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Implementation of Choice  
based Credit System

Government of Gujarat  
Education Department  
No.CBC-262011-918-KH  
Sachivalaya, Gandhinagar  
Dated 11<sup>th</sup> April,2011.

Read:

1. Report of working group on undergraduate education by National Knowledge Commission
2. Minutes of the meeting of Vice Chancellor held on 28<sup>th</sup> February,2011 and 21st March 2011

CIRCULAR


As per recommendations National Knowledge Commission and UGC as well as AIU, the central and state universities and other institutions of higher education need to carry out Academic reforms. UGC in its 11th Plan proposal and strategies has taken a number of new initiatives for reforms in higher education. The reforms need to be carried out in the arena of admission policy, a uniform academic calendar, introduction of Choice based Credit System (CBCS) & semester system, examination reforms including continuous internal assessment and grading system.

2. Choice based Credit System (CBCS) has several unique features such as enhanced learning opportunities, ability to match students' scholastic needs and aspirations, inter institution transferability of students, part completion of an academic programme in the institution of enrollment and part completion in a specialized (and recognized) institution, improvement in educational quality and excellence, flexibility for working students to complete programme over an extended time and standardization and comparability of educational programmes across the country.

3. Implementation of CBCS has been under active consideration of various stakeholders of higher education in Gujarat. The CBCS Gujarat drafts as well as Model regulations have been prepared after studying the models of different universities across the the country where it has been successfully implemented. A Standard CBCS model (as per Appendix-A) has been evolved by organizing a series of workshops and taking opinions from various stakeholders of higher education.

4. The draft CBCS model Regulations (As per Appendix-B) prepared jointly by Vice Chancellors of various State Universities in consultation with the state government shall serve as a guideline to various State Universities for the implementation of CBCS in their undergraduate programmes from June, 2011. All the State Universities may like to use these Standard format for framing various undergraduate courses in the respective disciplines after following due process of approval by their respective governing organs.

By order and in the name of Governor of Gujarat,

  
(Dr. Has Mukh Adhia)  
Principal Secretary,  
Education Department

To,

- PS to Hon. Chief Minister
- PS to Hon. Minister for Education
- PS to Hon. Minister of state (H&TE)
- ALL Vice Chancellors of All Universities.
- All Registrars of the Universities
- Commissioner of Higher Education
- Select File

## Choice Based Credit System

### The Gujarat Initiative

#### Lead In

The 11<sup>th</sup> Five Year plan of India proposed various measures for academic reforms in higher education. The National Knowledge Commission in its report to the nation in 2008-2009 on higher education and Yashpal Committee Report in 2009 recommended revamping of higher education through academic and administrative reforms. Keeping in view the challenges of the changed times and make the higher education in Indian Universities compatible with the universities in developed nations, the UGC (11<sup>th</sup> plan, March 2009) and later on the Association of Indian Universities (AIU) stressed on the following recommendations:

1. Semester System
2. Choice Based Credit System.
3. Curriculum Development
4. Examination Reforms
5. Administrative Reforms

All the above recommendations for reforms have been reviewed in by representatives of various universities in the State and considered for implementation with the aim of transforming Higher Education – a transformation where students change from being passive recipients of knowledge to becoming active participants of the knowledge imbibing process. The education system in the State thus changes from a teacher-centric to learner-centric mode. It should aim at all-round integral development of students' personality so that they become good citizens of the new world order.

In consonance with the recommendations of the Gyanam committee, National Knowledge Commission and UGC recommendations the Government of Gujarat under the visionary leadership of Honorable Chief Minister Shree Narendra Modi, guidance from Honorable Education Minister Shree Ramanabhai Vora as well as Honorable Minister of State for Technical and Higher Education Smt Vasuban Trivedi directed the office of the Commissioner of Higher Education to constitute a committee of experts and educationalists to study the different recommendations and to prepare a framework for implementation of Choice Based Credit System (CBCS). The meeting of about 60 experts was held on 25<sup>th</sup> March 2009 under the chairmanship of Shri Kireet Joshi, advisor to Honorable Chief Minister. The project was entrusted to Maharaja Sayajirao University of Baroda. The Vice Chancellor of M.S. University of Baroda Prof. Ramesh K. Goyal and ex Vice Chancellor of Gujarat University Prof. A.U. Patel carried out an intensive study of existing system of higher education after consultation with experts and academicians and prepared a report which was submitted to the office of the Commissioner of Higher Education. The report was presented to all Vice Chancellors in a

meeting (September 2009, Saurashtra University) which was chaired by the Principal Secretary, Education Dr. Hasmukh Adhia.

This was subsequently followed by a series of workshops involving various stakeholders including Vice Chancellors, Members of Statutory bodies, Deans, Members of the Board of Studies, Principals, Faculty and students from the State Universities. Based upon such workshops, a standard framework was prepared and was presented to all Vice Chancellors in a meeting. (March 2010, Gujarat University)

With their commitment for quality in Higher education Vice Chancellors of all State Universities implemented Choice Based Credit System at Postgraduate level from the academic year 2010-11. It was implemented at Undergraduate level at Saurashtra University, Sardar Patel University, and Bhavnagar University and in the faculty of Science at M.S.University of Baroda.

The framework was further refined, consolidated and standardized with input received from the universities that had already implemented the CBCS. The present draft has been prepared after having considered the successful models in different Universities of India as well as operational feasibility of the Choice Based Credit System in the State Universities.

### 1. Semesterization

The duration of academic transaction has varied in different institutions in different periods. What should be the ideal length of an academic term? 3 years? 2 years? 1 year? 6 months? 4 months? All the above models are in use in universities across the nation. The annual system has now been almost completely discarded internationally. The examination at the end of a year or two years puts a greater demand on memory recall and the examination questions in such an examination would not have a comprehensive coverage of topics studied. Shorter duration terms – like 6 months – seems to be more suited as:-

- They will have relatively less demand for memory recall
- Questions can cover topics more comprehensively
- It is easier to ensure cohesive learning experience and academic momentum for shorter terms.

In a bi-semester system, an academic year consists of two semesters. The odd semesters may be scheduled from July to November, and even semester from December to April. Each semester will have 15-16 weeks for academic work equivalent to 90 days.

### 1. Choice Based Credit System (CBCS)

As per the Report by the Times of India on Challenges of Higher Education (2010) are the challenges of Globalization. They can be met by:

1. Making the curriculum interdisciplinary. All cutting edge development in technologies occur at the interface of two

2. Each Academic year shall consist of two semesters, each of 15 weeks of teaching equivalent to 90 working days. The Odd semester period shall be from July to November and the Even semester period shall be from December to April.
3. There shall be following three categories of courses in Undergraduate programme.
  - A) Core Course:  
 A course which shall compulsorily be studied by a candidate to complete the requirement for Degree in a said programme of study.  
 Core Compulsory is a course which has to be studied compulsorily as a part of Core requirement so as to get degree in a said discipline of study.  
 Core Elective or Core Allied is a course that supports/strengthens the Core Compulsory.
  - B) Elective Course:  
 It is a course which can be chosen from the pool of courses. The course may be specific/specialized/supportive or advanced to the discipline of study. They may be nurturing candidate's skill as well as proficiency.  
 Generic Elective courses add generic proficiency to the students and they are for the said discipline of study.  
 Open Elective courses are from the pool of courses that are Interdisciplinary and/or Multidisciplinary.
  - C) Foundation Course:  
 It is a course that aims to improve proficiency and skill of the students.  
 Compulsory Foundation courses add generic proficiency to the students belonging to all disciplines of study.  
 Elective Foundation courses are Value based and aimed at Man making Education.
4. All of the above courses may be designed so as to include Field work/Project work/Laboratory work/Entrepreneurship/Internship/Vocational training etc depending upon the course requirement. The credit distribution may be done keeping in mind the weight age of the required skill in the said discipline of study.
5. In addition to the above three type of courses, more courses may be designed in future. They may be of following types:
  - A. Self Study Courses  
 The courses that enables students to learn on their own.
  - B. Add on Courses  
 The courses that allow students to earn more credits than minimum required for the said programme. These courses may enable the students to get equipped with advance skills and proficiency.
  - C. Advanced level Foundation courses  
 These are the courses that have special emphasis on proficiency in multiple languages as well as use of ICT in Knowledge Management.
6. Each course shall have a unique Course code. The Core courses, Elective courses and the Foundation courses shall be abbreviated respectively as C, E and F.
  1. Core Compulsory                    CC  
 Core Elective                        CE
  2. Elective Generic                    EG  
 Elective Open                        EO
  3. Foundation Compulsory            FC

Foundation Elective FE

The normal graduation programme shall have 20 credits/semester. The total number of credits for an G level undergraduate programme shall be 120. The weight age of Core, Elective and Foundation courses shall remain as follows:

Academic year	Semester	Core	Elective	Foundation
1	I & II	60%	20%	20%
2	III & IV	60%	20%	20%
3	V & VI	60%	20%	20%

A general framework for G level undergraduate programme shall be as follows:

Semester	I	II	III	IV	V	VI	Total
Credits	20	20	20	20	20	20	120

The A level and S level programmes shall be considered for implementation at a later stage.

Level	I	II	III	IV	V	VI	VII	VIII	Total
A	24	24	24	24	24	24	-	-	144
S	20	20	25	25	25	25	25	25	190

7. Since every course is independent and Self-contained, some courses can be permitted to be registered by the students of other departments, enabling them Cross-border and Interdisciplinary mobility.
8. A candidate has a provision to go with a slow pace by registering for a minimum of 12 credits in a semester. He/she may go with an accelerated pace by registering for a maximum of 23 credits in a semester.
9. A candidate may avail a maximum of two blank semesters in one stretch. However he/she may have to pay a prescribed fee for maintaining a blank semester. If a candidate takes more than six semesters to complete the requirements of 120 credits, he/she will have to pay a prescribed fee for the credits registered during the spilled over semester.
10. A candidate can avail four additional semesters for the completion of the stipulated 120 credit requirement for a programme. However in special cases, a candidate with the permission of the college/university can avail two more semesters. The duration may be extended by the universities in the second cycle of the CBCS implementation.

### Attendance and Medium of Instruction:

The Attendance Rules as well as the medium of Instruction shall be as per the norms of Concerned University.

### Evaluation Methods:

1. A student shall be evaluated through Comprehensive Continuous Assessment (CCA) as well as the End of Semester examination. The weight age of CCA shall be 30%, where as the weight age of the Semester end examination shall be 70%.
2. The In Semester assessment (CCA) is spread through the duration of the course and is to be done by the Teacher teaching the course. The assessment is to be done by various means including:
  - Written Tests
  - MCQ based quiz
  - Presentations/Seminars
  - Project work/Field work
  - Group discussions/Group activities.

The End of Semester examination shall have an assessment based upon following perspective with respect to all the courses:

- Evaluation with respect to Knowledge
- Evaluation with respect to Understanding
- Evaluation with respect to Skill
- Evaluation with respect to Application
- Higher Order Thinking Skills.

With respect to all the above components, there will be following four types of Questions from each unit of the course.

1. MCQ
2. Short Questions
3. Long answer questions
4. Very long answer questions

The questions may largely be from the questions from the question bank for the each Course.

The Schedule of the In.Semester examination (Internal Evaluation) and the End of Semester examination (External Evaluation) shall be as follows. The End of Semester Examination will be conducted by the University.

It will be compulsory for a candidate to obtain passing percentage in both Internal as well as External Evaluation. The passing marks for each course shall be 40%, or as decided

by the University.

Component	Units Covered	Weight age	Period of Assessment
I	1 & 2	15%	To be consolidated by 8 <sup>th</sup> week
II	3 & 4	15%	To be consolidated by 15 <sup>th</sup> week
III	Entire Course	70%	To be consolidated by 18 <sup>th</sup> to 20 <sup>th</sup> week

Final Grade should be announced by 24<sup>th</sup> week.

The candidate will never be said to have failed in a Course if he/she is unsuccessful in completing the course by the end of the semester. He/she is said to have Dropped the course.

The details of any Dropped paper will not appear in the Grade Card

#### Promotion, Re-Admission and Time for Completion of Course:

1. A candidate who has undergone a regular course of study in Semester I, fulfill the required criteria of attendance and has secured marks equal to passing standard both in Internal and External Examination shall be eligible for promotion to Semester II. He/she will have to earn a minimum of 12 Credits in Semester I.
2. A candidate who has successfully completed all the courses of Semester I, but not all the courses of Semester II shall be eligible for promotion to Semester III. He/she will be required to complete all courses of Semester II before migrating to Semester IV
3. A candidate who has undergone a regular course of study in Semester III, fulfill the required criteria of attendance and has secured marks equal to passing standard both in Internal and External Examination and having earned a minimum of 12 Credits shall be eligible for promotion to Semester IV.
4. A candidate who has successfully completed all the courses of Semester I and II but not all the courses of Semester III shall be eligible for promotion to Semester IV. He/she will be required to complete all courses of Semester III before migrating to Semester V
5. The same rules shall be applied for promotion from Semester IV to V and from V to VI respectively.
6. A candidate will be allowed two blank semesters continuously in case he/she may have to leave his/her study halfway due to unforeseen circumstances. However he/she may have to pay the prescribed registration fee as per the College/University norms for such semesters.
7. A candidate shall have maximum of 10 semesters (five academic years) for completion of a said programme in case he/she wishes to go at a slower pace by registering a minimum



of 12 credits per semester. However he/she will have to pay the prescribed registration fee for each of the semester in addition to the course fee for the courses he/she avails during each semester.

8. A candidate shall have a choice of going at fast pace by registering for 23 credits per semester.
9. The minimum and maximum number of credits may increase provided a candidate opts for Add on courses.
10. The tentative/provisional grade shall be issued at the end of every semester indicating the courses completed successfully. The final Grade Card may be issued by the Registrar of the concerned university after a candidate has successfully completed all the courses of the said programme.

#### Procedure for Awarding Grades:

A Normalization Committee shall be set up for every course. The committee will comprise of Head of the Department, One senior Faculty member from the same department and the concerned Course teacher.

The committee shall decide:

1. The Lower cut off to draw boundary between unsuccessful and successful candidates. This will be based upon analysis and logical thinking.
2. The Lower end of Grade and the Higher end of Grade that is thought to be appropriate for grading of students in a scale of 10 from 4 to 10.

Based upon above, the committee will calculate an Intermediate Score called U (Unit Score Value) which is spread between 0 and 1.

$$U = \frac{M - \text{Min}(M)}{\text{Max}(M) - \text{Min}(M)}$$

Where M is the score of candidate for the said course, Min (M) is the minimum score in the class for the said course and Max (M) is the maximum score in the class for the said course, after eliminating the scores of unsuccessful candidates.

The Normalized Percentage value is calculated as follows:

$$P = \{(B - A) \times U\} + A$$

Where A is the marks corresponding to the Lower limit of the Lower end of the grade decided to be awarded and B is the marks corresponding to the Upper limit of the Higher end of the grade decided to be awarded.

If Normalization committee decides to grade all successful candidates from 5 to 10 in a scale of 10, then A is equal to 40 and B is equal to 99. This can be explained on the basis of following table.

Grade Point	Lower limit (A)	Upper limit (B)	Range for P	Grade
4	30	39	$30 \geq P < 40$	Dropped
5	40	49	$40 \geq P < 50$	E
6	50	59	$50 \geq P < 60$	D
7	60	69	$60 \geq P < 70$	C
8	70	79	$70 \geq P < 80$	B
9	80	89	$80 \geq P < 90$	A
10	90	99	$90 \geq P < 100$	O

The Semester end Grade point average (SGPA) and the Course end Cumulative Grade point average (CGPA) are computed as follows.

The Grade Point in a said course may be calculated by using the formula

$GP = CV \times G$ , where CV is the Credit Value of the said course and G is the Grade awarded to a candidate in the said course.

The SGPA may be calculated as follows:

$SGPA = \frac{\text{Sum of all GPs in the said Semester}}{\text{Sum of Credits in the said semester}}$

The CGPA may be calculated as follows:

$CGPA = \frac{\text{Sum of all GPs in all the Semesters}}{\text{Credits for the said Programme}}$

The CGPA may be expressed to an accuracy of three decimal digits.

The Percentage equivalence may be obtained by multiplying CGPA by 10.

#### Provision for Appeal:

There shall be a provision for Appeal for a candidate who may be dissatisfied with the Grade he/she has been awarded. He/she can approach the Grievance Cell with the written submission. The appeal may be made for In Semester examination as well as the End of Semester examination. The Grievance Cell is empowered to revise the grades if the case is genuine and is also empowered to penalize the candidate if his/her submission is found to be baseless and unduly motivated. The Grievance Cell may be set up as per the norms of the University/ Institution

CBCS Regulation for Undergraduate Programme

These Regulations shall govern Undergraduate programmes under the Choice Based Credit System. These regulations shall come into force from Academic year 2011-2012.

Definitions:

1. "Undergraduate programmes" mean Bachelor's degree programmes in the Faculties of Science, Arts, Commerce, Education, Social Science, Law and Home Science (Where ever it is applicable to the concerned university.)
2. "An academic year" consists of two semesters. Each semester will have 15-16 weeks for academic work equivalent to 90 days. The odd semesters may be scheduled from July to November and even semester from December to April.
3. "Programme" is used for a fixed educational programme in place of Degree. A normal undergraduate programme shall be of six semester's duration.
4. "Course" is a component of programme i.e. in the CBCS; papers will be referred to as courses. Each Course is identified by a unique course code. Every course is not of equal weight age. Each course, in addition of having a curriculum, will have learning objectives and learning outcome.  
A Course may be designed to involve lectures/tutorials/laboratory work/ field work/project work/vocational training/viva voce etc. or combination of some of these.
5. "Credit" means the unit by which the course work is measured. It defines the quantum of contents/syllabus prescribed for the course. It also determines the number of hours of instructions required per week. In these regulations, one credit means one hour of direct teaching work or two hours of practical work/field work per week for 15 weeks in a semester.
6. "Grade letter" is an index to indicate the performance of a student in a particular course. It is arrived at by transformation of actual marks secured by a student in a said course. Grade letters are O, A, B, C, D, E, F.
7. "Grade Point" is the weight age allotted to each grade letter depending on the range of marks awarded in a course.
8. "Credit Points" refer to the product of "No. of credits assigned to the course" and the grade point secured for the same course.
9. "Semester Grade Point Average"(SGPA) is an index of a student's performance in a given semester. It is the ratio of the "total credit points earned by the students in all the courses at the semester" and the "total number of credits assigned to the courses" in the semester.
10. "Cumulative grade point Average" (CGPA) refers to the cumulative grade point average of SGPA and is computed based on the following formula.

$$\text{CGPA} = \frac{\text{Sum of all Credit points of the entire programme}}{\text{Sum of Credits up to the end of the programme}}$$

11. "Fee" means the fee prescribed by the University for the Undergraduate

Programme. The tuition fee and the examination fee of a semester will be in accordance with the number of credits a candidate has registered for in that semester.

### Salient Features of Choice Based Credit System:

1. All Undergraduate departments in the Universities/Affiliated Colleges shall offer undergraduate programmes in faculties of Arts, Commerce, Science, Education, Home Science, Law and Social Sciences from the Academic year 2011-12.
2. A student will have to get enrolled at an Affiliated College for a Core course depending upon his/her requirement of a degree in the said discipline of study.
3. A student will have a choice of selecting an Elective as well as Foundation courses from a pool of courses. She/he will have a choice of selecting such courses from the same department/faculty or the other department/faculty depending upon his/her interest, need, long term goals and also feasibility in terms of available expertise and infrastructure.
4. The faculty/an Affiliated college may design and offer courses after the due consideration and approval by the university.
5. Each course shall be assigned a specific number of Credits.
6. A Core course is the course which should compulsorily be studied by a candidate as a Core requirement so as to get degree in a said discipline of study.  
Two courses each of Core compulsory and Core Elective shall be offered to each student in every semester.  
The Credit weight age for Core course shall be of Three (03) Credits.
7. In addition to the Core courses, a student will have to choose Elective as well as Foundation courses from a pool of courses.  
Two courses of Elective, one each from Generic Elective and Interdisciplinary/Multidisciplinary/Subject centric electives shall have to be offered. The Credit weight age for Elective course shall be of Two (02) Credits.  
Two courses of Foundation, one each from Compulsory Foundation and Elective Foundation shall have to be offered. The Credit weight age for Foundation course shall be of Two (02) Credits.

### Undergraduate Course Structure:

1. Undergraduate programmes offered in the CBCS will be of Six semester duration. The General (G) level programme will be of 120 Credits distributed equally among the six semesters. The Advanced (A) level programme (Honors) shall be of 144 Credits distributed equally among the six semesters. A Special (S) level BS programme of eight semester duration will be considered for implementation at a later stage.

or more discipline. Interdisciplinary approach enables integration of concepts, theories, techniques, and perspectives from two or more disciplines to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline

2. Bridging the gap between professional and liberal education. This will greatly improve the employability of students.
3. Promoting students' mobility – horizontal as well as vertical.
4. Collaboration with industry and foreign partners to foster innovations. This will go a long way in capacity building of students.

Choice Based Credit System (CBCS) contains all salient features mentioned above. It offers a flexible system of learning. The system permits student to

- Learn at their own pace
- Choose electives from a wide range of courses
- Undergo additional courses and acquire more than required number of credits
- Adopt an interdisciplinary approach in learning
- Inter college/University transfer of Credits
- Complete a part of programme in the parent institute and get enrolled in another institution for specialized courses
- Enhance skill/employability by taking up project work, entrepreneurship and vocational training.
- Carry on and transfer their credit
- Make best use of the expertise of available faculty.

Some of the terms used in the new system along with their short definitions are as follows:

#### Programme:-

The term “Programme” is used for a fixed educational programme instead of “Degree”

#### Course:-

A “Course” is a component of programme, i.e. in the new system; papers will be referred to as courses. Each course is identified by a unique course code. Every course is not of equal weightage. While designing syllabus, course can have defined weightages. These weightages are called credits. Each course, in addition to having a curriculum, will have learning objectives and learning outcome. A course may be designed to comprise lectures/ tutorials/ laboratory work/ field work/ project work/vocational training /viva voce etc or a combination of some of these.

### Credit:-

Credit defines the quantum of content/syllabus prescribed for the course. It may be a unit prescribed for a course and is determined by the number of hours of instruction required per week. Thus, in each course credits will be assigned on the basis of the no. of hours required per week for lectures/tutorials/lab work/field work to complete the course in a single semester.

1 credit = 1 hour of direct teaching / week

1 credit = 2 hours of lab work /week

1 credit = 2 hours of field work /project /week

Thus, 1 credit course requires 1 hour per week during a 15 week semester and accordingly a 3 credit or 4 credit courses requires 3 or 4 hours per week during a 15 week semester.

A course which has 3-4 hours per week per semester with weightage of 3 to 4 credits is considered as a full course.

A paper with 2 credits is like a half paper.

A course of 3 credits may be so designed that there will be 2 credits for theory and 1 credit for lab work/ field work/ project work

A course of 4 credits may be so designed that there will be 3 credits for theory and 1 credit for lab work/ field work/ project work.

Typically a course will comprise of 4(four) units.

### Grade:-

Grade is an index to indicate the performance of a student in a particular course.

### Types of Courses:

Courses in a programme will be of three kinds: Core, Elective and Foundation.

#### 1. Core Course:-

There will be a Core Course in every semester. This is the course which should compulsorily be studied by a candidate as a core requirement to complete the requirement of a degree in a said discipline of study.

A course may be a soft core if there is a choice or an option for the candidate to choose from a pool of courses from the sister/allied disciplines which supports the main discipline. It may be called "Core Elective" or "Core Allied"

In contrast, a Compulsory Course paper is called "Core compulsory"

2. Elective Course:-

Elective course is a course which can be chosen from a pool of papers. It may be:

- Supportive to the discipline of study
- Providing an expended scope
- Enabling an exposure to some other discipline/domain
- Nurturing candidate's proficiency/skill.

An elective may be "Generic Elective" focusing on those courses which add generic proficiency to the students.

An elective be "Discipline centric" elective. It may be called "Subject Elective."

An elective paper may be chosen from an unrelated discipline. It may be called an "Open Elective."

3. Foundation Course:-

The Foundation Courses will be of two kinds: Compulsory Foundation and Elective foundation.

"Compulsory Foundation" courses are the courses based upon the content that leads to Knowledge enhancement. They are mandatory for all disciplines.

"Elective Foundation" courses are value based, and are aimed at man making education.

The credit framework for the Core course, Elective course and the Foundation course for a semester shall be as follows.

<u>Core Compulsory</u>	<u>Generic Elective</u>	<u>Compulsory foundation</u>
Course I -3 credits Course II -3 credits 6 credits/semester	2 credits/semester	2 credits/semester
<u>Core Elective (Allied)</u>	<u>Discipline centric elective/Open elective</u>	<u>Elective foundation</u>
Course I -3 credits Course II -3 credits 6 credits/semester	2 credits/semester	2 credits/semester

Core courses, thus, shall have 12 credits/semester. Elective courses shall have 4 Credits/semester. Foundation courses shall have 4 credits/semester.

The normal graduation programme, thus, shall have 20 credits/semester and the total Credits of all the six semester shall be 120.

Since every course is independent and self-contained, some courses can be permitted to be registered by the students of other departments; enabling cross-border and inter-disciplinary mobility of the students. The courses being offered by Dr. Babasaheb Ambedkar Open University, Gujarat Knowledge Society and SCOPE which have been Standardized according to the CBCS framework and so declared by KCG may be directly Offered as Elective and Foundation courses.

New courses may be introduced by the department/ institution at any time depending upon the requirement after completing necessary formalities.

A general framework for Bachelor's programme shall as follows:

- G (General) Level programme 120 credits
- A (Honors) Level programme 144 credits
- S (Special) Level 4 year BS programme 190 credits

Level	Semester –Wise credits.								Total
	1	2	3	4	5	6	7	8	
G	20	20	20	20	20	20	-	-	120
A	24	24	24	24	24	24	-	-	144
S	20	20	25	25	25	25	25	25	190

P.S.: S level shall be considered for implementation at a later stage.

The semester wise weightage of core, elective and foundation courses shall be as follows:

Academic year	Core & Core Allied	Interdisciplinary Electives	Foundation courses
Sem I & II	60%	20%	20%
Sem III & IV	60%	20%	20%
Sem IV & IV	60%	20%	20%

- A Candidate has a provision to go with a slow pace by registering for a minimum of 12 credits in a semester. He/She may go with an accelerated pace by registering for a maximum of 23 credits in a semester provided he/she opts for 120 credits for a normal G level programme.
- The tuition fee and examination fee to be fixed up by the university will be in accordance with the number of credits equivalent to courses a candidate has registered in the given semester.



- A candidate may avail a maximum of two blank semesters in one stretch. However, he has to pay a nominal fee for maintaining a blank semester.
- If a candidate takes more than six semesters to complete the requirements of 120 credits, he/she will have to pay a nominal extra fee for the credits registered during the spilled over semester.
- A candidate can avail four additional semesters for completion of the stipulated 120 credits requirement for the programme. However in special cases, the student with the permission of the college/university can avail two more semesters. (The duration may be extended by the universities in the second cycle of CBCS implementation)
- A candidate who decides to avail the add-on facility can register for a maximum of 27 credits per semester including 12-23 credits for regular papers. Such candidates have to pay extra fee for add on credits registered.
- University would decide on the validity of credits already earned by a candidate even after a lapse of more number of years, provided the candidate is able to cross the entry level of competency for the course.

### 3. Class room processes

#### A) Active Learning Methodology:

Transformation in the field of higher education requires revamping of class room processes. Class room needs to be made a place of an interesting learning experience. With this ideology Active learning methodology (ALM) is to be introduced in the Higher Education. The salient features of ALM are as follows.

- a) It is activity based learning
- b) The emphasis is on learning through meaningful interaction.
- c) It is a student centric methodology.

#### B) Use of ICT

ICT has made the teaching learning processes more interactive. Besides it empowers the teachers as well as students to explore the possibility of accessing knowledge worldwide.

- a) Digital Education and Learning Laboratory (DEL) has been set up in 216 colleges and proposal to set up such laboratories in 170 more colleges is in pipeline. These laboratories shall work as learning centers for all the subjects.
- b) Sandhan facilitates students to have an access to an interactive presentation by eminent academicians from across the nation. In addition it also covers aspects such as personality development, proficiency in English, research methodology and preparation for various competitive examinations. It is also going to function as a valuable repository of knowledge in the form of CDs and DVDs.

- c) There is a proposal to set up an Audiovisual room in the colleges across the State. This would facilitate learning through programmes that would be telecast live.
  - d) There is plan to prepare E content of various courses to be introduced as a part of CBCS. The motivation and support to develop E content under NME-ICT has been provided to the teachers across the state and the response as well as result has been quite good. E content will facilitate learning at anytime and for as many times as the student wishes.
  - e) The higher education department plans to set up 180 computer laboratories each having 100 computers and internet connectivity. Apart from being used as centers for On Demand On Line examination (ODOLE), these laboratories will serve as learning centers.
- C) The teaching learning process shall also involve project work/field work, Quiz as well as presentations by the students. This would be largely facilitated by Teacher Fellow (TF) as well as Course Assistant (CA). This will also form a part of Internal (Comprehensive) evaluation of the students. This will help imparting the necessary skill to the students as well as it will lead to development of analytical as well as research aptitude among the students.

#### 4. Teacher Capacity Building

The teacher training and capacity building is going to be carried out to enhance the skill, knowledge as well as to create right kind of attitude required to play a role of teacher. It will not only increase the competency with respect to knowledge but also in terms of technology, research, teaching and pedagogy. This will enable them to work as facilitator as well as motivator for students.

#### 5. Continuous and Comprehensive Assessment

Continuous and Comprehensive assessment is an integral part of CBCS.

A continuous assessment system in semester system (also known as internal assessment/comprehensive assessment) is spread through the duration of course and is done by the teacher teaching the course. The assessment is done through various means including:

- Written tests
- MCQ based quizzes
- Presentations
- Projects
- Field visits
- Seminars
- Group discussions/activities etc

The continuous assessment provides a feedback on teaching learning process. The feedback after being analyzed is passed on to the concerned for implementation and subsequent improvement.

To let the candidate know about his/her progress periodically, a semester is divided into three distinct components.

- The weightage of the in semester evolution (internal evaluation) shall be 30% and weightage of the end of semester evaluation shall be 70%.

Component	Units covered in a course	Weightage	Weightage Unit wise	Period of cont-assessment
I	1,2	15%	7.5%	To be consolidated by 8 <sup>th</sup> week
II	3,4	15%	7.5%	To be consolidated by 16 <sup>th</sup> week
III	Semester end exam	70%	17.5%	To be consolidated by 18-20 week
<b>Final Grades to be announced by 24<sup>th</sup> week</b>				

The end of semester examination shall have assessment from following perspective with respect to all courses:

1. Evaluation with respect to knowledge.
2. Evaluation with respect to Understanding.
3. Evaluation with respect to skill.
4. Evaluation with respect to Applications.
5. Higher Order Thinking Skills

With respect to all above components, there will be following four types of questions from each unit of the course:

1. MCQ
2. Short Questions
3. Long Answer Questions
4. Very Long Answer Questions

Question bank shall be prepared by the subject experts across the State. It will have all types of questions as mentioned above. The questions will be largely based upon the Course objective and the Course outcome and it will cover all the aspects of the course content.

Question papers will be set in such a manner that even a very ordinary student would be able to successfully clear/answer a part of the question paper and obtain minimum % of the marks based on a basic level of Conceptual clarity, understanding and application.

The next 30% questions would be tough and will be of that level that about 30% of the class can attempt successfully.

The next 10% will be of a higher level of difficulty which only about 5% of the class can attempt successfully.

The remaining 10% will be truly challenging questions of a level of difficulty that barely 1% of class can attempt both in terms of speed and difficulty.

A questions bank shall be prepared for each course based upon learning objectives and learning outcome of each of the course.

A student shall have an option to go for on demand on line examination (ODOLE).

Preparations for development of a module for ODOLE are being made on the model of National Institute of Open School.

The evaluation papers/ assessments during component I and component II of assessment will be immediately returned to the candidates.

The duration of component I and component II examination shall be 1 hour.

The duration of semester end examination shall be of 2 hours.

There shall be no practical examination for component I and II.

The evaluation of semester end practical viva voce examination, wherever such an examination is required to be conducted, will be carried out by a panel consisting an internal examiner and an external examiner in case such an examination is to be conducted at University level. In case of viva voce examination, the examiners should particularly test for the creative and problem solving capabilities in a candidate.

The distribution of maximum marks for practical examination will be 20 and for theory examination will be 50 and the total semester end examination will be for 70 marks for bachelor degree programme.

In Internal assessment, the student will have to score 40% marks in each of the component.

The candidate will NEVER be said to have failed in a course if he/she is unsuccessful in completing the course by the end of the semester. On the contrary he/she is said to have DROPPED the paper.

**The regulations of the university and provisions therein would determine conduct of continuous and comprehensive assessment for the programme.**

## **6. Grading**

Grading constitutes the core of CBCS, as it tries to reduce the subjective element in Assessment/evaluation and there by prevents any disadvantage to the student. Grade is an index of the performance of a student in a particular course. It is the transformation of scaled marks secured by a student in a course. Grade point is the weightage allotted to each grade depending on the range of marks awarded in a course.

Grade Points	Description	% of marks	Division/Grade
10	Outstanding	90% → 99%	First/O
9	Excellent	80% → 89%	First/A
8	Very good	70% → 79%	First/B
7	Good	60% → 69%	First/C
6	Fair	50% → 59%	Second/D
5	Average	40% → 49%	Pass/E
4	DROPPED	Below 40%	F

F = Dropped (<40%)

The % of marks taken into considerations includes marks of component I, II and III of each semester.

Semester Grade Point Average (SGPA) indicates the performance of a student in a given semester. SGPA is based on the total credit points earned by the student in all the courses and the total numbers of credits assigned to the courses in a semester.

Credit point for the paper = No. of credits assigned for the course  
X

Grade point secured for the course

SGPA = Total credit points earned in a semester / Total credits for that semester

For Example

Course	Credit	Marks obtained by student (In %)	Grade letter	Grade point	Credits assigned x Grade point = Credit Point
Core comp.	6	60	B	6	6 X 6 = 36
Core allied	6	55	C	5	6 X 5 = 30
Elective Generic	2	60	B	6	2 X 7 = 14
Elective Open	2	60	B	6	2 X 6 = 12
Foundation Generic	2	60	B	6	2 X 6 = 12
Foundation Elective	2	60	B	6	2 X 7 = 14
	20				118

$$\text{SGPA} = 118/20 = 5.9$$

Thus SGPA for semester I is 5.9

Cumulative grade point average (CGPA) is obtained by dividing the total number of credit points earned in all the semester by the total number of credits in all the semester.

For Example

I	Semester	Total	Credit	Point	118
II	"	"	"	"	130
III	"	"	"	"	122
IV	"	"	"	"	136
V	"	"	"	"	128
VI	"	"	"	"	130
Total					764

Total credits for semester I+II+III+IV+V+VI = 120

$$\text{CGPA} = 764/120 = 6.36$$

The Class/ Division shall be awarded on the basis of CGPA.

- |                                    |      |      |    |       |
|------------------------------------|------|------|----|-------|
| 1. First division with Distinction | CGPA | 9.00 | to | 10.00 |
| 2. First division                  | CGPA | 8.00 | to | 08.99 |
| 3. Higher second Division          | CGPA | 7.00 | to | 07.99 |
| 4. Second Division                 | CGPA | 6.00 | to | 06.99 |
| 5. Pass Division                   | CGPA | 5.00 | to | 05.99 |

Lead Out:

CBCS is the mother of student centric educational reforms. A student is provided with an academically rich, highly flexible learning system blended with abundant provision for skill practice and activity orientation that he/she could learn in depth without sacrificing his/her creativity.

> A student can exercise the option to decide his/her own pace of learning- slow, normal or accelerated plan and sequence his/her choice of paper, learn to face challenges through term work/ project work/ and may venture out to acquire extra knowledge/ proficiency through add-on facilities.

>A student enjoys an extra ordinary benefit that his/her evaluation would be in terms of grades, computed through a more scientific and a logical process of normalization which imbibes the advantages of relative weighing of the performances against evaluating in an absolute way.

>The great advantage is that the learning process is made continuous and the evaluation process is not only made continuous but also made learner-centric and is designed to recognize the capability and talent of a student.

>CBCS is a process of evolution of educational reforms that would yield the result in subsequent years and after a few cycles of its implementation.