

DHENKANAL (AUTO) COLLEGE, DHENKANAL

CHOICE BASED CREDIT SYSTEM

REGULATIONS FOR UNDER GRADUATE CLASSES (B.A./ B.Sc./ B.Com.)

From session-2017-18

1. ELIGIBILITY

- 1.1. Higher Secondary / +2 / Senior Secondary or any other equivalent examination passed from any Board / Council established by the Govt. of India or any State Govt. or any other equivalent examination recognized by Central Board of Secondary Education/ Council of Higher Secondary Education, Govt. of Odisha/ Dept of Higher Education / Dept. of Industry or any other Dept of Govt. of Odisha or Utkal University. Those joining B.Sc. Programme must have passed the above examination under the faculty of Science/. There shall be no such restriction for joining BA/ B.Com stream.
- 1.2. Students ordinarily may be selected for admission through e-admission process conducted by SAMS society of Government of Odisha.
- 1.3. Admission Policy would be decided by the Academic Council of the respective Autonomous Colleges.

2. DURATION

- 2.1 At least three years of six semester in toto.
- 2.2 Odd semester is from June to December (i.e., 1st, 3rd & 5th semester). The examination shall be held normally in the month of November - December.
- 2.3 Even semester is from January to June (i.e., 2nd, 4th & 6th semester). The examination shall be held normally in the month of May - June. However the Final Semester shall be conducted in April and result shall be published by end of May.
- 2.4 A student would be required to complete the course within six academic years from the date of admission.
- 2.5 A student may opt for fast track of completing all the six semesters in two years provided she/he has at least 2 (two) years industry / organizational experience after +2. Such permission would be granted at the discretion of the Principal of the Colleges.

3. Compulsory Registration for 1st Semester:

- 3.1 Registration for 1st semester is compulsory. A candidate admitted to +3 Course but not registered for 1st semester examination, his/her admission will be automatically cancelled.
- 3.2 A candidate may take a blank Semester: A blank Semester has to be clubbed with next Odd or Even Semester as the case may be i.e. 2nd, 4th and 6th / 1st, 3rd and 5th. The Hostel policy for blank semester is to be decided by colleges as per

their suitability. Hostel accommodation cannot be claimed as a right for a blank semester. (Blank semester is not to be confused as repetition due to failure).

3.3 75% attendance for students is a requirement for being eligible to appear at Examination Up to 15% waiver may be granted by the College Principal at discretion on Health Ground or participation in sports , cultural activities, NCC and NSS activities etc.

3.4 A student may clear backlog papers within 6 years. Improvement if any has to be completed within 4 years.

3.5 A student may register for extra credit i.e. register for additional papers under the same faculty or outside the faculty under an autonomous college or DDCE provided they are in a position to facilitate such teaching.

4 MARK DISTRIBUTION

Sl. No.	Course	No. of paper	Mark per paper	Total mark
1.	Core Course(CC)	14	100	1400
2.	Discipline Specific Elective(DSE)	4 (3 + 1 project)	100	400
3.	Generic Elective-A	2	100	200
4.	Generic elective-B	2	100	200
5.	Ability enhancement compulsory course(AECC)	2	100	200
6.	Skill Enhancement Course (SEC)	2	100	200
	Total	26		2600

5. WEIGHTAGE DISTRIBUTION of MARK FOR EVALUATION:

(a) Subjects with only theory

Mid Term	End Term	Total
20	80	100

(b) Subjects with theory and practical

Mid Term(Theory)	End Term		Total
	Practical	Theory	
15	25	60	100

- There is no Practical Examination in Mid Semester.

(c) Dissertation/ Project

Mid Term (Seminar)	End Term (Project)	Total
20	80	100

(d) Seminar

Topic	Preparation of presentation	Presentation Skill/ Body Language	Depth on the topic(evaluation through questions)	Total
5	3	7	5	20

(e) Project

Identification of problem	Review of Literature	Methodology	Findings	Analysis	Viva-voce	Total
5	10	10	20	15	20	80

(f) Practical

Experiment	Viva- voice	Record	Total
15	6	4	25

6. EXAMINATION QUESTION PATTERN

6.1 The end term semester examination will be of three hours irrespective of marks.

6.2 Practical examination will be of 3 hour duration.

6.3. For subject without having practical full marks are 100 per paper out of which 20 marks is allotted for Mid-Semester Examination (Internal) and 80 marks for end semester examination.

- (a) The question papers shall be divided into two parts such as Group- A & Group-B.
- (b) For subject without practical (80 marks)
- (i) Group- A will carry **10** short questions of **2** marks each .The answer should be within two sentences. (2 marksx10)
- (ii) There shall be 5 long type questions in Group –B with one alternative each have to be attempted and all questions shall be of equal value (12 marks X 5).

6.4 For subject with practical full marks are 100 per paper out of which 15 marks is allotted for Mid- Semester Examination, 60 is for End Semester Examination and 25 is for practical .

- (a) The question papers shall be divided into two parts such as Group- A & Group-B.
- (b) For subject with practical (60 marks)
- (i) Group- A will carry **10** short questions of **1** mark each. The answer should be within two sentences. (1 mark x 10)
- (ii) There shall be **5** long-type questions with one alternative each have to be attempted for subjects having practical. The questions shall be of equal value (10 Marks x 5)
- (iii) Practical will carry 25 marks out of which 6 mark for viva and 4 marks will be for records.

Model answers for long questions should be between 700 - 1000 words.

7. Grading System

Grade	symbol	% of Mark	Grade points
Outstanding	O	90-100	10
Excellent	A+	80-89	9
Very Good	A	70-79	8
Good	B+	60-69	7
Above average	B	50-59	6
Fair	C	40-49	5
pass	D	30-39	4
Fail	F	Below 30	0

7.1 N.B.

- (i) A Candidate has to secure **30% or above** to pass in each of the Papers.
- (ii) The candidate obtaining **Grade-F** is **considered failed** and will be required to clear the back paper(s) in the subsequent examinations within the stipulated time.
- (iii)The candidate securing '**B**' **Grade** and above in Core/Honours papers in aggregate will be awarded Honours.

(iv) The candidate securing 'B+' Grade and above in aggregate in first appearance will be awarded Honours with Distinction/Distinction (for pass/regular course).

(v) Any candidate filling the forms for appearing in back papers/improvement shall not be awarded Distinction.

7.2 A transitory letter grade I (carrying points 2) shall be introduced for cases where the results are incomplete. This grade shall automatically be converted into appropriate grade(s) as and when the results are complete.

7.3 A student's level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as :

SGPA - Semestre Grade Point Average

CGPA - Cumulative Grade Point Average

(a) **POINT** - Integer equivalent of each letter grade

(b) **CREDIT** - Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus.

CREDIT POINT - (b) X (a) for each course item

CREDIT INDEX - \sum **CREDIT POINT** of course items in

GRADE POINT AVERAGE - $\frac{\text{CREDIT INDEX}}{\text{CREDIT}}$

SEMESTER GRADE POINT AVERAGE (SGPA) = $\frac{\text{CREDIT INDEX}}{\text{CREDIT}}$ for a Semester

CUMULATIVE GRADE POINT AVERAGE(CGPA) =

$\frac{\text{CREDIT INDEX of all previous Semester up to a Semester}}{\text{CREDIT}}$

8. REPEAT EXAMINATION

8.1 A student has to clear back papers (i.e., in the paper/papers one has failed) by appearing at Immediate consecutive two r examinations within Five years from the date of admission.

8.2 A student may appear improvement (repeat) in any number of papers in the immediate subsequent examination. The higher marks shall be retained.

8.3 Improvement has to be completed with 4-Yrs from the date of admission.

A student can appear improvement test in a paper cleared in first chance.

9. HARD CASE RULE

9.1 2% of grace mark on the aggregate mark subject to maximum of 5 (five) marks in single paper shall be given. This shall be applicable in each semester.

9.2 0.5 (point five percent) grace mark can be given for award of B Grade in each semester provided grace mark under 6.1 has not been awarded.

10. BROAD PRINCIPLES OF CREDIT TRANSFER

There should be a small group to consider all cases of credit transfer . The group should consists of the following

Chairman - Principals

Convener - Controller of Examination

Members - Four teachers to be nominated by the Principal

Waiver for courses covered under other colleges not withstanding differences in detailed course can be granted . Papers which one has not studied even though they are prescribed for earlier semesters can be covered by the students .

11. OTHER BROAD PRINCIPLES:

11.1 Student transferred after 1st semester examination cannot be given position or medal under autonomous colleges. Students who have failed / remained absent / appeared for improvement shall not be eligible for University Gold medal or Rank. Students who have been granted credit waiver under credit transfer system can't be awarded Gold medal or position.

11.2 Each Dept shall have a designated Teacher in-charge of Examination to be decided by the Principal in addition to the Controller of Examinations of the College.

11.3 The Internal Evaluation would be the sole responsibility of Teacher offering the course (Concerned department offering the course)

11.4 Suitable modifications may be made by the Autonomous Colleges keeping in view the UGC Guideline for Autonomous Colleges, University Guidelines from time to time and State Govt. Guidelines from time to time.

12. Details of course structure for B.Sc./B.A./B.Com. (Honors):

Sl. No	Type of course	Course	No of papers		No. of sub papers	Credits Theory+ Practical	Credits Theory +Tutorial
I	Core	Core Course(CC)	14	Theory	14	14x4=56	14x5=70
				Practical/tutorials	14	14x2=28	14x1=14
II	Core	Discipline specific elective(DSE)	4	Theory	3	3x4=12	3x5=15
				Practical/tutorials	3	3x2=6	3x1=3
				Project	1	1x6=6	1x6=6
III	Elective	Generic elective(GE) (Interdisciplinary)	4	theory	4	4x4=16	4x5=20
				Practical/tutorials	4	4x2=8	4x1=4
IV	Compulsory	Ability Enhancement compulsory course(AECC)	2	M.I.L./English (Communication)	1	1x4=4	1x4=4
				Environmental studies	1	1x4=4	1x4=4
V	Elective	Skill Enhancement Course(SEC)	2	Communicative English & Writing skill	1	1x4=4	1x4=4
				Subject specific	1	1x4=4	1x4=4
Total			26		47	148	148

*** Wherever there is a practical there will be no tutorial and vice-versa**

13. Class Structure

13.1 Each Theory class is of 1hr. duration

13.2 Each practical class is of 2hrs. Duration.

13.3 Each tutorial is of 1 hr. duration.

13.4 For subjects with practicals, there will be 40 classes for each Theory paper and 20 classes for each Practical paper.

13.5 For subjects without practical, each paper will have 50 Theory classes and 10 Tutorial classes.

13.6 The size of the practical group practical papers is recommended to be 16 students per group.

14. Course Structure
(a) For SCIENCE

Sem	CORE COURESE (CC) (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2) (Skill Based)	Discipline Specific Elective(DSE) (4)	Elective: Generic (GE) (4)
I	CORE-I	M.I.L/English (Communication)			GE-A1 (GE-I)
	CORE-II				
II	CORE-III	Environmental Studies			GE-B1 (GE-II)
	CORE -IV				
III	CORE-V		SEC -1 Communicative English and Writing Skill		GE-A2 (GE-III)
	CORE-VI				
	CORE-VII				
IV	CORE-VIII		SEC -2 (<i>Subject specific Skill</i>)		GE-B2 (GEIV)
	CORE-IX				
	CORE-X				
V	CORE-XI			DSE-1	
	CORE-XII			DSE-2	
VI	CORE-XIII			DSE-3	
	CORE-XIV			DSE-4 (Project)	

- AECC-1 : To be offered by English/ Odia Department
- AECC-2 : To be offered collectively by Chemistry/ Botany/ Zoology department
- SEC-1 : To be offered by English Department
- SEC-2 : This is a subject specific skill to be offered by the respective Department
- GE to be offered by the Concerned GE subject department

Sl. No	Core Subject	Semester-1 GE-A1 (GE-I)	Semester-2 GE-B1 (GE-II)	Semester-3 GE-A2 (GE-III)	Semester-4 GE-B2 (GE-IV)
1.	Physics	Mathematics	Chemistry	Mathematics	Chemistry
2.	Chemistry	Physics	Mathematics	Physics	Mathematics
3.	Computer Science	Mathematics (statistics)	Physics	Mathematics (Num. Analy.)	Physics
4.	Mathematics	Chemistry	Physics	Chemistry	Physics
5.	Botany	Chemistry	Zoology	Chemistry	Zoology
6.	Zoology	Botany	Chemistry	Botany	Chemistry

(b) For ARTS

Sem	CORE COURESE (CC) (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2) (Skill Based)	Discipline Specific Elective(DSE) (4)	Elective: Generic (GE) (4)
I	CORE-I	M.I.L/English (Communication)			GE-A1 (GE-I)
	CORE-II				
II	CORE-III	Environmental Studies			GE-B1 (GE-II)
	CORE -IV				
III	CORE-V		SEC -1 Communicative English and Writing Skill		GE-B2 (GE-III)
	CORE-VI				
	CORE-VII				
IV	CORE-VIII		SEC -2 (Subject specific Skill)		GE-A2 (GEIV)
	CORE-IX				
	CORE-X				
V	CORE-XI			DSE-1	
	CORE-XII			DSE-2	
VI	CORE-XIII			DSE-3	
	CORE-XIV			DSE-4 (Project)	

- AECC-1 : To be offered by English/ Odia Department
- AECC-2 : To be offered collectively by Chemistry/ Botany/ Zoology department
- SEC-1 : To be offered by English Department
- SEC-2 : This is a subject specific skill to be offered by the respective Department
- GE to be offered by the Concerned GE subject department

Core Subject	Semester-1 GE-A1 (GE-I)	Semester-2 GE-B1 (GE-II)	Semester-3 GE-B2 (GE-III)	Semester-4 GE-A2 (GE-IV)	Remarks
Economics/ Philosophy/ Political Science/ Sanskrit/ English/ Mathematics/ History/ Odia/	Economics/ Philosophy/ Political Science/ Sanskrit	English/ Mathematics/ History/ Odia/ Psychology	English/ Mathematics/ History/ Odia/ Psychology	Economics/ Philosophy/ Political Science/ Sanskrit	GE will be other than the core subject.

Psychology					
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(c) For Commerce

Sem	CORE COURESE (CC) (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2) (Skill Based)	Discipline Specific Elective(DSE) (4)	Elective: Generic (GE) (4)
I	CORE-I	Environmental Studies			GE-A1 (GE-I)
	CORE-II				
II	CORE-III	M.I.L/English (Communication)			GE-B1 (GE-II)
	CORE -IV				
III	CORE-V		SEC -1 Communicative English and Writing Skill		GE-A2 (GE-III)
	CORE-VI				
	CORE-VII				
IV	CORE-VIII		SEC -2 (Subject specific Skill)		GE-A4 (GEIV)
	CORE-IX				
	CORE-X				
V	CORE-XI			DSE-1	
	CORE-XII			DSE-2	
VI	CORE-XIII			DSE-3	
	CORE-XIV			DSE-4 (Project)	

- AECC-1 : To be offered collectively by Chemistry/ Botany/ Zoology department
- AECC-2 : To be offered by English/ Odia Department
- SEC-1 : To be offered by English Department
- SEC-2 : This is a subject specific skill to be offered by the respective Department
- GE to be offered by the Concerned GE subject department
- GE-A and GE- B to be chosen by the student out of the group of subject offered under that category other than the core subject of the student

Sl. No	Core Subject	Semester-1/4	Semester-2/3
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		GE-A GE- A1 & A2 (GE-I & GE-4)	GE-B GE- B1 & B2 (GE-II & GE-III)
1.			
2.			
3.			

**Degree of 2-Year Master of Business Administration (M.B.A) Course
(Effective from the Academic year 2015-16)**

[CHOICE BASED CREDIT SYSTEM (CBCS)]

1. Eligibility:

- 1.1 Bachelor Degree in Commerce / Arts / Science / Business Administration / Engineering / Pharmacy or Equivalent from a University and eligibility criterion notified by AICTE or competent authority regulating Higher Education from time to time.
- 1.2 Any student who has passed Diploma in Office Management from State Council of Vocational and Technical Education established by Government.
- 1.3 And such degree or eligibility criterion as determined by the Government from time to time.

2. Duration:

- 2.1 Two years of four semesters in toto.
- 2.2 Odd semester is from June to December (i.e., 1st & 3rd semester). The examination shall be held in tentatively in the month of December.
- 2.3 Even semester is from January to May (i.e., 2nd & 4th semester). The examination shall be held in tentatively in the month of June.
- 2.4 A student would be required to complete the course within seven academic years from the date of admission.

3. Classes:

- 3.1 4 Credit Points: - 40 hours,
- 3.2 2 Credit Points: - 20 hours

4. Grading System:

4.1	Grade		Mark Secured from 100	Points
	Outstanding	'O'	100-90	10
	Excellent	'E'	89-80	9
	Very Good	'A'	79-70	8

Good	'B'	69-60	7
Fair	'C'	59-50	6
Pass	'D'	49-36	5
Failed	'F'	Below 36	0

- 4.2 A Candidate has to secure Grade -D or above to pass in each of the Papers
- 4.3 A transitory letter grade I (carrying points 2) shall be introduced for cases where the results are incomplete. This grade shall automatically be converted into appropriate grade(s) as and when the results are complete.
- 4.4 A student's level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as:
- SGPA Semester Grade Point Average
- CGPA Cumulative Grade Point Average
- (a) POINT Integer equivalent of each letter grade
- (b) CREDIT Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus.

CREDIT POINT - (b) X (a) for each course item

CREDIT INDEX - \sum CREDIT POINT of course items in

GRADE POINT AVERAGE $\frac{\text{CREDIT INDEX}}{\sum \text{CREDIT}}$

$\sum \text{CREDIT}$

SEMESTER GRADE POINT AVERAGE (SGPA) = $\frac{\text{CREDIT INDEX}}{\sum \text{CREDIT}}$ for a Semester

$\sum \text{CREDIT}$

CUMULATIVE GRADE POINT AVERAGE (CGPA)

Semester = $\frac{\text{CREDIT INDEX of all previous Semester upto a}}{\sum \text{CREDIT}}$

- 4.5 In addition to the points 'marks / percentage would also be awarded and shall also be reflected in the Mark Sheet.

5. Choice Based Credit System:

- 5.1. 'Credit' defines the quantum of contents / syllabus prescribed for a course and determines the number of hours of instruction required. The distinguishing features of CBCS are the following: It permits the students to:
- learn at their own pace
 - Choose electives from a wide range of elective courses offered by the departments of the colleges affiliated to the University
 - undergo additional courses and acquire more than the required number of credits
 - adopt an inter - disciplinary approach in learning

6. Question Pattern & Evaluation:

- 6.1. There shall be five numbers of questions with alternative representing all units, and all are compulsory.
- 6.2. The Internal Assignment / Written Assessment questions shall be prepared by Internal Subject teacher.

7. Evaluation of Theory Papers, Internal Assignment, and Lab Practical:

- 7.1. There shall be Core, Elective Core, Allied and Audit Courses.
- 7.2. The performance of a candidate in a theory subject shall be evaluated on 100 marks basis, out of which there shall be 70 marks theory to be evaluated by the external examiners, and 15 marks each towards Internal Unit Wise Assignment and one Internal Written Test.
- 7.3. The duration of the semester Internal and theory examinations shall be one hour and three hours respectively.
- 7.4. One Internal Written Examination at the mid of the semester carrying 15 marks, five assignments in each unit carrying 03 marks each. The subject teacher shall evaluate the internal examination papers and assignments and shall forward marks to the Controller of Examinations.
- 7.5. The performance of a candidate in lab or practical subject shall be evaluated by the Internal Examiner from within the department and another External Subject Expert from academics or industry. The External Examiner shall assign the problem (Question (s)) on the scheduled timing inside the lab to the examinees. The examinees shall write the questions / problems in the supplied answer sheets, and solve the assignment by using Computer, and shall only write the output in the supplied answer sheet. The Internal and External Examiner shall separately evaluate the answer sheet containing questions / problems, and the output, and finally conduct the viva voce jointly. The average marks awarded by the Internal and External Examiner shall be final. The answer scripts shall be sent to the Controller of Examinations for record.
- 7.6. In the event a candidate fails to appear either internal examination or assignments, but has passed both in theory and internal test or assignments, he / she shall be declared passed. He / she shall not be allowed to appear the internal examination or to submit assignments in the succeeding semester examination.

8. Summer Training & Dissertation:

- 8.1. Each student has to undergo a Summer Internship Training in a business or service concern organization for duration of 6 to 8 weeks on completion of the 1st year studies. On completion of the training he/she has to prepare a Project Report and submit the same to the Department during the 3rd Semester. The project study report shall carry 70 marks, and viva voce will carry 30 marks. Each student will be required to appear viva voce test before a committee consisting of one external examiner (Academics / Industry), and one internal examiner from the department for evaluation. The Internal and External Examiner shall separately evaluate the Project Report and conduct the viva voce jointly. The average marks awarded by the Internal and External Examiner in the Project Report and Viva Voce shall be final. A copy of the Project Report shall be sent to the Controller of Examinations for record.

- 8.2. Each student has to write a dissertation paper on a subject of interest from the electives chosen by him/her in consultation with a faculty of the department focusing on an organization. He / she shall register the topic with the department in the beginning of the 4th Semester and shall undertake the project work under the guidance of the project guide. The project shall not be carried out more than three. The candidates must complete the project work within a period of four weeks and submit the dissertation paper to the department for evaluation. Each student will be required to appear viva voce test before a committee consisting of one external examiner (Academics / Industry), and one internal examiner from the department for evaluation. The Internal and External Examiner shall separately evaluate the Project Report and conduct the viva voce jointly. The average marks awarded by the Internal and External Examiner in the Project Report and Viva Voce shall be final. A copy of the Project Report shall be sent to the Controller of Examinations for record.

9. Choice of Specialization:

- 9.1. A subject under a Specialization Group will be allowed in case it is opted by not less than 10 students.
- 9.2. In the event, less than 10 students opt one particular subject in a Specialization group, the decision of the Head of the Department is final.

10. Audit Course:

- 10.1. Each Audit Course shall carry 2 Credits.
- 10.2. A student is entitled to opt not more than two Audit Course to add on credit during 2nd, 3rd and 4th Semester provided he / she opt and go through the examination process.
- 10.3. The Controller of Examinations shall notify seeking options from the students at the beginning of 2nd, 3rd and 4th Semester.
- 10.4. Notwithstanding the provisions made herein, shall be binding to the College or Department to entertain or conduct in the event the options received from more than 05 students.

11. Repeat and Improvement:

- 11.1 A student has to clear back papers (i.e., in the paper / papers one has failed) by appearing at subsequent three semester examinations.
- 11.2 A student may appear improvement in any paper / papers in the immediate subsequent examination. Only one chance can be availed. The higher mark of the two chances (i.e., first and the improvement) shall be valid. However, there is no provision for improvement in either Internal Assignment / Examination.

12. Hard Case Rule:

- 12.1 1% of grace mark on the aggregate mark in single paper taking aggregate, not exceeding to 05 in a subject shall be given. This shall be applicable in each semester.

13. Disqualification for Award of Degree:

- 13.1 Students who have been convicted by any cognizable offence (s) shall be debarred from receiving degrees.

-: MBA COURSE STRUCTURE:-

Paper Code	Paper Name	Credit Point	Marks Distribution			
			Th	L/P	Int.Th VV/ As	Cat
First Semester:						
M01	Management Concept and Practices	4	70	--	30	C
M02	Organizational Behavior	4	70	--	30	C
M03	Quantitative Methods for Management	4	70	--	30	C
M04	Business & Economic Environment	4	70	--	30	C
M05	Managerial Communication Skills	4	70	--	30	C
M06	Financial Accounting	4	70	--	30	C
M07	Business Regulatory Frame Work	4	70	--	30	C
M08	Computer Applications in Management "Or"	4	50	30	20	AC
M08	E Commerce	4	50	30	20	AC
Second Semester:						
M09	Human Resources Management	4	70	--	30	C
M10	Marketing Management	4	70	--	30	C
M11	Financial Management	4	70	--	30	C
M12	Production & Operation Management	4	70	--	30	C
M13	Cost & Management Accounting	4	70	--	30	C

M14	Banking & Insurance Management	4	70	--	30	C
M15	Research Methodology	4	70	--	30	C
M16	Entrepreneurship Development "Or"	4	70	--	30	AC
M16	Agri-Business	4	70	--	30	AC
Third Semester:						
M17	Managerial Economics	4	70	--	30	C
M18	International Business	4	70	--	30	C
M19	Corporate & Tax Laws	4	70	--	30	C
M20	Specialization –I-1	4	70	--	30	EC
M21	Specialization-I-2	4	70	--	30	EC
M22	Specialization-II-1	4	70	--	30	EC
M23	Specialization-II-2	4	70	--	30	EC
M24	Summer Internship Programme	4	70	--	30	C
(Choose the 1 st and 2 nd papers from any two specialization group as I & II from A to VII as noted in the Dual specialization table)						
Fourth Semester:						
M25	Business Policy & Strategic Management	4	70	--	30	C
M26	Business Ethics & Corporate Governance	4	70	--	30	C
M27	Management Information System	4	70	--	30	C
Specialization- I						
M28	The Candidate has to opt the next	4	70	--	30	EC
M29	Two papers from the Specialization-I Group selected in the IIIrd Semester as 3 & 4.	4	70	--	30	EC

Specialization –II						
M30	The Candidate has to opt the next two Papers from the specialization-II Group selected in the III rd Semester as 3 & 4.	4	70	--	30	EC
M31		4	70	--	30	EC
M32	Dissertation Report & Viva-voce.	4	70		30 V.V	C

MBA (Fourth Semester) Special Papers

Paper Code	Paper Name	Credit Point	Marks Distribution			
			Th.	L/P	Int.Th VV/As	Cat
Human Resources Management (Group-I)						
M-HRM-1	Human Resources Planning & Development	4	70	--	30	EC
M-HRM-2	Legal Framework Governing Human Relations	4	70	--	30	EC
M-HRM-3	Management of Training & Development	4	70	--	30	EC
M-HRM-4	International Human Resource Management	4	70	--	30	EC
M-HRM-5	Compensation Management	4	70	--	30	EC
M-HRM-6	Corporate Social Responsibility	4	70	--	30	EC
Financial Management (Group-II)						
M-FM-1	Financial Markets & Institution	4	70	--	30	EC
M-FM-2	Security Analysis & Portfolio Management	4	70	--	30	EC
M-FM-3	Merchant Banking & Financial Services	4	70	--	30	EC
M-FM-4	International Finance	4	70	--	30	EC
M-FM-5	Financial Derivatives	4	70	--	30	EC
M-FM-6	Mutual Fund & Commodity Market	4	70	--	30	EC
Marketing Management (Group-III)						
M-MM-1	Consumer Behaviour	4	70	--	30	EC
M-MM-2	Advertising & Promotion Management	4	70	--	30	EC

M-MM-3	Sales & Distribution Management	4	70	--	30	EC
M-MM-4	Product & Brand Management	4	70	--	30	EC
M-MM-5	Retail Management	4	70	--	30	EC
M-MM-6	Customer Relationship Management	4	70	--	30	EC
Information Technology Management (Group-IV)						
M-IT-1	DBMS & RDBMS	4	40	30	30	EC
M-IT-2	Internet Technology	4	40	30	30	EC
M-IT-3	Computer Aided Management	4	40	30	30	EC
M-IT-4	Internet Marketing	4	40	30	30	EC
M-IT-5	Enterprise Resources Planning	4	40	30	30	EC
M-IT-6	Information Security & Cyber Law	4	40	30	30	EC
Entrepreneurship Management (Group-V)						
M-EM-1	Financing Small Business	4	70	--	30	EC
M-EM-2	New Entrepreneurship Management	4	70	--	30	EC
M-EM-3	Entrepreneurship for Small Business	4	70	--	30	EC
M-EM-4	Export Import Producing Business	4	70	--	30	EC
M-EM-5	Public Private Partnership	4	70	--	30	EC
M-EM-6	Project Management	4	70	--	30	EC
Banking & Insurance Management (Group VI)						
M-BIM-1	Principles & Practices of Banking	4	70	--	30	EC
M-BIM-2	Principles & Practices of Risk Management	4	70	--	30	EC
M-BIM-3	Banking Laws	4	70	--	30	EC
M-BIM-4	Insurance laws	4	70	--	30	EC
M-BIM-5	Claims Management	4	70	--	30	EC
M-BIM-6	Regulatory Framework in Financial Sector					
Corporate Communication (Group VII)						
M-BCC-1	Communication and Business Communication	4	70	--	30	EC

M-BCC-2	PR and Corporate Communication	4	70	--	30	EC
M-BCC-3	Print and Electronic Media	4	70	--	30	EC
M-BCC-4	Information Technology and Cyber Journalism	4	70	--	30	EC
M-BCC-5	Advertising and Marketing	4	70	--	30	EC
M-BCC-6	Reporting and Editing – Theory and Process					EC

Audit Courses:

M-F/AC-1	Community Development (Rural & Urban)	2	70	--	30	AU
M-F/AC-2	Rural Marketing	2	70	--	30	AU
M-F/AC-3	Accounting for Small Business Organizations	2	70	--	30	AU
M-F/AC-4	Capital Market Instruments	2	70	--	30	AU
M-F/AC-5	Tourism & Travel Trade	2	70	--	30	AU
M-F/AC-6	Managerial Counseling	2	70	--	30	AU

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REGULATIONS & SYLLABUS

Degree of 2-Year Master of Science (Computer Science) (M.Sc. (CS) Course (Effective from the Academic year 2015-16)

CHOICE BASED CREDIT SYSTEM (CBCS)

1. Eligibility:

- 1.4 Bachelor Degree in Commerce / Arts / Science / Business Administration / Computer Science / Application / Engineering / Pharmacy / Office Management or Equivalent from a recognized University having Mathematics / Business Mathematics in 10 +2 Level.
- 1.5 And such degree or eligibility criterion as determined by the Government from time to time.

2. Duration:

- 2.5 Two years of four semesters in toto.
- 2.6 Odd semester is from June to December (i.e., 1st & 3rd semester). The examination shall be held in tentatively in the month of December.
- 2.7 Even semester is from January to May (i.e., 2nd & 4th semester). The examination shall be held in tentatively in the month of June.
- 2.8 A student would be required to complete the course within seven academic years from the date of admission.

3. Classes:

- 3.1 4 Credit Points: - 40 hours,
- 3.2 2 Credit Points: - 20 hours

4. Grading System:

4.1	Grade		Mark Secured from 100 Points	
	Outstanding	'O'	100-90	10
	Excellent	'E'	89-80	9
	Very Good	'A'	79-70	8
	Good	'B'	69-60	7
	Fair	'C'	59-50	6
	Pass	'D'	49-36	5
	Failed	'F'	Below 36	0

4.5 A Candidate has to secure Grade -D or above to pass in each of the Papers

4.6 A transitory letter grade I (carrying points 2) shall be introduced for cases where the results are incomplete. This grade shall automatically be converted into appropriate grade(s) as and when the results are complete.

4.7 A student's level of competence shall be categorized by a GRADE POINT AVERAGE to be specified as:

SGPA Semester Grade Point Average

CGPA Cumulative Grade Point Average

(c) POINT Integer equivalent of each letter grade

(d) CREDIT Integer signifying the relative emphasis of individual course item(s) in a semester as indicated by the Course structure and syllabus.

CREDIT POINT - (b) X (a) for each course item

CREDIT INDEX - \sum CREDIT POINT of course items in

$$\text{GRADE POINT AVERAGE} = \frac{\text{CREDIT INDEX}}{\sum \text{CREDIT}}$$

$$\text{SEMESTER GRADE POINT AVERAGE (SGPA)} = \frac{\text{CREDIT INDEX for a Semester}}{\sum \text{CREDIT}}$$

CUMULATIVE GRADE POINT AVERAGE (CGPA) =

CREDIT INDEX of all previous Semester upto a Semester
 Σ CREDIT

4.4 In addition to the points 'marks / percentage would also be awarded and shall also be reflected in the Mark Sheet.

5. Choice Based Credit System:

5.1. 'Credit' defines the quantum of contents / syllabus prescribed for a course and determines the number of hours of instruction required. The distinguishing features of CBCS are the following: It permits the students to:

- learn at their own pace,
- Choose electives from a wide range of elective courses offered by the departments of the colleges affiliated to the University,
- undergo additional courses and acquire more than the required number of credits,
- adopt an inter - disciplinary approach in learning.

6. Question Pattern & Evaluation:

6.1. There shall be five numbers of questions with alternative representing all units in theory subjects, and all are compulsory.

6.2. The Internal Assignment / Written Assessment questions shall be prepared by Internal Subject teacher.

7. Evaluation of Theory Papers, Internal Assignment, and Lab Practical:

7.1. There shall be Core, Elective Core, Allied and Audit Courses.

7.2. The performance of a candidate in a theory subject shall be evaluated on 100 marks basis, out of which there shall be 70 marks theory to be evaluated by the external examiners, and 15 marks each towards Internal Unit Wise Assignment and one Internal Written Test.

7.3. The duration of the semester Internal and theory examinations shall be one hour and three hours respectively.

7.4. One Internal Written Examination at the mid of the semester carrying 15 marks, five assignments in each unit carrying 03 marks each. The subject teacher shall evaluate the internal examination papers and assignments and shall forward marks to the Controller of Examinations.

7.5. The performance of a candidate in lab or practical subject shall be evaluated by the Internal

Examiner from within the department and another External Subject Expert from academics or industry. The External Examiner shall assign the problem (Question (s)) on the scheduled timing inside the lab to the examinees. The examinees shall write the questions / problems in the supplied answer sheets, and solve the assignment by using Computer, and shall only write the output in the supplied answer sheet. The Internal and External Examiner shall separately evaluate the answer sheet containing questions / problems, and the output, and finally conduct the viva voce jointly. The average marks awarded by the Internal and External Examiner shall be final. The answer scripts shall be sent to the Controller of Examinations for record.

- 7.6. In the event a candidate fails to appear either internal examination or assignments, but has passed both in theory and internal test or assignments, he / she shall be declared passed. He / she shall not be allowed to appear the internal examination or to submit assignments in the succeeding semester examination.

8. Project Work and Viva:

- 8.1. Each student has to undergo a Project Work Training in a Software / Hardware Development concern for duration of three months on completion of the 3rd Semester. On completion of the training he/she has to prepare a Project Report and submit the same to the Department during the 4th Semester. The Project Report shall carry 280 marks, and viva voce 120 marks. Each student will be required to appear viva voce test before a committee consisting of one external examiner (Academics / Industry), and one internal examiner from the department for evaluation. The Internal and External Examiner shall separately evaluate the Project Report and conduct the viva voce jointly. The average marks awarded by the Internal and External Examiner in the Project Report and Viva Voce shall be final. A copy of the Project Report shall be sent to the Controller of Examinations for record.

9. Choice of Specialization:

- 9.3. A subject under a Specialization Group will be allowed in case it is opted by not less than 10 students.
- 9.4. In the event, less than 10 students opts one particular subject in a Specialization group, the decision of the Head of the Department is final.

10. Audit Course:

- 10.5. Each Audit Course shall carry 2 Credits.
- 10.6. A student is entitled to opt not more than two Audit Course to add on credits during 2nd, 3rd, and 4th Semesters only provided he / she opts and go through the examination process.
- 10.7. The Controller of Examinations shall notify seeking options from the students at the beginning of 2nd and 3rd Semester.
- 10.8. Notwithstanding the provisions made herein, shall be binding to the College or Department to entertain or conduct in the event the options received from more than 05 students.

11. Repeat and Improvement:

- 11.1 A student has to clear back papers (i.e., in the paper / papers one has failed) by appearing at subsequent three semester examinations.
- 11.2 A student may appear improvement in any paper / papers in the immediate subsequent examination. Only one chance can be availed. The higher mark of the two chances (i.e., first and the improvement) shall be valid. However, there is no provision for improvement in either Internal Assignment / Examination.

12. Hard Case Rule:

- 12.1 1% of grace mark on the aggregate mark in single paper taking aggregate, not exceeding to 05 in a subject shall be given. This shall be applicable in each semester.

13. Disqualification for Award of Degree:

- 13.1 Students who have been convicted by any cognizable offence (s) shall be debarred from receiving degree

M.Sc (Computer Science) Course Structure

Paper Code	Paper Name	Credit Point	Marks Distribution			
			Th	L/P	Int.Th /As/VV	Cat
First Semester:						
MSC1	Data Structure and Algorithms	4	70	--	30	C
MSC2	Computer Architecture	4	70	--	30	C
MSC3	Database Systems	4	70	--	30	C
MSC4	Discrete Mathematics & Structures	4	70	--	30	C
MSC5	Elective-I(Object Oriented Programming using c++)	4	70	--	30	EC
MSC6	Algorithm Lab	4	50	30	20	C
MSC7	Database Lab	4	50	30	20	C
Second Semester:						
MSC8	Computer Networks	4	70	--	30	C

MSC9	JAVA Programming	4	70	--	30	C
MSC10	Operating System Design	4	70	--	30	C
MSC11	Theory of Computation	4	70	--	30	AC
MSC11	Algorithm Design Analysis	4	70	--	30	AC
MSC12	Elective-II(Microprocessor and System Programming)	4	70	--	30	EC
MSC13	JAVA Programming Lab	4	50	30	20	C
MSC14	UNIX and Shell Programming Lab	4	50	30	20	C
Third Semester:						
MSC15	Artificial Intelligence	4	70	--	30	C
MSC16	Software Engineering	4	70	--	30	C
MSC17	Compiler Design	4	70	--	30	C
MSC18	Elective-III(Advance Java Programming)	4	70	--	30	EC
MSC19	Elective-IV(Mobile Computing)	4	70	--	30	EC
MSC20	Artificial Intelligence (AI)-Lab	4	50	30	20	--
MSC21	Adv. Java – Lab	4	50	30	20	--
Fourth Semester:						
MSC22	Project Work & Viva Voce	16	280	--	120	C
MSC23						
MSC24						
MSC25						

Electives Papers

Paper Code	Paper Name	Credit Point	Marks Distribution			
			Th	L/P	Int.Th /As/VV	Cat

<u>Elective –I</u>						
MSC E-I	Object Oriented Programming using c++	4	70	--	30	EC
MSC E-II	Internet Technology	4	70	--	30	EC
MSC E-III	Digital Signal Processing	4	70	--	30	EC
MSC E-IV	Visual Programming	4	70	--	30	EC
<u>Elective –II</u>						
MSC E-I	Web Services	4	70	--	30	EC
MSC E-II	Soft Computing	4	70	--	30	EC
MSC E-III	Computer Graphics and Application	4	70	--	30	EC
MSC E-IV	Microprocessor and System Programming	4	70	--	30	EC
<u>Elective-III</u>						
MSC E-I	Network Security	4	70	--	30	EC
MSC E-II	Data Warehouse and Mining	4	70	--	30	EC
MSC E-III	Advance Java Programming	4	70	--	30	EC
MSC E-IV	Cloud Computing	4	70	--	30	EC
<u>Elective-IV</u>						
MSC E-I	Mobile Computing	4	70	--	30	EC
MSC E-II	Embedded Systems	4	70	--	30	EC
MSC E-III	Wireless Sensor Network	4	70	--	30	EC
MSC E-IV	Real-Time System	4	70	--	30	EC

Audit Courses:

MSC-AU-I	Information Security & Cyber Law	2	70	--	30	AU
MSC-AU-II	Web Designing Tools (HTML5, CSS)	2	70	--	30	AU
MSC-AU-III	E-Commerce	2	70	--	30	AU
MSC-AU-IV	Multimedia-I (Photoshop)	2	70	--	30	AU

MSC-AU-V	Multimedia-II (Corel Draw)	2	70	--	30	AU
MSC-AU-VI	Animation	2	70	--	30	AU

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