



## CHOICE BASED CREDIT SYSTEM

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## ABSTRACT

There is general agreement that there is an urgent need for the transformation of education so as to make it socially relevant and purposeful. University Grants Commission (UGC) has already initiated several steps to bring equity, efficiency and academic excellence in National Higher Education System. The important ones include innovation and improvement in course- curricula, introduction of paradigm shift in learning and teaching pedagogy, examination and education system. University Grant Commission (UGC) has made it mandatory to be implemented choice based credit system (CBCS) in all the undergraduate (UG) and postgraduate (PG) courses under the XI plan of Higher Education. Gangadhar Meher University has also implemented CBCS in all UG and PG courses. GM University has confirmed compulsory that CBCS to be implemented across all departments. Undoubtedly, it would cast positive effect on the higher education system.

## KEYWORDS :

## 1. INTRODUCTION

There is general agreement that there is an urgent need for the transformation of education so as to make it socially relevant and purposeful. (Report of National Review Committee, 1978). University Grants Commission (UGC) has already initiated several steps to bring equity, efficiency and academic excellence in National Higher Education System. The important ones include innovation and improvement in course- curricula, introduction of paradigm shift in learning and teaching pedagogy, examination and education system. Majority of Indian higher education institutions have been following marks or percentage based evaluation system, which obstructs the flexibility for the students to study the subjects/courses of their choice and their mobility to different institutions. There is need to allow the flexibility in education system, so that students depending upon their interests and aims can choose interdisciplinary, intra-disciplinary and skill-based courses. This can only be possible when choice based credit system (CBCS), an internationally acknowledged system, is adopted. The choice based credit system not only offers opportunities and avenues to learn core subjects but also exploring additional avenues of learning beyond the core subjects for holistic development of an individual. The CBCS will undoubtedly facilitate us benchmark our courses with best international academic practices. University Grant Commission (UGC) has made it mandatory to be implemented choice based credit system (CBCS) in all the undergraduate (UG) and postgraduate (PG) courses under the XI plan of Higher Education. (Kelkar & Ravishankar, 2014) revealed in their study that many universities/autonomous institutions have already implemented the same, Mumbai University made it compulsory in 2011. By 2013, the entire UG and PG programmes became credit-based. The main objectives of introducing such programmes by UGC are: Need for reforms in higher education; enhanced learning opportunities; ability to match learners' scholastic needs and aspirations; interuniversity transferability of learners; improvement in quality of education and excellence; greater flexibility to complete the course; standardization and comparability of educational programmes across the country (Hasan and Parvez, 2015). Gangadhar Meher University has also implemented CBCS in all UG and PG courses.

## 2. Advantages of CBCS

- It can be seen as a major shift from the teacher centre to learner centre education.
- Learners can offer as many credit as they can cope up the pressure of the examination.
- It permits learners to choose soft courses of different

interdisciplinary and intra disciplinary subjects with the core subjects.

- It is also helpful to the learners to choose courses and papers as per their choice and interest.
- It promotes mobility of learners from one institution to another one.
- It would take education system as par the global standard.
- It also helps to the learners to pursue their courses at different times.
- It helps learners to realize their potentials through the flexibility in offering courses.
- It has broadened the base of education system.
- All round development of learners or multi facets personality of learners can be promoted. Through it.
- It is also helpful in employment, as knowledge of different soft courses may helpful for that.
- Stress and anxiety of learners can be reduced through it.
- Work efficiency can be enhanced.
- Development of professional skills can be possible.
- Helpful in ensuring the uniformity in education system in terms of evaluation and assessment.
- It puts emphasis on seminar presentation, assignment, discussion, project etc. based teaching.
- It stressed on exercising maximum use of ICT in class room teaching.
- It gives importance to the internal assessment too.
- Slow learners can get advantage from it, as it has the flexibility in choosing credits at one time.
- Equality among the learners can be ensured through it, as it has the grading system.
- Globally acclaimed education system can be maintained through it, as it has the provision of offering different courses at the same time.
- Learners could pace their learning or course as per their habit and ability.
- It is also helpful in building favourable learning environment, as everyone is supposed to take part in learning process as per their ability and competency.
- Cooperation and healthy work temperament can be ensured and developed among the learners.
- Habits of work commitment of learners can be strengthened (Hasan and Parvez, 2015).

## 3. Outline of Choice Based Credit System:

1. **Core Course:** A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course.
2. **Elective Course:** Generally a course which can be chosen from a pool of courses and which may be very specific or specialized or advanced or supportive to the discipline/

subject of study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the candidate's proficiency/skill is called an Elective Course.

**2.1 Discipline Specific Elective (DSE) Course:** Elective courses may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective. The University/Institute may also offer discipline related Elective courses of interdisciplinary nature (to be offered by main discipline/subject of study).

**2.2 Dissertation/Project:** An elective course designed to acquire special/advanced knowledge, such as supplement study/support study to a project work, and a candidate studies such a course on his own with an advisory support by a teacher/faculty member is called dissertation/project.

**2.3 Generic Elective (GE) Course:** An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective. P.S.: A core course offered in a discipline/subject may be treated as an elective by other discipline/subject and vice versa and such electives may also be referred to as Generic Elective.

**3. Ability Enhancement Courses (AEC):** The Ability Enhancement (AE) Courses may be of two kinds: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). "AECC" courses are the courses based upon the content that leads to Knowledge enhancement; i. Environmental Science and ii. English/MIL Communication. These are mandatory for all disciplines. SEC courses are value-based and/or skill-based and are aimed at providing hands-on-training, competencies, skills, etc.

**3.1 Ability Enhancement Compulsory Courses (AECC):** Environmental Science, English Communication/MIL Communication.

**3.2 Skill Enhancement Courses (SEC):** These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

**4. Evaluation in Choice Based Credit System**

**PASSING CRITERIA**

In order to pass a semester the following three criteria has to be fulfilled by a student.

- Minimum Grade 'P' (40%) of marks in each theory paper,
- Minimum of Grade 'C' (40%) of marks in each practical paper and
- Minimum Grade 'P' (Grade point of 4.0) in aggregate of all papers of the semester

**CALCULATION OF GP, SGPA, CGPA & PERCENTAGE OF MARKS**

- Each course carries a specific number of Credit Hours (CH) denoting the weightage.
- The Grade Point (GP) in each course is expressed through conversion table.
- The Semester Grade Point Average (SGPA) is awarded at the end of each semester and is calculated as follows:

$$SGPA = \frac{\sum GP \times CH}{\sum CH}$$

The Cumulative Grade Point Average (CGPA) is awarded on successful completion of all semesters and is calculated as follows:

$$CGPA = \frac{\sum SGPA \times \sum CH}{\sum CH}$$

**Illustration of CGPA**

Semester-I	Semester-II	Semester-III	Semester-IV	Semester-V	Semester-VI
Credit-20	Credit-22	Credit-23	Credit-26	Credit-26	Credit-25
SGPA=6.9	SGPA=7.8	SGPA=7.8	SGPA=8.0	SGPA=8.3	SGPA=8.0

$$CGPA = \frac{20 \times 6.9 + 22 \times 7.8 + 23 \times 7.8 + 26 \times 8.0 + 26 \times 8.3 + 25 \times 8.0}{141} = 7.7$$

**CONVERSION TABLE & CLASSIFICATION OF RESULT**

% of Marks	Grade Point	Grade Letter	Grade	CGPA / SGPA	Classification of Division
>= 90 - 100	10.0	A+	Outstanding	>= 9.5	First Class
>= 80 - < 90	9.0	A	Excellent	>= 8.5 - < 9.5	
>= 70 - < 80	8.0	A-	Very good	>= 7.5 - < 8.5	
>= 60 - < 70	7.0	B+	Good	>= 6.5 - < 7.5	Second Class
>= 50 - < 60	6.0	B	Above average	>= 5.5 - < 6.5	
>= 40 - < 50	5.0	C	Average	>= 5.0 - < 5.5	
>= 30 - < 40	4.0	P	Pass	>= 4.5 - < 5.0	Pass
< 30	0.0	F	Fail	Below 4.5	Fail
				>= 5.5	Distinction

**ABBREVIATION USED**

AECC: Ability Enhancement Course	GP: Grade Point
GE: Generic Elective	TC: Total Credit
SEC: Skill Enhancement Courses	TCP: Total Credit Points
DSE: Discipline Specific Elective	SGPA: Semester Grade Point Average
	CGPA: Cumulative Grade Point Average

Example 1: PG Mark sheet As Cited Below:

**GANGADHAR MEHER UNIVERSITY**  
SAMBALPUR, 768004, ODISHA  
PROVISIONAL CERTIFICATE CUM MARK SHEET

This is to certify that JHANSI ADARAKA bearing Roll Number UPG18BT001 and Registration Number 2147719 has passed the MASTER OF SCIENCE (BOTANY) Examination, October - 2020 and has secured the following marks.

Semester	Course Title	Grade	Points	GP	CH			
Semester-I	BOT-101 Cytology	4	3.0	7.3	4.0			
	BOT-102 Traditional and Modern Taxonomy	4	3.0	8.0	4.0			
	BOT-103 Archegoniate	4	3.0	6.7	4.0			
	BOT-104 Cytology	4	3.0	8.0	4.0			
	BOT-105 Practical	4	3.0	8.0	4.0			
Grade Point Average of Semester-I						20	4.0	7.78
Semester-II	BOT-201 Biochemistry-I	4	3.0	6.4	4.0			
	BOT-202 Biochemistry-II	4	3.0	7.4	4.0			
	BOT-203 Genetics	4	3.0	6.7	4.0			
	BOT-204 Developmental Biology	4	3.0	8.4	4.0			
	BOT-205 Practical	4	3.0	8.4	4.0			
Grade Point Average of Semester-II						24	4.0	8.2
Semester-III	BOT-301 Plant Physiology-I	4	3.0	7.3	4.0			
	BOT-302 Plant Physiology-II	4	3.0	7.9	4.0			
	BOT-303 Ecology and Ecosystem	4	3.0	7.9	4.0			
	BOT-304 Microbiology, Plant Pathology and Biotechnology	4	3.0	7.2	4.0			
	BOT-305 Practical	4	3.0	5.3	4.0			
Grade Point Average of Semester-III						24	4.0	7.4
Semester-IV	BOT-401 Plants in Human Welfare and Biodiversity Assessment	4	3.0	9.1	4.0			
	BOT-402 Evolution and Plant Breeding	4	3.0	9.8	4.0			
	BOT-403 Molecular Biology and Biotechnology	4	3.0	9.7	4.0			
	BOT-404 Botany, Instrumentation and Bioinformatics	4	3.0	9.0	4.0			
	BOT-405 Project / Practical	4	3.0	9.0	4.0			
Grade Point Average of Semester-IV						20	4.0	9.42
Overall Grade Point Average (CGPA):						8.04		
Percentage of Marks:						80.40		
Result:						First Class		
Date of Publication of Result:						22/10/2020		

Example 2 UG Mark sheet:

**GANGADHAR MEHER UNIVERSITY**  
SAMBALPUR - 768004, ODISHA  
PROVISIONAL CERTIFICATE CUM GRADE SHEET

This is to certify that TANMAYEE BENERA bearing Examination Roll Number: UBA17EC001 and University Registration Number 641115 has passed the B.S. Bachelor of Arts (Under Semester System) Examination, October-2020 and has secured the following Grades.

Semester	Course Title	Grade	Points	GP	CH			
SEMESTER - I	ENGL-101 English (Theory)	A	4	4	3			
	ENGL-102 English (Theory)	A	4	4	3			
	ENGL-103 English (Theory)	A	4	4	3			
	ENGL-104 English (Theory)	A	4	4	3			
SEMESTER - I						12	4.0	12
SEMESTER - II	ENGL-201 English (Theory)	A	4	4	3			
	ENGL-202 English (Theory)	A	4	4	3			
	ENGL-203 English (Theory)	A	4	4	3			
	ENGL-204 English (Theory)	A	4	4	3			
SEMESTER - II						12	4.0	12
SEMESTER - III	ENGL-301 English (Theory)	A	4	4	3			
	ENGL-302 English (Theory)	A	4	4	3			
	ENGL-303 English (Theory)	A	4	4	3			
	ENGL-304 English (Theory)	A	4	4	3			
SEMESTER - III						12	4.0	12
SEMESTER - IV	ENGL-401 English (Theory)	A	4	4	3			
	ENGL-402 English (Theory)	A	4	4	3			
	ENGL-403 English (Theory)	A	4	4	3			
	ENGL-404 English (Theory)	A	4	4	3			
SEMESTER - IV						12	4.0	12
Total CGPA Secured: 8.17								
Equivalent Percentage of Marks: 76.70%								
Result: First Class with Distinction								
Date of Publication of Result: 22/10/2020								

**5. Implementation Strategies by University Grants Commission:**

- The CBCS may be implemented in Central/State Universities subject to the condition that all the stakeholders agree to common minimum syllabi of the core papers and at least follow common minimum curriculum as fixed by the UGC. The allowed deviation from the syllabi being 20% at the maximum.
- The universities may be allowed to finally design their own syllabi for the core and elective papers subject to point no. 1. UGC may prepare a list of elective papers but the universities may further add to the list of elective papers they want to offer as per the facilities available.
- Number of Core papers for all Universities has to be same for both UG Honors as well as UG Program.

- Credit score earned by a student for any elective paper has to be included in the student's overall score tally irrespective of whether the paper is offered by the parent university (degree awarding university/institute) or not.
- For the introduction of AE Courses, they may be divided into two categories: a) AE Compulsory Courses: The universities participating in CBCS system may have common curriculum for these papers. There may be one paper each in the 1st two semesters viz. (i) English/MIL Communication, (ii) Environmental Science. b) Skill Enhancement Courses: The universities may decide the papers they may want to offer from a common pool of papers decided by UGC or the universities may choose such papers themselves in addition to the list suggested by UGC. The universities may offer one paper per semester for these courses.
- The university/Institute may plan the number of seats per elective paper as per the facility and infrastructure available.
- An undergraduate degree with Honours in a discipline may be awarded if a student completes 14 core papers in that discipline, 2 Ability Enhancement Compulsory Courses (AECC), minimum 2 Skill Enhancement Courses (SEC) and 4 papers each from a list of Discipline Specific Elective and Generic Elective papers respectively.
- An undergraduate Program degree in Science disciplines may be awarded if a student completes 4 core papers each in three disciplines of choice, 2 Ability Enhancement Compulsory Courses (AECC), minimum 4 Skill Enhancement Courses (SEC) and 2 papers each from a list of Discipline Specific Elective papers based on three disciplines of choice selected above, respectively.
- An Undergraduate program degree in Humanities/ Social Sciences/ Commerce may be awarded if a student completes 4 core papers each in two disciplines of choice, 2 core papers each in English and MIL respectively, 2 Ability Enhancement Compulsory Courses (AECC), minimum 4 Skill Enhancement Courses (SEC), 2 papers each from a list of Discipline Specific Elective papers based on the two disciplines of choice selected above, respectively, and two papers from the list of Generic Electives papers.
- The credit(s) for each theory paper/practical/ tutorial/ project/dissertation will be as per the details given in A, B, C, D for B.Sc. Honours, B.A./B.Com. Honours, B.Sc. Program and B.A./B.Com. Program, respectively.
- Wherever a University requires that an applicant for a particular M.A./M.Sc. /Technical/Professional course should have studied a specific discipline at the undergraduate level, it is suggested that obtaining 24 credits in the concerned discipline at the undergraduate level may be deemed sufficient to satisfy such a requirement for admission to the M.A./M.Sc./Technical/Professional course.
- The Universities/Institutes may offer any number of choices of papers from different disciplines under Generic Elective and Discipline Specific Elective as per the availability of the courses/faculty.
- Universities/Institutes may evolve a system/policy about Extra Curricular Activities/ General Interest and Hobby Courses/Sports/NCC/NSS/Vocational courses/related courses on their own.
- A student can opt for more number of Elective and AE Elective papers than proposed under the model curriculum of UGC. However the total credit score earned will not exceed 160 credits for UG Honours and 140 credits for UG Program degree.
- The new scheme of UG courses should be given due consideration while framing the admission eligibility requirement for PG/ Technical courses in Indian Universities/Institutions to ensure that students following inter and multi-disciplinary format under CBCS are not at

a disadvantage. It is suggested that wherever required, obtaining 24 credits in particular discipline may be considered as the minimum eligibility, for admission in the concerned discipline, for entry to PG/Technical courses in Indian Universities/Institutions.

## 6. CONCLUSION:

Gangadhar Meher University has also implemented CBCS in all UG and PG courses. GM University has confirmed compulsory that CBCS to be implemented across all departments. Undoubtedly, it would cast positive effect on the higher education system.

## 7. Acknowledgement

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## REFERENCES:

1. Hasan, M. and Parvez, M. (2015). Choice-Based Credit System in India: Pros and Cons. *Journal of Education and Practice*, Vol.6 (25), pp.30-33.
2. Kelkar, A.S & Ravishankar, L. (2014). Choice Based Credit System: boon or bane. *Current Science*, Vol. 107 (8), pp. 1229-1230.
3. Report of National Review Committee (1978). Learning To Do: Towards a Learning and Working Society. *Ministry of Education and Social Welfare, Government of India*. Retrieved from <http://14.139.60.153/handle/123456789/339> on 3/12/2020.
4. UGC (2020). Minimum course curriculum for undergraduate courses under choice based credit system. *University Grants Commission*. Retrieved from [https://www.ugc.ac.in/pdfnews/8023719\\_guidelines-for-cbcs.pdf](https://www.ugc.ac.in/pdfnews/8023719_guidelines-for-cbcs.pdf) on 2/12/2020