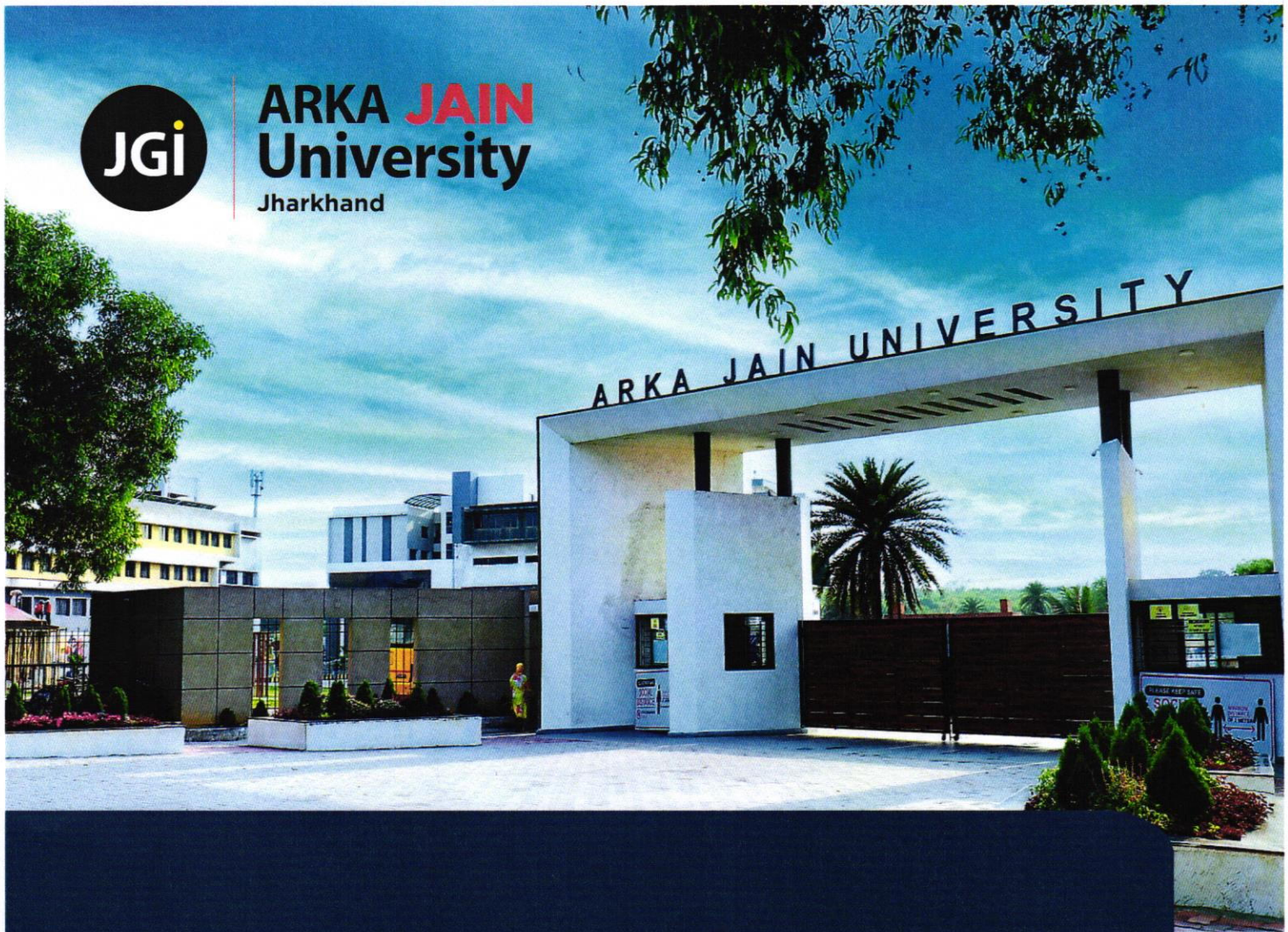




ARKA JAIN
University
Jharkhand



AJU Guidelines on Choice Based Credit System for **3 Year UG Programs**

(w. e. f. Academic Session 2017-18)



ARKA JAIN
University
Jharkhand

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OF THE
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As per UGC guidelines, it has been decided to implement to Choice Based Credit System (CBCS) across all programs, wherever applicable, from the academic year 2017-2018. The main feature of CBCS is to make education, student centric rather than system centric or teacher centric. The CBCS provides the students the flexibility in Education system, so that they can choose, inter-disciplinary, intra-disciplinary and skill based courses of their interest.

1. The ordinance shall be applicable from the academic session 2017-18 to all U.G. Programmes being run in University. Notwithstanding anything contained in any rule for 3-Year UG Programme, this ordinance shall apply to every student/course of 3-year UG programme being run by the University

2. Admission to these programmes will be made as per eligibility conditions and guidelines prescribed by the concerned course regulation / ordinance of the University from time to time.

3. The undergraduate degree programme in the CBCS will have courses spread across six semesters. A typical semester will comprise a minimum of 15 to 18 weeks of academic work that will translate into 90 actual teaching days. Two consecutive (one odd and one even) semesters will make up an academic year. An UG course shall be of Six Semesters covering three Calendar Years (Academic Sessions – June to May). The duration of the Odd Semesters (First, Third and Fifth) shall be 'June to November', and that of Even Semesters (Second, Fourth and Sixth) shall be 'December to May'. The dates and duration mentioned in the academic calendar concerned will be in consonance with the above schedule as far as practicable.

4. The duration of the programme leading to the degree may be extended from its normal period by two years. Each year shall be divided into two semesters i.e. July to December and January to June.

5. An undergraduate degree program with Honours in a discipline will have a course credit requirement of minimum 140 credits while an undergraduate degree program without Honours will require a student to earn 124 course credits. Students in a Honours program can opt to earn additional credits by undertaking additional Elective courses subject to the condition that the total number of course credits does not exceed 160 credits

6. The following courses shall be covered under Choice Based Credit System:

In line with the UGC's guidelines, the courses are categorized as Core courses, Elective courses or Ability Enhancement courses



6.1 Core Course: A Core course is a course that has to be compulsorily studied. A student in an undergraduate degree programme with Honours will have to take up 14 core courses, each of 6 credits. In a Regular undergraduate degree programme a student will need to take up 12 core courses, each again of 6 credits.

6.2 Elective Course: An Elective course is to be chosen by the student from a pool of such courses on offer and will essentially be of three types:

6.2.1 Discipline Specific Elective Course: An Elective Course which is offered by the main discipline. The discipline offering a Discipline Specific Elective course may also offer discipline related elective courses that are interdisciplinary in nature. A student enrolled in an undergraduate degree program with Honours will have to earn 24 course credits from Discipline Specific Elective courses.

6.2.2 Generic Elective Course: A Generic Elective Course is offered by an unrelated discipline and has the objective of broadening the academic experience of a student. A student enrolled in an undergraduate degree program with Honours can acquire 24 course credits from Generic Elective Courses. A Core Course offered in a discipline may be allowed as an Elective to a student from another discipline. This course will be treated under the category of Generic Elective Courses.

6.2.3 Dissertation/Project: Engaging students in a Project/ Dissertation work, which requires knowledge application and problem solving, is considered to be important in the learning process. All students enrolled in an undergraduate degree program (Honours and non-Honours) will have the option of choosing to undertake Project/Dissertation work for 6 credits in lieu of a 6 credit Discipline Specific Elective course in the fifth semester only.

6.3 Ability Enhancement Courses: Ability Enhancement Courses which are to be taken up by students in an undergraduate degree program will be of two types:

6.3.1 Ability Enhancement Compulsory Courses: These 4 credit courses are mandatory for every student enrolled in an undergraduate degree program. A student will have to take up 4 credit course in Environmental Science and a second 4 credit course in English Communication/ MIL Communication.



6.3.2 Skill Enhancement Courses: Skill Enhancement Courses will be value based or skill based and there will be a pool of courses on offer. A student enrolled in an undergraduate degree program with Honours will have to take up a minimum of two SEC courses of 4 credits each as part of the program requirement. For students enrolled in non-Honours undergraduate degree programs the credit requirement from Skill Enhancement Courses will be 16 credits. It is desirable that the university will prepare Skill Enhancement Courses for various disciplines from the list of SEC provided by the UGC template. However, schools are free to develop their own SECs independently which must have prior approval of the Academic Council.

7.The STRUCTURE OF COURSES AND CREDITS OF THE UG-CBCS PROGRAMMES

This guideline is based on Instructional Template disseminated by UGC. The programmes offered by ARKA JAIN University will conform to the following guidelines.

A. Two categories of Ability Enhancement Courses will be offered:

I. Ability Enhancement Compulsory Courses of one paper each in the two semesters consisting of

a) English/MIL Communication b) Environmental Science.

ii. Skill Enhancement Courses

B. For the purpose of computation of work-load the following mechanism is to be adopted:

1 Credit = 1 Theory period of one-hour duration

1 Credit = 1 Tutorial period of one-hour duration

1 Credit = 1 Practical period of two-hour duration

8. REQUIREMENTS FOR AN UNDERGRADUATE DEGREE

The following table indicates the requirements for successful completion of under-graduate degree in ARKA JAIN University

DEGREE	MINIMUM REQUIREMENTS
Undergraduate Degree with Honours (all disciplines)	• 14 core papers in that discipline • 2 Ability Enhancement Compulsory Courses • 2 Skill Enhancement Courses (minimum) • 4 Discipline Specific Elective • 4 Generic Elective papers
Undergraduate Degree (in science)	• 4 core papers each in three disciplines of choice • 2 Ability Enhancement Compulsory Courses • 4 Skill Enhancement Courses (minimum) • 2 papers each of Discipline Specific Elective papers based on three disciplines of choice selected above, respectively.
Undergraduate degree in Humanities/ Social Sciences/ Commerce	• 4 core papers each in two disciplines of choice • 2 core papers each in English and MIL/Alt English respectively. • 2 Ability Enhancement Compulsory Courses • 4 Skill Enhancement Courses (minimum) • 2 papers each from a list of Discipline Specific Elective papers based on the two disciplines of choice selected above • 2 papers from the list of Generic Electives papers.

9.1 CREDIT ALLOCATION AND PROGRAMME TEMPLATE

Adopted from UGC Instructional Template for Facilitating Implementation of Choice Based Credit System (CBCS)

9.1 Credit Allocation (B.Sc. Honours)

Course	Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(14 Papers)	$14 \times 4 = 56$	$14 \times 5 = 70$
Core Course Practical/ Tutorial		
(14 Papers)	$14 \times 2 = 28$	$14 \times 1 = 14$
II. Elective Courses (6 Credits)		
(8 Papers)		
A. 1. Discipline Specific Elective (4 Papers)	$4 \times 4 = 16$	$4 \times 5 = 20$
A. 2 Discipline Specific Elective Practical / Tutorial (4 Papers)	$4 \times 2 = 8$	$4 \times 1 = 4$
B. 1 Generic Elective / Interdisciplinary (4 Papers)	$4 \times 4 = 16$	$4 \times 5 = 20$
B. 2 Generic Elective Practical / Tutorial (4 Papers)	$4 \times 2 = 8$	$4 \times 1 = 4$
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credit each)	$2 \times 4 = 8$	$2 \times 4 = 8$
Environmental Science		
English Communication		
2. Skills Enhancement Courses (SEC) (Minimum 2) (2 Papers of 4 credit each)	$2 \times 4 = 8$	$2 \times 4 = 8$
TOTAL CREDIT	148	148

9.2 PROGRAMME TEMPLATE (B.SC. HONOURS)

Semester	Core Course (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C1	English Communication			GE-1
	C2	Environmental Science			
II	C3	Environmental Science			GE-2
	C4	English Communication			
III	C5		SEC-1 English		GE-3
	C6				
	C7				
IV	C8		SEC-2		GE-4
	C9				
	C10				
V	C11			DSE-1	
	C12			DSE-2	
VI	C13			DSE-3	
	C14			DSE-4	

9.3 CREDIT ALLOCATION: B.A./B.COM. (HONOURS) & BBA

Course	Credits	
	Theory + Practical	Theory + Tutorial
I. Core Course (6 Credits)		
(14 Papers)	$14 \times 4 = 56$	$14 \times 5 = 70$
Core Course Practical/ Tutorial		
(14 Papers)	$14 \times 2 = 28$	$14 \times 1 = 14$
II. Elective Courses (6 Credits)		
(8 Papers)		
A. 1. Discipline Specific Elective (4 Papers)	$4 \times 4 = 16$	$4 \times 5 = 20$
A. 2 Discipline Specific Elective Practical / Tutorial (4 Papers)	$4 \times 2 = 8$	$4 \times 1 = 4$
B. 1 Generic Elective / Interdisciplinary (4 Papers)	$4 \times 4 = 16$	$4 \times 5 = 20$
B. 2 Generic Elective Practical / Tutorial (4 Papers)	$4 \times 2 = 8$	$4 \times 1 = 4$
Optional Dissertation or project work in place of one Discipline Specific Elective paper (6 credits) in 6th semester		
III. Ability Enhancement Courses		
1. Ability Enhancement Compulsory Courses (AECC) (2 Papers of 4 credit each)	$2 \times 4 = 8$	$2 \times 4 = 8$
Environmental Science		
English Communication		
2. Skills Enhancement Courses (SEC) (Minimum 2) (2 Papers of 4 credit each)	$2 \times 4 = 8$	$2 \times 4 = 8$
TOTAL CREDIT	148	148

9.4 PROGRAMME TEMPLATE: B.A./B.COM. HONOURS & BBA

Semester	Core Course (14)	Ability Enhancement Compulsory Course (AECC) (2)	Skill Enhancement Course (SEC) (2)	Elective: Discipline Specific DSE (4)	Elective: Generic (GE) (4)
I	C1	English / MIL Communication			GE-1
	C2	Environmental Science			
II	C3	Environmental Science			GE-2
	C4	English / MIL Communication			
III	C5		SEC-1 English		GE-3
	C6				
	C7				
IV	C8		SEC-2		GE-4
	C9				
	C10				
V	C11			DSE-1	
	C12			DSE-2	
VI	C13			DSE-3	
	C14			DSE-4	



10. CREDITS AND ATTENDANCE:

a. To be awarded credit in Core Courses, Elective Courses, Discipline Specific Elective (DSE) Course, Generic Elective (GE) Course and Ability Enhancement Courses (AEC) [comprising of Ability Enhancement Compulsory Courses (AECC) & Skill Enhancement Courses (SEC)], students must have at least 75% attendance. The attendance of all courses including the Skill Enhancement Courses shall be counted and accounted for in full while determining if the student has met the minimum attendance norms of ARKA JAIN University.

b. In case a student fails to have at least 75 percent attendance, he/she will not be allowed to sit for the end semester examination and hence have to repeat the concerned semester after the successful completion of the subsequent semesters.

(For example, if a student fails to secure the necessary credit in the first semester, then he/she can register in the second and subsequent semesters. And only after the successful completion of the sixth semester, can he/she repeat the first semester to earn the deficit credits.)

10. EXAMINATIONS, EVALUATION AND GRADING:

11.1 Examinations: Examinations, whether mid-term or end-term, theory or practical, would be counted separately for the purpose of considering a student passed or failed.

11.1.1 If a student does not appear in a paper (internal or external, theory or practical) in an examination, the student will be considered failed in that paper. Any paper where a student fails will be called an 'Arrear' paper of that student.

In case a student fails in any one or more papers in an end semester examination, she/he can appear in all the papers in which she/he failed

11.1.2 Schedule: The schedule for examinations will be as per the concerned Academic Calendar. The exact dates of examinations and related information will be notified by the office of the Controller of Examinations, ARKA JAIN University

11.2 The continuous evaluation for theory and practical courses shall be as under:

Theory Courses Component

	Weightage (4 Credit)	Weightage (4 Credit)	Weightage (4 Credit)
Mid-term Exam	20	15	10
Assignment	05	05	05
Class Attendance	05	05	05
End-term Exam	70	50	30

Practical Courses Component in end Term Exam:

	Weightage (4 Credit)	Weightage (4 Credit)	Weightage (4 Credit)
Experiment (including written text)	70	50	30
Viva-voce	20	15	10
Lab Records	10	10	10

12. Absolute grading system will be followed in which the marks are converted into grades based on the pre-determined class intervals defined in the course regulation and a multiplication factor of 10 shall be used to convert CGPA into equivalent percentage.

13. A student obtaining Grade F shall be considered fail and will be required to appear in the entire examination.

14. For non-credit courses 'Satisfactory' or 'Unsatisfactory' shall be indicated instead of the letter grade and this will not be counted for the computation of SGPA/CGPA.

15. On the completion of the programme, a consolidated transcript with CGPA indicating the performance in all semesters will be issued to all the registered students.



BACHELOR OF BUSINESS ADMINISTRATION (BBA)

Credit Allocation Matrix as per CBCS structure
Distribution of Credit across 6 semesters
Scheme of Study as per CBCS Structure

Sl.No.	Particulars	Subjects		Credits
I.	CORE	• Management Principles and Applications • Business Accounting-I • Managerial Economics • Financial Management • Business Accounting-II • Macro Economics • Marketing Management	• Managerial Accounting • Human Resource Management • Strategic Management • Retail Management • Research Methodology • Production and Operations Management • Summer Internship	7 X 5 =35 6 X 4 =24
II.	DISCIPLINE SPECIFIC ELECTIVE	• Business Law • Taxation • Entrepreneurship Development • Business Ethics • Dissertation • Consumer Behavior • Advertising and Sales Promotion • Service Marketing • Principles of Investment Management • International Finance • Financial Markets and Institutions • Recruitment and Selection • Industrial Relations and Labor Laws	• Knowledge Management • Banking Concepts and Practices • Company Accounts and Audit • Financial Statements and Analysis • Brand Management • Sales and Distribution Management • Rural and International Marketing • Training and Development • Performance Management and Appraisal System • Change Management and Organization Development	3 x 4 =12 5 x 5 =25 1 x 6= 6
III.	PROJECT	• Behavioral Science • Business Awareness • Statistics in Business Decisions • Information Technology for Managers	• E Commerce • International Economics • Event Management	3 X 5= 15 4 x 4= 16
IV.	ABILITY ENHANCING COURSES	• Environmental Science • Business Communication		2 X 4 = 8
V.	SKILL ENCHANTMENT COURSES	• Case Study Analysis • Organizational Behavior		2 X 4 = 8
	TOTAL			149

Distribution of Credit across 6 semesters

Sl.No	Type of Paper	No. of Paper	Total Credit	% weightage
1	• Core Paper	13	59	40%
2	• Generic Paper	7	31	21%
3	• Ability Enhancement Compulsory Paper	2	8	5%
4	• Discipline Specific Elective	9	43	29%
5	• Skill Enhancement	2	8	5%
	Total	33	149	100%

SEMESTER - I

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Management Principles & Applications	Core	4	3-1-0	100	40	70	20	5	5
2	Business Accounting -I	Core	4	3-1-0	100	40	70	20	5	5
3	Managerial Economics	Core	4	3-1-0	100	40	70	20	5	5
4	Case Study Analysis	SES	4	3-1-0	100	40	70	20	5	5
5	Business Communication	AECC	4	3-1-0	100	40	70	20	5	5
6	Behavioral Science	Core	4	3-1-0	100	40	70	20	5	5
	Total		24	24	600	240	420	120	30	30

C – Core Paper | GE – Generic Elective | SEC – Skill Enhancement Compulsory Paper | AEC – Ability Enhancement Compulsory Paper

SEMESTER - II

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Financial Management	Core	4	3-1-0	100	40	70	20	5	5
2	Business Accounting-II	Core	4	3-1-0	100	40	70	20	5	5
3	Macro Economics	Generic	4	3-1-0	100	40	70	20	5	5
4	Organizational Behavior	SES	4	3-1-0	100	40	70	20	5	5
5	Environmental Science	AECC	4	3-1-0	100	40	70	20	5	5
6	Business Awareness	Generic	4	3-1-0	100	40	70	20	5	5
	Total		24	24	600	240	420	120	30	30

C – Core Paper | GE – Generic Elective | SEC – Skill Enhancement Compulsory Paper | AEC – Ability Enhancement Compulsory Paper

SEMESTER - III

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Marketing Management	Core	5	4-1-0	100	40	70	20	5	5
2	Managerial Accounting	Core	5	4-1-0	100	40	70	20	5	5
3	Statistics in Business Decisions	Generic	5	4-1-0	100	40	70	20	5	5
4	Human Resource Management	Core	5	4-1-0	100	40	70	20	5	5
5	Information Technology for Managers	Core	4	3-1-0	100	40	70	20	5	5
	Total		24	24	500	200	350	100	25	25

C – Core Paper | GE – Generic Elective | SEC – Skill Enhancement Compulsory Paper | AEC – Ability Enhancement Compulsory Paper

SEMESTER - IV

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Strategic Management	Core	4	4-1-0	100	40	70	20	5	5
2	Retail Management	Core	4	4-1-0	100	40	70	20	5	5
3	Research Methodology	Core	4	4-1-0	100	40	70	20	5	5
4	Business Law	Core	4	3-1-0	100	40	70	20	5	5
5	Taxation	Core	4	3-1-0	100	40	70	20	5	4
6	E Commerce	Generic	4	3-1-0	100	40	70	20	5	5
	Total		27	27	600	240	420	120	30	29

C – Core Paper | GE – Generic Elective | SEC – Skill Enhancement Compulsory Paper | AEC – Ability Enhancement Compulsory Paper

SEMESTER - V

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Production and Operations Management	Core	5	4-1-0	100	40	70	20	5	5
2	Entrepreneurship Development	SEC	5	4-1-0	100	40	70	20	5	5
3	International Economics	DSE	5	4-1-0	100	40	70	20	5	5
4	Consumer Behavior (Elective – I, Marketing)	DSE	5	4-1-0	100	40	70	20	5	5
5	Advertising and Sales Promotion (Elective – II, Marketing)	DSE	5	4-1-0	100	40	70	20	5	4
6	Service Marketing (Elective – III, Marketing)	DSE	5	4-1-0	100	40	70	20	5	5
7	Principles of Investment Management (Elective – I, Finance)	DSE	5	4-1-0	100	40	70	20	5	5
8	International Finance (Elective – II, Finance)	DSE	5	4-1-0	100	40	70	20	5	5
9	Financial Market & Institutions (Elective – III, Finance)	DSE	5	4-1-0	100	40	70	20	5	5
10	Recruitment and Selection (Elective – I, HRM)	DSE	5	4-1-0	100	40	70	20	5	5
11	Industrial Relations and Labor Laws (Elective – II, HRM)	DSE	5	4-1-0	100	40	70	20	5	5
12	Knowledge Management (Elective – III, HRM)	DSE	5	4-1-0	100	40	70	20	5	5
13	Summer Internship	Core	5	5	100	40	70	20	5	5
	Total		30	30	700	280	420	120	30	30

SEMESTER - VI

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Business Ethics	Generic	5	3-1-0	100	40	20	5	5
2	Event Management	Generic	5	4-1-0	100	40	20	5	5
3	Banking Concepts and Practices (Elective IV, Finance)	DSE	5	4-1-0	100	40	20	5	5
4	Company Accounts and Audit (Elective V, Finance)	DSE	5	4-1-0	100	40	20	5	5
5	Financial Statements and Analysis (Elective VI, Finance)	DSE	5	4-1-0	100	40	20	5	4
6	Brand Management (Elective IV, Marketing)	DSE	5	4-1-0	100	40	20	5	5
7	Sales and Distribution Management (Elective V, Marketing)	DSE	5	4-1-0	100	40	20	5	5
8	Rural and International Marketing (Elective VI, Marketing)	DSE	5	4-1-0	100	40	20	5	5
9	Training and Development (Elective IV, HRM)	DSE	5	4-1-0	100	40	20	5	5
10	Performance Management and Appraisal System (Elective V, HRM)	DSE	5	4-1-0	100	40	20	5	5
11	Change Management and Organization Development (Elective VI, HRM)	DSE	5	4-1-0	100	40	20	5	5
12	Dissertation	CORE	6	6	100	40	20	5	5
	Total		25	25	500	200	100	25	25

C – Core Paper | GE – Generic Elective | SEC – Skill Enhancement Compulsory Paper | AEC – Ability Enhancement Compulsory Paper



BACHELOR OF COMPUTER APPLICATION (BCA)

Credit Allocation Matrix as per CBCS structure
Distribution of Credit across 6 semesters
Scheme of Study as per CBCS Structure

Sl.No.	Particulars	Subjects			Credits
I.	CORE PAPER	• Introduction to Computer Science • Programming in C • Computer Science Lab • Programming in C Lab • Data Structure through C • Object Oriented Programming with C++ • Operating System • Data Structure through C Lab • Object Oriented Programming with C++ Lab • Programming with Java • Design and Analysis of Algorithms	• Database Management System • Data Communication & Networking • Programming with Java Lab • Database Management System Lab • Introduction to Data Science • Internet of Things • Enterprise Java • Machine Learning • Enterprise Java Lab • Machine Learning Lab • Software Engineering	5×14 = 70 2×8 = 16	
II.	DISCIPLINE SPECIFIC ELECTIVE	Data Science	Internet of Things	Artificial Intelligence	5×2=10 2×2=4
		ELECTIVE I & II	ELECTIVE I & II	ELECTIVE I & II	
		• R Programming Language • Python for Data Science • Web Programming • R Programming Language Lab • Python for Data Science Lab • Web Programming Lab	• Sensor Technologies • Embedded System • Web Programming • Sensor Technologies Lab • Embedded System Lab • Web Programming Lab	• Introduction to RPA Tools • Introduction to Process Automation • Web Programming • Introduction to RPA Tools Lab • Introduction to Process Automation Lab • Web Programming Lab	
		ELECTIVE III & IV	ELECTIVE III & IV	ELECTIVE III & IV	5×2=10
		• Design and Analysis of Experiments • Probabilistic Graphical Models • Exploratory Data Analysis and Data Visualization Techniques	• Artificial Intelligence • Digital Image Processing • Cloud Computing	• Six Sigma and Lean Methods • Digital Image Processing • Business Intelligence	
		ELECTIVE V & VI	ELECTIVE V & VI	ELECTIVE V & VI	
		• Big Data Analytics • NoSQL Databases • Time Series Analysis • Big Data Analytics Lab • NoSQL Databases Lab • Time Series Analysis Lab • Project	• Embedded C with Arduino • Digital Signal Processing • Artificial Neural Networks • Embedded C with Arduino Lab • Digital Signal Processing Lab • Artificial Neural Networks Lab • Project	• Cloud Deployment And Management • Natural Language Processing • Artificial Neural Network • Cloud Deployment And Management Lab • Natural Language Processing Lab • Artificial Neural Networks Lab • Project	
III.	GENERIC PAPER	• Discrete Mathematics • Numerical & Statistical Methods			5 X 1 = 5 4 x 1 = 4
IV.	ABILITY ENHANCEMENT COMPULSORY PAPER	• Business Communication • Environmental Science			2 X 4 = 8
V.	SKILL ENHANCEMENT COMPULSORY COURSE	• Python Programming • Python Programming Lab • Mobile Application Development • Mobile Application Development Lab			4 X 2 = 8 2 X 2 = 4
	TOTAL				160

Distribution of Credit across 6 semesters

Sl.No	Type of Paper	No. of Paper	Total Credit	% weightage
1	• Core Paper	22	86	53.75%
2	• Generic Paper	2	09	5.62%
3	• Ability Enhancement Compulsory Paper	2	10	6.25%
4	• Discipline Specific Elective	11	43	26.87%
5	• Skill Enhancement	4	12	7.5%
	Total	41	160	100%

SEMESTER - I

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Introduction to Computer Science	Core	5	4-1-0	100	40	70	20	5	5
2	Programming In C	Core	5	4-1-0	100	40	70	20	5	5
3	Discrete Mathematics	GS	5	4-1-0	100	40	70	20	5	5
4	Business Communication	AECC	5	4-1-0	100	40	70	20	5	5
	Practical									
5	Computer Science Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
6	Programming In C Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
	Total		24	28	500	200	350	100	25	25

*CIA – Continuous Internal Assessment – Based on Projects / Assignment during the semester

GS- Generic Subject | AECC -Ability Enhancement Compulsory Course

SECC -Skill Enhancement Compulsory Course | DSE - Discipline Specific Elective

SEMESTER - II

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Data Structure through C	Core	5	4-1-0	100	40	70	20	5	5
2	Object Oriented Programming with C++	Core	5	4-1-0	100	40	70	20	5	5
3	Operating System	Core	5	4-1-0	100	40	70	20	5	5
4	Numerical & Statistical Methods	GS	4	3-1-0	100	40	70	20	5	5
5	Environmental Science	AECC	5	4-1-0	100	40	70	20	5	5
	Practical									
6	Data Structure through C Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
7	Object Oriented Programming with C++ Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
	Total		28	32	600	240	420	120	30	30

*CIA – Continuous Internal Assessment – Based on Projects / Assignment during the semester

GS- Generic Subject | AECC -Ability Enhancement Compulsory Course

SECC -Skill Enhancement Compulsory Course | DSE - Discipline Specific Elective

SEMESTER - III

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Data Structure through C	Core	5	4-1-0	100	40	70	20	5	5
2	Object Oriented Programming with C++	Core	5	4-1-0	100	40	70	20	5	5
3	Operating System	Core	5	4-1-0	100	40	70	20	5	5
4	Numerical & Statistical Methods	GS	5	4-1-0	100	40	70	20	5	5
5	Environmental Science	AECC	4	3-1-0	100	40	70	20	5	5
	Practical									
6	Data Structure through C Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
7	Object Oriented Programming with C++ Lab	Core	2	0-0-4	50	20	35	10	2.5	2.5
8			2	0-0-4	50	20	35	10	2.5	2.5
	Total		30	36	650	260	455	130	32.5	32.5

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SEMESTER - IV

S.No	Name of the Subject	Type of Paper	Credits	Contact Hours Per week L-T-P	Total Marks	Pass marks	End Term Theory/ Practical Exam	Mid Term Theory/ Practical Exam	CIA*	Attendance
1	Introduction to Data Science	Core	5	4-1-0	100	40	70	20	5	5
2	Internet of Things	Core	5	4-1-0	100	40	70	20	5	5
3	Data Science - Elective I	DSE	5	4-1-0	100	40	70	20	5	5
	IOT - Elective I									
	AI - Elective I									
4	Data Science - Elective II	DSE	5	4-1-0	100	40	70	20	5	5
	IOT - Elective II									
	AI - Elective II									
	Practical									
5	Data Science - Elective I	DSE	2	0-0-4	50	20	35	10	2.5	2.5
	IOT - Elective I									
	AI - Elective I									
6	Data Science - Elective II	DSE	2	0-0-4	50	20	35	10	2.5	2.5
	IOT - Elective II									
	AI - Elective II									
	Total		24	28	500	200	350	100	25	25

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a. K. Shrivastava

