completes the courses equivalent to minimum of 48 credits.
- Total Marks for M.Sc.-I : $\mathbf{1 2 0 0}$
- Total Credits for M.Sc.-I (Semester I \&II):48
- Practical Examination is annual.
- Examination for CCPR-105 shall be based on Semester I Practicals.
- Examination for CCPR-205 shall be based on Semester II Practicals.
- *Duration of Practical Examination as per respective BOS guidelines
- Separate passing is mandatory for Theory, Internal and Practical Examination mine

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020) M.Sc. Programme Structure (Other than Mathematics and Statistics)
M.Sc. Part-II(Level-9)

| SEMESTER-III(Duration-Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sr. } \\ & \text { No. } \end{aligned}$ | Course Code | Teaching Scheme Theory and Practical |  |  | Examination Scheme |  |  |  |  |  |
|  |  |  |  |  |  | University Assessment(UA) |  |  | Internal Assessment(IA) |  |  |
|  |  |  | $\begin{gathered} \text { Lectures } \\ \text { (Per week) } \end{gathered}$ | $\begin{gathered} \text { Hours } \\ \text { (Per week) } \end{gathered}$ | Credit | Maximum Marks | Minimum Marks | Exam. Hours | Maximum Marks | Minimum Marks | Exam. Hours |
| CGPA | 1 | CC-301 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CCS-302 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS-303 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | DSE-304 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CCPR-305 | 16 | 16 | 8 | 200 | 80 | -- | -- | -- | * |
| Total(C) |  |  | -- | -- | 24 | 520 | -- | -- | 80 | -- |  |
| Non-CGPA | 1 | AEC-306 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  | 2 | $\begin{aligned} & \hline \text { EC(SWM } \\ & \text { MOOC)- } \\ & 307 \\ & \hline \end{aligned}$ | Number of lectures and credit shall be as specified on SWAYAM MOOC |  |  |  |  |  |  |  |  |
| SEMESTER-IV(Duration-Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| CGPA | 1 | CC-401 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CCS-402 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS-403 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | DSE-404 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CCPR-405 | 16 | 16 | 8 | 200 | 80 | -- | -- | -- | * |
| Total(D) |  |  | -- | -- | 24 | 520 | -- | -- | 80 | -- | -- |
| Non-CGPA | 1 | SEC-406 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  | 2 | GE-407 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total(C+D) |  |  |  |  | 48 | 1040 | -- | -- | 160 | -- | -- |

- Student contact hours per week:32 Hours (Min.)
- TheoryandPracticalLectures:60 Minutes Each
- CC-Core Course
- CCS-Core Course Specialization
- CCPR-Core Course Practical and Project
- DSE-Discipline Specific Elective
- AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course
- SEC-Mandatory Non-CGPA compulsory Skill Enhancement Course
- EC(SWMMOOC)-Non-CGPA Elective Course
- GE-Multidisciplinary Generic Elective
- Requirement for Entry at Level 9:

Completed all requirements of the relevant Post Graduate Diploma (Level 8)in.........

- Exit at Level 9:Students will exit after Level 9 with Master's Degree in.......if he/she completes the courses equivalent to minimum of 96 credits.

|  | M.Sc.-I | M.Sc.-II | Total |
| :--- | :--- | :--- | :--- |
| Marks | $\mathbf{1 2 0 0}$ | $\mathbf{1 2 0 0}$ | $\mathbf{2 4 0 0}$ |
| Credits | $\mathbf{4 8}$ | $\mathbf{4 8}$ | $\mathbf{9 6}$ |

## I. CGPA course:

1. There shall be 14 Core Courses $(\mathrm{CC})$ per programme.
2. There shall be 04 Core Course Specialization(CCS) of 16 credits per programme.
3. There shall be 02 Discipline Specific Elective (DSE)courses of 08 credits per programme
4. Total credits for CGPA courses shall be of 96 credits per programme
II. Mandatory Non-CGPA Courses:
5. There shall be 02 Mandatory Non-CGPA compulsory Ability Enhancement Courses(AEC) of 02credits each per programme.
6. There shall be 01 Mandatory Non-CGPA compulsory Skill Enhancement Course(SEC) of 02 credits per programme.
7. There shall be one Elective Course (EC) (SWAYAM MOOC). The credits of this course shall be as specified on SWAYAM MOOC.
8. There shall be one Generic Elective (GE) course of 02 credits per programme. Each student has to take generic elective from the department other than parent department.
9. The total credits for Non-CGPA course shall be of 08 credits $+2-4$ credits of EC as per availability.
10. The credits assigned to the course and the programme are to be earned by the students and shall not have any relevance with the work load of the teacher.

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020)
M.Sc. Programme Structure (Statistics)
M.Sc. Part-I(Level-8)

| SEMESTER-I (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sr. } \\ & \text { No. } \end{aligned}$ | Course Code | Teaching Scheme Theory and Practical |  |  | Examination Scheme |  |  |  |  |  |
|  |  |  |  |  |  | University Assessment (UA) |  |  | Internal Assessment (IA) |  |  |
|  |  |  | Lectures (Per week) | Hours (Per week) | Credit | Maximum Marks | Minimum Marks | Exam. Hours | Maximum Marks | Minimum Marks | Exam. <br> Hours |
| CGPA | 1 | CC-101 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-102 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-103 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-104 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CC-105 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCPR-106 | 12 | 12 | 4 | 100 | 40 | * | -- | -- | -- |
| Total (A) |  |  | - | -- | 24 | 500 | -- | -- | 100 | -- | -- |
| Non-CGPA | 1 | AEC-107 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  |  |  |  | SEM | TER-II | uration- Si | Month) |  |  |  |  |
| CGPA | 1 | CC-201 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-202 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-203 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-204 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CC-205 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCPR-206 | 12 | 12 | 4 | 100 | 40 | * | -- | -- | -- |
| Total (B) |  |  | -- | -- | 24 | 500 | -- | -- | 100 | -- | -- |
| Non-CGPA | 1 | SEC-207 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total (A+B) |  |  |  |  | 48 | 1000 | -- | -- | 200 | -- | -- |


| - Student contact hours per week : 32 Hours (Min.) | - Total Marks for M.Sc.-I : 1200 |
| :---: | :---: |
| - Theory and Practical Lectures : $\mathbf{6 0}$ Minutes Each | - Total Credits for M.Sc.-I (Semester I \& II) : 48 |
| - CC-Core Course <br> - CCPR-Core Course Practical <br> - AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course <br> - SEC- Mandatory Non-CGPA compulsory Skill Enhancement Course | - Practical Examination is annual. <br> - Examination for CCPR-106 shall be based on Semester I Practical. <br> - Examination for CCPR-206 shall be based on Semester II Practical. <br> - *Duration of Practical Examination as per respective BOS guidelines <br> - Separate passing is mandatory for Theory, Internal and Practical Examination |
| - Requirement for Entry at Level 8: <br> Completed all requirements of the relevant Bachelor's degree (Level 7) with principal / major subjects Statistics |  |
| - Exit Option at Level 8: Students can exit after Level 8 with minimum of 48 credits. | Graduate Diploma Statistics if he/she completes the courses equivalent to |

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020) M.Sc. Programme Structure (Statistics)
M.Sc. Part II(Level 9)

SEMESTER-III (Duration- Six Month)

| SEMESTER-III (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sr . <br> No. | Course Code | Teaching Scheme Theory and Practical |  |  | Examination Scheme |  |  |  |  |  |
|  |  |  |  |  |  | University Assessment (UA) |  |  | Internal Assessment (IA) |  |  |
|  |  |  | Lectures (Per week) | Hours (Per week) | Credit | Maximum Marks | $\begin{aligned} & \text { Minimum } \\ & \text { Marks } \\ & \hline \end{aligned}$ | Exam. <br> Hours | Maximum Marks | Minimu m Marks | Exam. Hours |
| CGPA | 1 | CC-301 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CCS -302 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS-303 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CCS-304 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | DSE -305 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCPR-306 | 12 | 12 | 4 | 100 | 40 | * | -- | -- | - |
| Total (C) |  |  | - | - | 24 | 500 | -- | -- | 100 | -- |  |
| Non-CGPA | 1 | AEC-307 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  | 2 | EC-308 | Number of lectures and credit shall be as specified on SWAYAM MOOC |  |  |  |  |  |  |  |  |
| SEMESTER-IV (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| CGPA | 1 | CC-401 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CCS -402 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS-403 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CCS-404 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | DSE -405 | 4 | 4 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCPR-406 | 12 | 12 | 4 | 100 | 40 | * | -- | -- | -- |
| Total (D) |  |  | -- | -- | 24 | 500 | -- | -- | 100 | -- | -- |
| Non-CGPA | 1 | SEC-407 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  | 2 | GE-408 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total (C+D) |  |  |  |  | 48 | 1000 | -- | -- | 200 | -- | -- |

- Student contact hours per week : $\mathbf{3 2}$ Hours (Min.)
- Total Marks for M.Sc.-II : $\mathbf{1 2 0 0}$
- Theory and Practical Lectures : $\mathbf{6 0}$ Minutes Each
- Total Credits for M.Sc.-II (Semester III \& IV) :
- CC-Core Course
- Practical Examination is annual.
- CCS- Core Course Specialization
- CCPR-Core Course Practical
- DSE-Discipline Specific Elective
- AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course
- SEC- Mandatory Non-CGPA compulsory Skill Enhancement Course
- EC (SWM MOOC) - Non-CGPA Elective Course
- GE-Generic Elective
- Requirement for Entry at Level 9:

Completed all requirements of the relevant Post Graduate Diploma (Level 8) in Statistics

- Exit at Level 9: Students will exit after Level 9 with Master's Degree in Statistics if he/she completes the courses equivalent to minimum of 96 credits.

|  | M.Sc.-I | M.Sc.-II | Total |
| :--- | :---: | :---: | :---: |
| Marks | 1200 | 1200 | 2400 |
| Credits | 48 | 48 | 96 |

## I. CGPA course:

1. There shall be 12 Core Courses (CC) of 48 credits per programme.
2. There shall be 06 Core Course Specialization (CCS) of 24 credits per programme.
3. There shall be 02 Discipline Specific Elective (DSE) courses of 08 credits per programme.
4. There shall be 4 Core Course Practical (CCPR) of 16 credits per programme.
5. Total credits for CGPA courses shall be of 96 credits per programme.
II. Mandatory Non-CGPA Courses:
6. There shall be 02 Mandatory Non-CGPA compulsory Ability Enhancement Courses (AEC) of 02 credits each per programme.
7. There shall be 01 Mandatory Non-CGPA compulsory Skill Enhancement Course (SEC) of 02 credits per programme.
8. There shall be one Elective Course (EC) (SWAYAM MOOC). The credits of this course shall be as specified on SWAYAM MOOC.
9. There shall be one Generic Elective (GE) course of 02 credits per programme. Each student has to take generic elective from the department other than parent department.
10. The total credits for Non-CGPA course shall be of 08 credits $+2-4$ credits of EC as per availability.
11. The credits assigned to the courses and the programme are to be earned by the students and shall not have any relevance with the work load of the teacher.

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020) M.Sc. Programme Structure (Mathematics)
M.Sc. Part-I(Level-8)

| SEMESTER-I (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Sr. } \\ \text { No. } \end{gathered}$ | Course Code | Teaching Scheme Theory and Practical |  |  | University Assessment (UA) |  |  | Internal Assessment (IA) |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Lectures + Tutorial (Per week) | Hours (Per week) | Credit | $\begin{aligned} & \text { Maximum } \\ & \text { Marks } \end{aligned}$ | Minimum | Exam. Hours | $\begin{aligned} & \text { Maximum } \\ & \text { Marks } \end{aligned}$ | $\begin{array}{\|c\|} \hline \text { Minimum } \\ \text { Marks } \end{array}$ | Exam. Hours |
| CGPA | 1 | CC-101 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-102 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-103 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-104 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CC-105 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | OE-106 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
| Total (A) |  |  | -- | -- | 24 | 480 | -- | -- | 120 | -- | -- |
| Non-CGPA | 1 | AEC-107 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| SEMESTER-II (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| CGPA | 1 | CC-201 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | CC-202 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CC-203 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CC-204 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CC-205 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | OE-206 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
| Total (B) |  |  | -- | -- | 24 | 480 | -- | -- | 120 | -- | -- |
| Non-CGPA | 1 | SEC-207 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total (A+B) |  |  |  |  | 48 | 960 | -- | -- | 240 | -- | -- |


| $\bullet$ Student contact hours per week : $\mathbf{3 0}$ Hours | $\bullet$ Total Marks for M.Sc.-I : $\mathbf{1 2 0 0}$ |
| :--- | :--- |
| $\bullet$ Theory and Tutorial Lectures : $\mathbf{6 0}$ Minutes Each | $\bullet$ Total Credits for M.Sc.-I (Semester I \& II) : 48 |
| - CC-Core Course | Separate passing is mandatory for Theory and Internal <br> Examinations |
| - OE-Open Elective Course |  |
| - AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course |  |
| - SEC- Mandatory Non-CGPA compulsory Skill Enhancement Course |  |

- Requirement for Entry at Level 8:

1) Completed the Bachelor of science degree with principal / major subject Mathematics. or
2) Completed the Bachelor of science degree with Mathematics courses upto Second Year of Bachelor's degree. or
3) Completed the Bachelor's degree (Level 7) with principal / major subject Mathematics. or
4) Completed the Bachelor's degree (Level 7) with Mathematics courses upto undergraduate Diploma (Level 6)

- Exit Option at Level 8:

Students can exit after completion of Level 8 with Post Graduate Diploma in Mathematics.

Choice Based Credit System with Multiple Entry and Multiple Exit Option (NEP-2020) M.Sc. Programme Structure (Mathematics)
M.Sc. Part-II(Level-9)

| SEMESTER-III (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Sr. } \\ & \text { No. } \end{aligned}$ | Course Code | Teaching Scheme Theory and Practical |  |  | Examination Scheme |  |  |  |  |  |
|  |  |  |  |  |  | University Assessment (UA) |  |  | Internal Assessment (IA) |  |  |
|  |  |  | Lectures + Tutorial (Per week) | $\begin{gathered} \text { Hours } \\ \text { (Per week) } \end{gathered}$ | Credit | Maximum Marks | Minimum Marks | Exam. Hours | Maximum Marks | Minimum Marks | Exam. Hours |
| CGPA | 1 | CC-301 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | DSE-302 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS -303 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CCS -304 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CCS -305 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCS -306 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
| Total (C) |  |  | -- | -- | 24 | 480 | -- | -- | 120 | -- | -- |
|  | 1 | AEC-307 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Non-CGPA | 2 | $\begin{aligned} & \text { EC (SWM } \\ & \text { MOOC)- } \\ & 308 / \\ & \text { OE-308 } \\ & \hline \end{aligned}$ | Number of lectures and credit shall be as specified on SWAYAM- MOOC or as specified on OE |  |  |  |  |  |  |  |  |
| SEMESTER-IV (Duration- Six Month) |  |  |  |  |  |  |  |  |  |  |  |
| CGPA | 1 | CC-401 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 2 | DSE -402 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 3 | CCS -403 | 4+1 | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 4 | CCS -404 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 5 | CCS -405 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
|  | 6 | CCS -406 | $4+1$ | 5 | 4 | 80 | 32 | 3 | 20 | 8 | 1 |
| Total (D) |  |  | -- | -- | 24 | 480 | -- | -- | 120 | -- | -- |
| Non-CGPA | 1 | SEC-407 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
|  | 2 | GE-408 | 2 | 2 | 2 | -- | -- | -- | 50 | 20 | 2 |
| Total (C+D) |  |  |  |  | 48 | 960 | -- | -- | 240 | -- | -- |


| - Student contact hours per week: $\mathbf{3 0}$ Hours | $\bullet$ Total Marks for M.Sc.-II : 1200 |
| :--- | :--- |
| - Theory and Tutorial Lectures : $\mathbf{6 0}$ Minutes Each | $\bullet$ Total Credits for M.Sc.-II (Semester III \& IV) : 48 |
| - Separate passing is mandatory for Theory and Internal Examination |  |
| - CC-Core Course | • SEC- Mandatory Non-CGPA compulsory Skill Enhancement Course |
| - CCS- Core Course Specialization | $\bullet$ EC (SWM MOOC) - Non-CGPA Elective Course |
| - DSE-Discipline Specific Elective | $\bullet$ GE- Multidisciplinary Generic Elective |
| - AEC-Mandatory Non-CGPA compulsory Ability Enhancement Course |  |
| - Requirement for Entry at Level 9: |  |
| 1) Students of Shivaji University Kolhapur who have completed learning of Post Graduate Diploma (Level 8) in Mathematics. |  |
| 2) Completed all requirements of the relevant Post Graduate Diploma (Level 8) in Mathematics. |  |
| 3) Bachelor's Degree (Honours / Research) (Level 8) with principal / major subject Mathematics |  |
| - Exit at Level 9: |  |
| Students will exit after completion of Level 9 with Master's Degree in Mathematics. |  |


|  | M.Sc.-I | M.Sc.-II | Total |
| :--- | :--- | :--- | :--- |
| Marks | $\mathbf{1 2 0 0}$ | $\mathbf{1 2 0 0}$ | $\mathbf{2 4 0 0}$ |
| Credits | $\mathbf{4 8}$ | $\mathbf{4 8}$ | $\mathbf{9 6}$ |

## I. CGPA course:

1. There shall be 12 Core Courses (CC) of 48 credits per programme.
2. There shall be 08 Core Course Specialization (CCS) of 32 credits per programme.
3. There shall be 02 Discipline Specific Elective (DSE) courses of 08 credits per programme
4. There shall be 02 Open Elective Courses (OE) of 08 credits per programme.
5. Total credits for CGPA courses shall be of 96 credits per programme

## II. Mandatory Non-CGPA Courses:

1. There shall be 02 Mandatory Non-CGPA compulsory Ability Enhancement Courses (AEC) of 02 credits each per programme.
2. There shall be 02 Mandatory Non-CGPA compulsory Skill Enhancement Course (SEC) of 02 credits per programme.
3. There shall be one Elective Course (EC) (SWAYAM -MOOC). The credits of this course shall be as specified on SWAYAM -MOOC.
4. If for a particular program there is no compatible SWAYAM-MOOC then for that program OE shall be offered.
5. There shall be one Multidisciplinary Generic Elective (GE) course of 02 credits per programme. Each student has to take generic elective from the department other than parent department.
6. For Non-CGPA courses the total credits shall be $10+$ the credits of EC or OE as per availability.
7. The credits assigned to the course and the programmes are to be earned by the students and shall not have any relevance with the work load of the teacher.
