

St. Joseph's College of Commerce (Autonomous)

163, Brigade Road, Bengaluru – 560 025

Accredited with 'A++' Grade (4th Cycle) by the National Assessment
and Accreditation Council (NAAC)

Recognized by the UGC as
"COLLEGE WITH POTENTIAL FOR EXCELLENCE"



Bachelor of Commerce (Analytics) Semesters V and VI

Syllabus as per Karnataka State Education Policy 2024

Curriculum Framework w.e.f., 2024-2025

**Academic Year 2026 – 2027
Batch 2024 – 2027**

St. Joseph's College of Commerce (Autonomous)

Affiliated to Dr. Manmohan Singh Bengaluru City University

St. Joseph's College of Commerce (SJCC) was formerly a part of St. Joseph's College, established in the year 1882. The Commerce Department was established in the year 1949 and it became an independent college with its own building in Brigade Road in the year 1972.

The college has in its Vision a model for higher education which encourages individuals to dream of a socially just world and in its Mission a strategy to empower individuals in realizing that dream.

With an objective of imparting quality education in the field of Commerce and Management, the college has been innovating in all aspects of higher education over a long period of time. These innovations were further bolstered with the granting of autonomous status to the college by UGC in September 2005. From then on, the college has taken a lead in reforming curriculum and syllabus, examination and evaluation pattern and teaching and learning methods through the Board of Studies, the Academic Council and the Governing Council comprising of eminent academicians, industry representatives and notable alumni.

The college has undergone four cycles of NAAC accreditation starting from the year 2000 in which it secured 'five stars', next in the year 2007 an 'A' grade, in the year 2012 again an 'A' grade and recently in February 2021 an 'A++'. It is one of the very few institutions in the country to have secured A++ grade in the fourth cycle under the Revised Accreditation Framework (RAF) and the first college in Karnataka to do so. The college was declared as a 'College with Potential for Excellence' in the year 2010. In 2011, SJCC was recognized as a Research Centre by Bangalore University. The college has been ranked the only institution from Karnataka to make it consistently to the top 100 in the country in the National Institutional Ranking Framework (NIRF) ratings of Ministry of Education, Government of India.

The college offers diverse programmes in Commerce, Business Administration Arts and Science. Under Commerce Studies it offers B.Com, B.Com (Professional- International Accounting and Finance), B.Com (BPM- Industry Integrated), B.Com (Travel and Tourism), B.Com (Analytics), B.Com (Professional - Strategic Finance), B.Com (Accounting and Taxation), M.Com (Finance & Taxation/ Marketing & Analytics), M.Com (International Business) & M.Com (Financial Analysis). Under Business Administration it offers BBA, BBA (Entrepreneurship) and BBA (Professional- Finance and Accountancy). Under Arts it offers BA (English, Communicative English and Psychology) and Under Science it offers B.Sc (Economics, Mathematics and Data Analytics). The college also offers five one-year Post Graduate Diploma programmes

ABOUT THE DEPARTMENT

The B. Com Department of St. Joseph's College of Commerce has efficiently streamlined all its courses to reflect an interdisciplinary approach to understanding the contemporary business environment. Its aim is to construct a strong foundation in core subjects such as Accounting, Taxation, Economics, Statistics and Auditing along with a choice of Cost Accounting, Finance, Business Analytics, Marketing and Human Resources, studied in the fifth and sixth semester. The courses are challenging, yet, rewarding for students with high aspirations. Our students have been sought after by employers for their excellent knowledge, skills and attitude, giving them an edge over their peers from other institutions. The B.Com Programme of the college is rated amongst the top 10 in the country (India Today, AC Nielson Survey 2016).

OBJECTIVES OF THE B.COM PROGRAMME

- a. To provide conceptual knowledge and application skills in the domain of Commerce studies.
- b. To provide knowledge in all the areas of business to be able to meet expectations of Commerce, Trade and Industry.
- c. To sharpen the students' analytical and decision-making skills.
- d. To provide a good foundation to students who plan to pursue professional programmes like CA, ICWAI, ACS, CFA and MBA.
- e. To facilitate students to acquire skills and abilities to become competent and competitive in order to be assured of good careers and job placements.
- f. To develop entrepreneurship abilities and managerial skills in students so as to enable them to establish and manage their own business establishments effectively.
- g. To develop ethical business professionals with a broad understanding of business from an interdisciplinary perspective.

I. ELIGIBILITY FOR ADMISSION

Candidates who have completed the two-year Pre-University course of Karnataka State or its equivalent are eligible for admission into this Programme.

II. DURATION OF THE PROGRAMME

The duration of the programme is three (03) years of Six Semesters. A candidate shall complete his/her degree within five (5) academic years from the date of

his/her admission to the first semester. Students successfully completing three (03) years of the course will be awarded Bachelor's Degree in Commerce.

III. MEDIUM OF INSTRUCTION

The medium of instruction shall be in English.

IV. ATTENDANCE

- a. A student shall be considered to have satisfied the requirement of attendance for the semester, if he/she has attended not less than 75% in aggregate of the number of working periods in each of the courses, compulsorily.
- b. A student who fails to complete the course in the manner stated above shall not be permitted to take the End Semester Examination.

V. TEACHING AND EVALUATION

M.Com/MBA/MFA/MBS/MTA/MA/M.Sc graduates with B.Com, B.B.A, B.B.S,BA and B.Sc as basic degree from a recognized university are only eligible to teach and to evaluate the courses including part – B courses of I and II semesters except languages, compulsory additional courses and core Information Technology related courses, Skill based, Value Based and Foundation courses, mentioned in this regulation. These courses shall be taught by the Post graduates as recognized by the respective Board of Studies.

VI. SCHEME OF EXAMINATION

ACADEMIC EVALUATION UNDER STATE EDUCATION POLICY (SEP) (EFFECTIVE FROM ACADEMIC YEAR 2024-2025)

The academic evaluation of both undergraduate (UG) and postgraduate (PG) programmes consists of two components: Continuous Internal Assessment (Formative Assessment) and End-Semester Examination (Summative Assessment). Assessment for UG Students under SEP will be as follows:

Type of Assessment	Assessment Component	Allotted Marks
Continuous Internal Assessment / Formative Assessment	CIA I (Test)	10 Marks
	CIA II (Skill-based Assessment)	10 Marks
	Mid-Term Exam	20 Marks
Total	40 marks (scaled down to 20 marks)	
End-Semester Examination / Summative Assessment	End-Semester Examination (For three hours duration)	80 Marks
TOTAL		100 Marks

A. Additional Details

- **Mid-Term Exam:** The mid-term exam covers at least 40-50% of the syllabus and has duration of one hour.
- **Continuous Internal Assessment (CIA) Activities:** CIA activities are designed with clear objectives, modalities, assessment rubrics, and outcomes.

B. CIA improvement

There is **no provision for enhancing CIA marks** for UG students once the semester ends.

Attendance requirement for taking ESE

- The University Grants Commission (UGC) mandates a minimum of 75% attendance in each course to be eligible to write the End Semester Examinations (ESE).
- There is no provision for condonation of attendance under the UGC Act.

VII. MINIMUM FOR A PASS

- **Minimum Pass Marks in Final Examination:** A minimum of 40 percent is required in each course in the End Semester Exams. The student must score at least 32 marks out of 80 in the End Semester Examination (ESE).
- **Overall Pass Requirement:** The aggregate of Continuous Internal Assessment (CIA) and End Semester Examination (ESE) should also be a minimum of 40 percent. Out of 100 marks, a student must secure at least 40 marks in each course to qualify as passed inclusive of minimum 32 marks out of 80 in End Semester Exam.

VIII. GRADING SYSTEM FOR CHOICE BASED CREDIT SYSTEM (CBCS)

The modalities and operational details are given below:

- **Grade Points:** The College adopts a ten-point grading system. The papers are marked in a conventional way for 100 marks. The marks obtained are converted to grade point according to the following table. If a student is absent for the paper the grade point assigned is 0.

% Marks	95 - 100	90 - 94	85 - 89	80 - 84	75 - 79	70 - 74	65 - 69	60 - 64	55 - 59	50 - 54	45 - 49	40 - 44	Below 40
Grade Point	10	9.5	9	8.5	8	7.5	7	6.5	6	5.5	5	4.5	0

Credits: Credits are assigned to courses based on the following broad classification:

Courses Category	Instruction Hours/week	Credits
------------------	------------------------	---------

Languages	3 Hours	3
Major Core	4 Hours	4
Skill Enhancement Courses	1-4 Hours	1-4
Compulsory Courses	1-2 Hours	1-2

Grade point calculation

- Semester Grade Point Average (SGPA): The SGPA is calculated as the sum of the product of the credits and the grade points scored in all courses, divided by the total credits.

$$\text{SGPA} = \frac{\text{Total of (Credits Earned X Grade Points)}}{\text{Total of Corresponding Credits}}$$

- Minimum SGPA required for a pass is 4.5.
- If a student has not passed in all courses or is absent, the SGPA is not assigned.
- Cumulative Grade Point Average (CGPA): The CGPA is the weighted average of all the courses taken by a student across all semesters of a programme.

$$\text{CGPA} = \frac{\sum \text{Total Credits in the Semester} \times \text{SGPA}}{\text{Total Credits of the Courses}}$$

Note: SGPA and CGPA will be rounded off to two decimal places.

Interpretation of SGPA/CGPA and Classification of Final Result

Grade Points	% of Marks	Grade	Result/Class Description
9.00-10.00	85 - 100	O	Outstanding
8.00-8.99	75 - 85	A+	First Class Exemplary
7.00-7.99	65 - 75	A	First Class Distinction
6.00-6.99	55 - 65	B+	First Class
5.50-5.99	50 - 55	B	High Second Class
5.00-5.49	45 - 50	C	Second Class
4.50 - 4.99	40 - 45	P	Pass Class

Below 4.5	Below 40	RA	To Re-Appeal
-----------	----------	----	--------------

IX. PATTERN OF ESE QUESTION PAPER UNDER SEP

The End Semester Examination (ESE) question paper under SEP will include questions that assess both Lower Order Thinking Skills (LOTS) and Higher Order Thinking Skills (HOTS). The difficulty level of the question paper will be distributed as follows: 40% easy, 30% difficult, and 30% very challenging.

- **Duration:** 3 Hours
- **Maximum Marks:** 80

The question paper pattern will be as follows:

Sections	Marks per Question	Number of Questions	Total Marks
SectionA	2 marks	5 questions (out of 7)	10 Marks
SectionB	5 marks	4 questions (out of 6)	20 Marks
SectionC	12 marks	3 questions (out of 5)	36 Marks
SectionD	14 marks	1 question (Case Study)	14 Marks
Total			80 Marks

X. REVALUATION AND RETOTALING

Requests for **revaluation**, **retotaling**, and **photocopies of the answer book** for the End-Semester Examination (ESE) must be submitted to the Controller of Examination along with the prescribed fee within two weeks from the declaration of results.

XI. ABSENCE DURING END SEMESTER EXAMINATION

If a student misses the End Semester Examination, they will be marked as "Absent" and will be required to take the supplementary examination for that course during the next available opportunity only.

XII. MALPRACTICE

Students will be dealt severely in case if they are found guilty of any malpractices

during examination. The college has zero tolerance towards any kind of foul means adopted to secure marks in the exams.

Outcome Based Education (OBE)

B. Com (Analytics)

PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Our **B. Com (Analytics)** program will produce graduates who will:

PE 01	Be competent, creative and highly valued professionals in industry, academia, or government.
PE 02	Adapt to a rapidly changing environment with newly learnt and applied skills and competencies, become socially responsible and value driven citizens, committed to sustainable development
PE 03	Act with conscience of global, ethical, societal, ecological and commercial awareness with sustainable values as is expected of professionals contributing to the country.
PE 04	Able to continue their professional development by obtaining advanced degrees in accounting and other professional fields.

PROGRAMME OUTCOMES (POS)

After the completion of the **B. Com (Analytics)** Programme, the student will be able to:

PO 1	Disciplinary and Inter-disciplinary Knowledge: Demonstrate the understanding of relevant business, management and organization knowledge, both academic and professional, in line with industry standards
PO 2	Decision Making Skill: Apply underlying concepts, principles, and techniques of analysis, both within and outside the discipline to generate all the possible solutions and pick one that shows their understanding of the problem and the outcomes.
PO 3	Integrated Problem-Solving and Research: Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems by analyzing key managerial issues in a

	particular industry or company and propose appropriate managerial solutions to the situation
PO 4	Critical Thinking Skill: Evaluate evidence, arguments, claims and beliefs by using right type of reasoning as appropriate to the situation and Analyze how parts of a whole interact with each other to produce overall outcomes in complex systems.
PO 5	Creative Thinking Skill: Develop, implement and communicate new and worthwhile ideas using both incremental and radical concepts to make a real and useful contribution to their work
PO 6	Usage of Modern Technology and Tools: Use tools and technologies of digital nature, communication/networking tools and social networks appropriately to access, manage, integrate, evaluate and create information to successfully function in a knowledge economy.
PO 7	Leadership and Team Work: Develop a vision, translate that vision into shared goals, and effectively work with others to achieve these goals
PO 8	Ethical Conduct: Act responsibly and sustainably at local, national, and global levels.
PO 9	Collaboration: Work collaboratively and respectfully as members and leaders of diverse teams.
PO 10	Self-Directed and Life-Long Learning: Create goals and monitor progress toward them by developing an awareness of the personal, environmental and task-specific factors that affect the attainment of the goals.

PROGRAMME SPECIFIC OUTCOMES (PSOS)

PO 11	Developing analytical model Develop models to identify and evaluate complex business challenges by analysing data using analytical techniques and visualising tools.
PO 12	Application of analytical model Apply appropriate analytical methods into the core business operations and to leverage data to cultivate and nourish informed decision-making.

B.COM (Analytics) - PROGRAMME (Batch 2024)							
PROGRAMME MATRIX AS PER STATE EDUCATION POLICY							
Category/Semester	I	II	III	IV	V	VI	TOTAL
Part A : Languages							
Language 4 Hrs - 3 Crs	Lang I	Lang I	Lang I	Lang I	-	-	
	Lang II	Lang II	Lang II	Lang II	-	-	
Part A Credits	6 Crs	6 Crs	6 Crs	6 Crs	-	-	24
Part B: Core Courses							
Major Core Courses 4 Hrs - 4 Crs	Financial Accounting	Corporate Accounting	Cost Accounting	Financial Management	Management Accounting	Operations Research	
	Business Statistics I	Business Statistics II	R Programming for Analytics	Python Programming for Analytics	Income Tax I	Income Tax II	
	Mathematics	Business Economics	Human Resource Management	Marketing Management	Machine Learning with Python	Advanced Analytics with Python	
	Principles of Management	Business Law	Principles & Practices of Auditing	Banking and Insurance	Research Methodology	Goods and Service Tax	
Elective Courses 4 Hrs/4 Crs					DBMS with SQL	Data Visualization with Tableau & Power BI	
Part B Credits	16	16	16	16	20	20	104
Part C : Skill Enhancement Courses /Activities							
Skill Based Courses /Activities		*Certificate Course 1 Cr	Introduction to Spreadsheet 2 Crs	Generative AI 2 Crs	Financial Modelling 3 Crs	Survey Project 2. Crs	
				*Certificate Course 1 Cr		Corporate Internship 2 Crs	
Value Based Activities		Extracurricular Activities 1 Cr	-	Extracurricular Activities 1 Cr	Social Internship 1 Cr	Extension Activities 1 Cr	
Part C Credits		2 Crs	2 Crs	4 Crs	8 Crs	5 Crs	17
Part D: Foundation /Compulsory Courses							
Foundation/ Compulsory Courses	Psychological Well being 1 Cr	Constitutional Values II 2 Crs	Environmental Studies 2 Crs	-	-	-	
	Constitutional Values I 2 Crs						
Part D Credits	3 Crs	2 Crs	2 Crs				7
Total	25 Crs	26 Crs	26 Crs	26 Crs	24 Crs	25 Crs	152

**Course Structure
Semester V**

Course Code	Title of the Course	Category	Lecture Hours per week	CIA	ESE	Total Marks	Credits
C5 24 MC 501	Management Accounting	Major Core	4	20	80	100	4
C5 24 MC 502	Income Tax I	Major Core	4	20	80	100	4
C5 24 MC 503	Machine Learning with Python	Major Core	4	20	80	100	4
C5 24 MC 504	Research Methodology	Major Core	4	20	80	100	4
C5 24 ME 501	DBMS with SQL	Major Elective	4	20	80	100	4
C5 24 SB 501	Financial Modeling	Skill Based Course	3	20	80	100	3
UG 24 SI 501	Social Internship	Skill Based Activity	2	25	–	25	1
Total credits				145	480	625	24

**Course Structure
Semester VI**

Course Code	Title of the Course	Category	Lecture Hours per week	CIA	ESE	Total Marks	Credits
C5 24 MC 601	Operations Research	Major Core	4	20	80	100	4
C5 24 MC 602	Income Tax II	Major Core	4	20	80	100	4
C5 24 MC 603	Advanced Analytics with Python	Major Core	4	20	80	100	4
C5 24 MC 604	Goods and Services Tax	Major Core	4	20	80	100	4
C5 24 ME 601	Data Visualisation through Tableau and Power BI	Major Elective	4	20	80	100	4
UG 24 SB 601	Survey Project	Skill Based Activity	2	25	25	50	2
UG 24 CI 601	Corporate Internship	Skill Based Activity		50	–	50	2
UG 24 VB 601	Extension Activities	Value Based Activity		25	–	25	1
Total credits				200	425	625	25