Curriculum and Syllabi of M.Voc. Banking and Finance

(Admission from 2025 onwards)

Submitted by

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April-2025

C O N T E N TS

Syllabi

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DDU KAUSHAL Kendra
Cochin University of Science and Technology

Curriculum and Syllabi of M.Voc. Banking and Finance

I. Introduction

The Banking, Financial Services, and Insurance (BFSI) sector forms the backbone of India's economic framework, contributing significantly to the nation's GDP. As one of the fastest-growing segments of the Indian economy, the BFSI sector is estimated to account for around 12% of India's GDP, underscoring its critical role in driving economic growth and stability. With the expansion of financial services, rapid digitization, and the government's initiatives to enhance financial inclusion, the sector has evolved into a dynamic ecosystem requiring skilled professionals to sustain its momentum. This vocational postgraduate programme in Banking and Finance (M.Voc. Banking & Finance) focuses on equipping students with industry-specific knowledge and practical skills to address the complex and ever-evolving needs of the BFSI domain.

The BFSI sector is a key contributor to employment generation in India, offering diverse career opportunities ranging from retail and investment banking to insurance, wealth management, and fintech innovations. The future prospects of the sector are highly promising, driven by factors such as increased globalization, rising digital adoption, and policy reforms. This programme aims to prepare graduates to excel in the competitive BFSI landscape by fostering a blend of theoretical understanding and practical expertise. By bridging the gap between academic learning and industry demands, the curriculum aspires to create professionals capable of shaping the future of India's financial services ecosystem while contributing to the nation's economic growth and development.

The curriculum of the two-year M.Voc. Banking & Finance programme is primarily designed as per the guidelines of National Credit Framework, 2023 (NCrF) that integrates the qualification frameworks National Higher Education Qualification Framework (NHEQF), National Skills Qualification Framework (NSQF) and National Curriculum Framework (NCF)/ National School Education Qualification Framework (NSEQF). The curriculum also bases Outcome-Based Education (OBE) system, Choice-Based Credit System (CBCS), and Grading System. This comprehensive approach enhances the educational experience while aligning with contemporary educational practices. The curriculum and syllabi of the M.Voc. Banking & Finance programme are designed to provide aspirants with in-depth theoretical knowledge and skill-based practical/training aligned with the needs of the banking and finance industry. This comprehensive approach will significantly enhance the employability of the post graduates, enabling them to meet the industry's evolving resource demands. This curriculum and syllabi will be implemented starting from the academic year 2025-26.

II. Scope

The M.Voc. Banking & Finance is a two-year post graduate vocational programme with four semesters. The programme provides an exit option after successfully completing the first year (first

and second semesters) with specified internship requirement. This curriculum and syllabi are applicable to the M.Voc. Banking & Finance programme in DDU KAUSHAL Kendra of Cochin University of Science and Technology (CUSAT) starting from the academic year 2025-26.

III. M.Voc. Banking and Finance (M.Voc. B&F)

The M.Voc. Banking and Finance programme, as mentioned earlier, is a vocational postgraduate programme primarily designed as per the guidelines of National Credit Framework, 2023 (NCrF) to prepare students for the dynamic and rapidly expanding Banking, Financial Services, and Insurance (BFSI) sector, which contributes significantly to India's GDP and economic stability. With the increasing demand for skilled professionals driven by financial inclusion, digitization, and policy reforms, this programme combines theoretical knowledge with practical training to meet the sector's evolving needs. The curriculum integrates the National Skill Qualification Framework (NSQF), Sector Skill Council Certification, Outcome-Based Education (OBE), and Choice-Based Credit System (CBCS) to ensure a holistic and industry-aligned learning experience. By bridging the gap between academic learning and industry expectations, the programme aims to enhance employability and prepare graduates to contribute meaningfully to India's financial ecosystem.

III. 1. Programme Education Objectives (PEOs)

1. PEO1: To produce graduates who acquire and apply specialized expertise in diverse business fields to address evolving industry challenges, innovate solutions, and align practices with global benchmarks.
2. PEO2: To equip graduates with the ability to leverage industry-relevant tools, technologies, and data-driven approaches for optimizing workflows, enhancing decision-making, and adapting to technological disruptions.
3. PEO3: To empower graduates to design systematic, ethical, and sustainable strategies that solve complex real-world problems while adhering to regulatory, social, and environmental responsibilities.
4. PEO4: To prepare graduates for industry demands by integrating hands-on training, certifications, and collaborative projects that bridge theoretical knowledge with practical professional competence.
5. PEO5: To instil a culture of continuous skill development in graduates, enabling them to stay updated with global trends, policy changes, and emerging technologies, ensuring adaptability in dynamic professional ecosystems.

III. 2. Programme Outcome (POs)

PO1: Acquire and apply specialized theoretical and practical expertise in the evolving business context to address industry-specific challenges, innovate solutions, and align with global standards.

2. PO2: Apply industry-relevant tools and data-driven techniques to optimize decision-making, streamline workflows, and adapt to technological advancements.
3. PO3: Develop systematic, evidence-based strategies and models to solve real-world problems, ensuring alignment with ethical, regulatory, and sustainability frameworks.
4. PO4: Provide hands-on professional competence via internships, certifications, and collaborative projects, fostering employability and readiness for dynamic industry demands.
5. PO5: Embrace continuous skill development to stay abreast of emerging technologies, policy shifts, and global trends, ensuring resilience in evolving professional ecosystems.

III. 3. Programme (Specific) Education Objectives (PSEOs)

2. PSEO1: Equip students with in-depth theoretical and applied knowledge of banking, financial services, and insurance (BFSI) operations such that they are empowered to act as strategic decision makers.
3. PSEO2: Impart skill-based training on financial market operations, risk management, fintech applications and financial analytics to make learners industry ready.
4. PSEO3: Prepare leaners to contribute to national economic development by promoting inclusiveness, understanding policy framework and utilizing technological innovations in financial services.
5. PSEO4: Provide a global outlook on sustainable banking and finance practices.
6. PSEO5: Integrate theoretical knowledge of banking and financial services with practical skills through hands-on corporate internships, professional workshops, and project-based learning to bridge the gap between academia and industry.

III. 4. Programme Specific Outcomes (PSOs)

1. PSO1: Develop deep understanding of banking, financial services, and insurance (BFSI) concepts, including regulatory frameworks, financial markets, and industry-specific practices.
2. PSO2: Apply theories and models in treasury management, tax processing, financial reporting, and fintech applications to solve real-world problems connected to the BFSI sector.
3. PSO3: Utilize spreadsheet-based analytical tools and financial analytics techniques to enhance decision-making processes and adapt to digitization trends in the BFSI sector.
4. PSO4: Develop and use quantitative financial models to analyse financial data, assess risks, and propose innovative solutions for complex financial problems.
5. PSO5: Understand the global banking and finance landscape to uphold sustainable management practices and standards.
6. PSO6: Achieve industry-recognized certifications and practical exposure through internships, skill workshops, and sector-specific training to enhance employability in the BFSI domain.
7. PSO7: Embrace a lifelong learning mindset to stay updated with industry trends, policy reforms, and emerging technologies, ensuring adaptability in a rapidly evolving BFSI ecosystem.

III. 5. Mapping of Programme Outcome (POs) and Programme Specific Outcome (PSOs)

Programme Outcomes (POs)	Programme Specific Outcomes (PSOs)						
	PSO1	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
PO1	3	3	2	3	2	2	2
PO2	2	3	3	3	2	2	2
PO3	2	3	2	3	3	2	2
PO4	1	2	2	2	2	3	2
PO5	2	2	2	2	3	3	3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High

IV. Curriculum

The curriculum of the two-year M.Voc. Banking & Finance programme is designed in line with the guidelines of National Credit Framework, 2023 (NCrF) of UGC that integrates the qualification frameworks National Higher Education Qualification Framework (NHEQF), National Skills Qualification Framework (NSQF) and National Curriculum Framework (NCF)/ National School Education Qualification Framework (NSEQF). The curriculum also bases Outcome-Based Education (OBE) system, Choice-Based Credit System (CBCS), and Grading System. The curriculum in each of the semester of the programme have a suitable mix of general courses and skill courses. The general courses will have 30-40% of the total credits and balance 60-70% credits for skill courses.

IV.1. Skill Development Components (60%-70% Weightage)

NSQF mandates Vocational Education for students is designed, developed, delivered, assessed and certified in close consultation with industry and employers in accordance with the guidelines by the Awarding Bodies, especially with respect to the following aspects:

1. Stakeholders' consultations during design and developed of qualification.
2. Industry validation of the qualification to establish its need and relevance
3. Allowing the relevant experts from the industry/sectors to deliver and assess the qualification and prescribing the same in the guidelines for appointment of instructors/ trainers

The University, in collaboration with industry partners and based on skill gap analysis reports published by the NSDC, industry associations, Sector Skill Councils, government agencies, etc., determines specific job roles to be integrated into the curriculum.

The practical, hands-on aspect of the skill component in the curriculum shall be delivered in face-to-face mode. The skill component shall align with the Qualification Packs (QPs) or National Occupational Standards (NOSs), while the general education component adheres to the university norms. If a progressive QP is unavailable for a specific trade from the Sector Skill Councils (SSCs), relevant entrepreneurial or occupational roles may be incorporated. These roles should include well-defined responsibilities and performance standards, identified in consultation with industry partners and subject-matter experts.

IV.2. Notional Hours and Creditisation

The total Notional Learning Hours for one year of education/ learning across vocational education, training and skilling is 1200 Hrs per year for the purpose of assignment of credits for which the students/ learners shall be awarded 40 Credits subject to assessment.

The learning hours may include class room learning, teaching, practical and laboratory work, innovation labs, class projects, assignments, tutorials; sports and games, yoga, physical activities, performing arts, music, handicraft work, social work, NCC, bag less days; examinations, class tests, quizzes, assessments; vocational education, training and skilling, minor or major project work, field visits in skill education as well as internship, apprenticeship, on the job training (OJT), and experiential learning etc. The breakup of credits in the programme done is subject to the following guidelines in the National Credit Framework (NCrF) and National Skill Qualification Framework (NSQF).

Theory/Lecture 1 Credit = 15 hours	**Practical 1 Credit = 30 hours**	**Internship 1 credit = 10 days of internship/ (3.33 credits for one month)**	**Skill Training 1 Credit = 30 hours.**
• In each theory/ lecture class, a new concept is taught, and the student is learning something new throughout the class. • It also includes self-learning.	• The practical is dependent on theory and experiments performed are based on concepts learned in theory class. • Repetition of an already learned concept. Observations are taken again and again.	For PG Students - 660 Hours of Internship + project work with Assessment	The total notional hours for Employability Skill (Skill Training) would be 180 hours (with minimum of 90 hours in 1st year)

IV.3. Programme Structure

The programme structure of the M.Voc. Banking and Finance is designed to provide a balanced blend of theoretical knowledge and practical skills, aligning with industry standards and emerging trends in the BFSI sector. It incorporates a progressive learning pathway through general courses, skill courses and training, internships, and project work ensuring comprehensive development of competencies required for immediate employability and career advancement. The course and training distributions follow. It provides for Assignment, Accumulation, Storage, Transfer & Redemption of Credits. It paves way for multi-disciplinary education and empowers students through flexibility in choice of courses for choosing their own learning trajectories and programmes, and thereby choose their paths in life with appropriate career choices, including option for mid-way course corrections, according to their talents and interests.

SEMESTER I

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0101	Banking Theory, Law & Practice	3	3	0	3	50	50
2	25-494-0102	Fundamentals of General and Life Insurance	3	3	0	3	50	50
3	25-494-0103	Principles of Management	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0104	Bank Operations & Treasury Management	3	3	0	3	50	50
5	25-494-0105	Business Research Methods	3	3	0	3	50	50
6	25-494-0106	Financial Markets & Security Trading Operations	4	2	4	6	50	50
7	25-494-0107	Quantitative Management	4	2	3	5	50	50
8	25-494-0108	Professional Skill Training I (PST-I) – Foundations of Soft and Professional Skills for BFSI Sector (60 Hrs.)	2	-	-	-	200	-
Total Credit of General Courses			**9**	**-**	**-**	**9**		
Total Credit of Skill Courses			**16**	**-**	**-**	**17**		
Total Credit/Hours/Marks			**25**	**19**	**7**	**26**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

SEMESTER II

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0201	Corporate Finance	3	3	0	3	50	50
2	25-494-0202	Legal and Regulatory Framework for Business	3	3	0	3	50	50
3	25-494-0203	Financial Reporting	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0204	Spread Sheet Applications for Finance	4	3	3	6	50	50
5	25-494-0205	Financial Services Marketing	3	3	1	4	50	50
6	25-494-0206	Tax Processing & Management	3	2	3	5	50	50
7	25-494-02xx	Elective -1 (with practical)	4	3	2	5	50	50
8	25-494-0207	Professional Skill Training-II (PST-II) Advanced Client Engagement and Regulatory Compliance for BFSI Sector (30 Hrs.)	1	0	0	0	100	-
9	25-494-0208	Internship with Mini Project (1 month)	3	-	-	-	100	0
Total Credit of General Courses			**9**	-	-	-		
Total Credit of Skill Courses			**18**	-	-	-		
Total Credit/Hours/Marks			**27**	**20**	**9**	**29**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

SEMESTER III

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0301	International Banking & Finance	3	3	0	3	50	50
2	25-494-0302	Investment Banking Services	3	3	0	3	50	50
3	25-494-0303	Sustainable Banking & Green Finance	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0304	Risk Management	3	3	0	3	50	50
5	25-494-03xx	Elective 2 (with practical)	4	3	2	5	50	50
6	25-494-03xx	Elective 3 (with practical)	4	3	2	5	50	50
7	25-494-03xx	Elective 4 (without practical)	3	3	0	3	50	50
8	25-494-0305	Professional Skill Training-III (PST-III) Strategic Decision Making and Risk Management for BFSI Sector (60 Hrs.)	2	-	-	-	200	-
Total Credit of General Courses			**9**	-	-	-	-	-
Total Credit of Skill Courses			**16**	-	-	-	-	-
Total Credit/Hours/Marks			**25**	21	**4**	**25**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

SEMESTER IV

S.No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-04xx	Elective 5 - MOOC -1	2	-	-	-	-	100
2	25-494-04xx	Elective 6 - MOOC 2	2	-	-	-	-	100
		SKILL COURSES:			-	-		
3	25-494-0401	Professional Skill Training-IV (PST IV) Innovation and Strategic Implementation in BFSI Sector (30 Hrs.)	1	-	-	-	100	-
4	25-494-0402	Internship with Major Project & Viva-Voce* (4 months)	14	-	-	-	200	300
Total Credit of General Courses			**4**	-	-	-		
Total Credit of Skill Courses			**15**	-	-	-		
Total Credit/Hours/Marks			**19**	-	-	-	**300**	**500**
Total Programme Credit for GCs			**31**	-	-	-	-	-
Total Programme Credit for SCs			**65**	-	-	-	-	-
Grand Total (I+II+III+IV)			**96**	-	-	-	**1950**	**1550**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

ELECTIVE COURSES – WITH PRACTICAL

- CODE for the particular Elective Course: 25-494-0AXX
- Where 'A' stands for semester number in which it is offered.
- 'XX' stands for unique two-digit number for a particular elective course.

Sl.No	Course Code	Elective Course
1	25-494-0A11	Mutual Fund Management
2	25-494-0A12	Currency Management
3	25-494-0A13	Equity & Bond Analysis
4	25-494-0A14	Wealth Management
5	25-494-0A15	Corporate Restructuring
6	25-494-0A16	Credit Analysis
7	25-494-0A17	Financial Modelling
8	25-494-0A18	Financial Analytics
9	25-494-0A19	Data Visualisation Tools
10	25-494-0A20	Python for Banking and Finance
11	25-494-0A21	Artificial Intelligence (AI) for Finance
12	25-494-0A22	Actuarial Science

ELECTIVE COURSES – WITHOUT PRACTICAL

Sl.No	Course Code	Elective Course
1	25-494-0A31	Rural Banking and Micro Finance
2	25-494-0A32	Fintech Applications in Banking and Finance
3	25-494-0A33	Behavioural Finance
4	25-494-0A34	Financial Audit

ELECTIVES - MOOC COURSES

The course code for MOOC courses will begin from 25-494-0441 onwards as it is offered in the fourth semester. The list of MOOC courses cannot be finalized at this stage, as students select them based on their requirements, and the selection may vary over time.

Sl.No	Course Code	Elective Course
1	25-494-0441	MOOC Course 1
2	25-494-0442	MOOC Course 2

IV.4. Delivery of Courses

Through a dynamic blend of traditional lectures, case studies, workshops, simulations and experiential learning opportunities, students in the M.Voc. Banking and Finance programme are deeply engaged with real-world challenges, developing critical analytical and problem-solving skills. Case studies serve as a cornerstone, offering nuanced insights into complex financial and banking scenarios, encouraging strategic thinking, and refining decision-making abilities. Additionally, experiential learning components such as simulations, practical skill workshops, consulting projects, and internships provide hands-on exposure, enabling students to apply theoretical knowledge in real-world financial settings. This multifaceted approach is essential to cultivate a comprehensive understanding

of banking and financial concepts while fostering the agility and adaptability required to excel in today's dynamic BFSI sector.

IV.4.1 Elective Courses

The students are required to complete six elective courses spread across the II, III and IV semesters of the programme. Out of these, four electives must be selected from a predefined Elective Course Basket within the programme's syllabi. There are two elective baskets – (1) elective courses with practical and (2) elective courses without practical. Students must choose three elective courses from the basket of "elective courses with practical" and one elective course from the basket of "elective basket without practical". The one elective course from the "elective basket without practical" is to be done in the third semester. Out of the six, the remaining two electives are to be "MOOCs" chosen subject to the guidelines of the University's "Regulations for Conducting Online Courses (MOOC)".

IV.4.2 MOOC Courses

As part of the programme, students are required to undertake two elective courses (general course) as mandatory MOOCs, each carrying 2 credits, in adherence to the University's "Regulations for Conducting Online Courses (MOOC)." These courses are strategically planned to begin in the first semester, ensuring ample time for completion and the inclusion of their marks and grades in the fourth-semester mark list. To streamline this process, a dedicated faculty member will serve as the MOOC Coordinator, providing guidance and support to students throughout their MOOC journey. This initiative integrates flexibility and innovation into the curriculum, enhancing the learning experience.

IV.4.3 Internship and Internship Based Mini/Major Project

A one-month full-time internship, carrying 3 credits, will have to be undertaken by the students immediately after the second semester but before commencing the third semester. A report of internship (Mini Project) in the prescribed format must be submitted by the students for assessment. There will be continuous assessment (CE) during the above internship. The students are required to submit a written project report as per the guidelines of the Centre at the end of the internship. The entire fourth semester is dedicated to an extensive internship of four months, during which students are required to complete a Major Project directly related to their internship experience and participate in a Viva-voce. The major project, aligned with the internship, will undergo continuous evaluation throughout the semester. Together, the project and viva-voce in the fourth semester carry a total of 14 credits. The evaluation will focus on various aspects, including the time spent with the company or organization, the quality and relevance of the project or report submitted, the viva-voce (with external expert also), the perceived value of the internship, and the learning outcomes achieved by the student. Both the internships (II & IV semesters) have to be done in an organisation in the BFSI sector**.** Detailed operational guidelines regarding the modus operandi and other relevant aspects of Internships, Project and the CE process including Viva-voce shall be prepared and circulated with approval of the Centre Council of DDUKK.

IV.4.4. Professional Skill Trainings (PSTs)

Professional Skill Trainings (PSTs) are embedded in the M.Voc. Banking and Finance curriculum (mandatory as per NCrF, 2023) to equip students with industry-aligned expertise and professional competencies critical for excelling in the Banking, Financial Services, and Insurance (BFSI) sector. The guidelines of NCrF are to be followed for obtaining the training programme. These training programmes shall emphasize hands-on learning through simulations, industry-specific tools, and emerging practices such as financial modelling, digital banking, tax management, compliance frameworks, risk mitigation strategies, customer relationship management and so on. Interactive sessions, led by seasoned professionals, shall also prioritize soft skills development, including communication, teamwork, and problem-solving, to foster holistic readiness. Students are required to attend Professional Skill Training with a duration of 90 hours, in multiple spells, in each year of study. The Professional Skill Training can be spread across the four semesters of the programme to meet the requirements of NCrF. Students shall be encouraged to participate in training programmes organized by state/national level Institutes/Centres or Departments of Universities including DDUKK/Professional bodies such as NISM, BFSI, AIMA etc. to satisfy the requirements for acquiring credits for the aforementioned training programmes in various semesters. In order to attend such training programmes, students have to obtain prior permission from the Centre by submitting the details of the institution offering the training programme. The credits for the participation in such training programme shall be awarded only based on the training evaluation report submitted by the students along with the participation certificates. The associated training costs are to be borne by the students. The training contents shall be related to employment opportunities in the BFSI sector.

V. Continuous Evaluation

The Continuous Evaluation (CE) process in the M.Voc. in Banking and Finance programme is a comprehensive approach designed to ensure holistic and consistent assessment of students throughout their academic journey. CE encompasses various components such as assignments, test papers, seminars, quizzes, projects, presentations, class participation, and tests papers; each contributing to a dynamic learning experience. This multifaceted evaluation method not only measures theoretical understanding but also emphasizes practical skills, critical thinking, and active engagement. The combination of components of CE for each semester will be decided by the Centre Council of DDUKK at the beginning of each semester.

V.1. Mode of Evaluation: The whole system of evaluation and grading will be as per the "Regulation for Post Graduate Programmes Under Choice Based Credit System (CBCS) offered by the University Departments/Schools/Centres" of the University. As per the regulation, the entire system of evaluation is internal for University Departments/Schools/Centres. The maximum marks for each course shall be 100 (except for Internships, internship based Major Project and Professional Skill Trainings). Out of which 50% marks are for Continuous Evaluation (CE) throughout each semester and 50% marks are for Semester-end examination (SEE). In the case of Professional Skills Training (PST) the entire marks will be awarded through continuous evaluation (CE) by the external experts engaging the workshop.

V.2. Internship and Mini/Major Project Evaluation: For the Internship with Mini Project in semester II (entire 100 marks based on CE), 50 marks are awarded as per the continuous evaluation during the period of internship, the interim presentation of the Mini Project and the written report submitted by the students. The remaining 50 marks will be awarded through a viva-voce conducted by internal examiners. Students who have failed in the continuous evaluation (CE) of internship have to repeat the internship under the guidance of a faculty assigned in the subsequent year(s). In case of a student who secured 50% marks or more for the continuous evaluation of internship and report but failed to appear for the viva-voce can appear for the viva-voce along with subsequent batch(es).

For the Internship with Major Project in Semester IV, the maximum marks shall be 500, of which maximum 200 marks will be awarded on the basis of continuous evaluation (CE) of internship, the interim presentation of the major project work by internal faculty members. The rest 300 marks will be awarded based on evaluation of the major project report submitted by the students by a board of examiners (SEE) (at least one external examiner) constituted by the Director/HoD of the Centre and the Viva–voce carried out by the same board of examiners (100 marks each for Major Project Report, and presentation of the report and viva-voce). Students who have failed in CE of internship cum major project have to repeat the internship cum major project under the guidance of a faculty assigned in the subsequent year(s). In case of a student who secured 50% marks or more for the continuous evaluation of internship major project but failed to appear for the viva-voce can appear for the Viva-voce along with subsequent batch(es).

V.3. Continuous Evaluation Marks Allocation: Continuous evaluation marks will be awarded on the basis of class tests, assignments, viva-voce, practical assignments, term-papers, mini-projects etc. as decided by the teacher concerned, considering the relevance of each component with respect to the course he/she handles. However, the student shall be evaluated continuously throughout the semester and marks shall be awarded as per the following guidelines:

1. A minimum of 50 per cent weightage shall be given for internal tests/lab exams/practical assignments
2. A maximum of 20 per cent weightage shall be given for written assignments
3. A maximum of 20 per cent weightage shall be given for class room presentations, Viva –voce and mini projects
4. A maximum of 10 per cent weightage shall be given for other items such as class participation or other activities that the teacher of the concerned course believes as relevant for the course and assigned to the students.

However, Department/Centre Council can change the guidelines for the distribution of internal marks given above, as and when required.

V.4. Structure of the Question Paper of Semester End Examinations

The Semester End question paper shall have three parts (except for practical examinations), namely Part-A, Part-B and Part C. The maximum marks for Semester End Examinations will be 50 (except for MOOCs, Professional Skill Training, Internships).

In Part A, there will be 5 compulsory questions which will be of short answer. Each question in Part A carries two marks.

Part-B will consist of seven questions out of which students must answer four questions. Each question will carry five marks in this part.

In Part-C, student will have to answer two questions of 10 marks each from a group of three questions. One case study would be preferred among the three questions in this section.

In case of practical exams, this pattern need not be followed. The number of questions can be varied according to the nature of the subject and the same will be decided by the examiners concerned based on the norms set by the Centre/Department council.

Revised Bloom's Taxonomy for Assessment Design of CE and SEE

<table>
<tr><th rowspan="2">S. No.</th><th rowspan="2">Revised Bloom's Taxonomy</th><th colspan="4">Weightage as a Percentage of Total Marks</th></tr>
<tr><th>General Courses</th><th>Skill Courses</th><th>Internships</th><th>Mini/Major Project</th></tr>
<tr><td>1</td><td>Remember</td><td rowspan="2">40%</td><td rowspan="2">10%</td><td>-</td><td>-</td></tr>
<tr><td>2</td><td>Understand</td><td>-</td><td>-</td></tr>
<tr><td>3</td><td>Apply</td><td rowspan="2">50%</td><td rowspan="2">60%</td><td>-</td><td>-</td></tr>
<tr><td>4</td><td>Analyse</td><td rowspan="3">100%</td><td rowspan="3">100%</td></tr>
<tr><td>5</td><td>Evaluate</td><td rowspan="2">10%</td><td rowspan="2">30%</td></tr>
<tr><td>6</td><td>Create</td></tr>
</table>

Level	Descriptors	Level of Attainment
1	Remember	Recalling from the memory of the previously learned material
2	Understand	Explaining ideas or concepts
3	Apply	Using the information in another familiar situation
4	Analyse	Breaking information into the part to explore understandings and relationships
5	Evaluate	Justifying a decision or course of action
6	Create	Creating Generating new ideas, products or new ways of viewing things

SYLLABI

FIRST SEMESTER

SEMESTER I

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0101	Banking Theory, Law & Practice	3	3	0	3	50	50
2	25-494-0102	Fundamentals of General and Life Insurance	3	3	0	3	50	50
3	25-494-0103	Principles of Management	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0104	Bank Operations & Treasury Management	3	3	0	3	50	50
5	25-494-0105	Business Research Methods	3	3	0	3	50	50
6	25-494-0106	Financial Markets & Security Trading Operations	4	2	4	6	50	50
7	25-494-0107	Quantitative Management	4	2	3	5	50	50
8	25-494-0108	Professional Skill Training I (PST-I) – Foundations of Soft and Professional Skills for BFSI Sector (60 Hrs.)	2	-	-	-	200	-
Total Credit of General Courses			9	-	-	9		
Total Credit of Skill Courses			16	-	-	17		
Total Credit/Marks			**25**	**19**	**7**	**26**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

Banking Theory, Law and Practice

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0101	Banking Theory, Law and Practice	3	GC	50	50	3	0	3

Course Objectives:

1. Comprehend the foundational concepts, historical evolution, and socio-economic role of banking systems, including the structure of banking in India and recent trends like digital banking and financial inclusion.
2. Know the operational mechanisms of banking, risk management, payment systems and technology-driven innovations.
3. Comprehend the legal, regulatory, and compliance frameworks governing banking in India and globally, along with consumer protection mechanisms.
4. Acquire theoretical knowledge on scenarios in retail/corporate banking, investment services, and microfinance, while addressing contemporary challenges like NPAs, ethical banking (ESG), and globalization.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Identify and describe the structure of banking institutions in India, key legal frameworks, and basic banking functions.	Remember
CO2	Explain the role of financial intermediation in economic development, interpret regulatory compliance requirements, and summarize the operational mechanisms of payment systems and risk management practices.	Understand
CO3	Examine the use of banking laws to resolve customer grievances or NPA cases, cybersecurity protocols in core banking solutions (CBS), and basic retail banking products aligned with ethical lending practices.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	2	2			1		
CO3	3	2	2		1		1

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Banking

Meaning, Evolution, and Role of Banks: Financial intermediation, economic development. Types of Banks: Commercial, cooperative, RRBs, Concentration Banks- payment banks, small finance banks. Structure of Banking in India: RBI, public/private/foreign banks, NBFCs, EXIM Banks. Recent Trends: Digital banking, fintech collaborations, and financial inclusion (Jan Dhan, PMJDY).

Module II: Banking Functions

Banking Functions: Deposit mobilization, credit creation, liquidity management. Risk Management in Banking: Credit, market, operational risks; Basel III norms. Payment Systems: RTGS NEFT, IMPS, UPI, and blockchain in banking. Technology in Banking: Core banking solutions (CBS), AI-driven customer service, cybersecurity.

Module III: Banking Law and Regulation

Legal Framework: RBI Act 1934, Banking Regulation Act 1949, SARFAESI Act 2002, Negotiable Instruments Act 1881. Regulatory Compliance: KYC/AML norms, priority sector lending, CRR/SLR. Consumer Protection: Banking Ombudsman, RBI's customer service guidelines. International Banking Laws: Anti-money laundering (FATF), cross-border regulations.

Module IV: Banking Practice and Financial Services

Retail Banking: Products (loans, cards, wealth management), customer relationship management. Corporate Banking: Project finance, trade finance, cash management. Investment Banking: Mergers & acquisitions, IPOs, underwriting. NBFCs and Microfinance: Role, regulations, and challenges.

Module V: Contemporary Issues in Banking

NPAs and Resolution Mechanisms: IBC 2016, asset reconstruction companies. Ethical Banking: ESG compliance, green financing, ethical lending practices. Globalization and Challenges: Currency risks, geopolitical impacts, sustainable banking.

Reference:

1. Tannan, M. L. (2021). *Banking law and practice in India* (28th ed.). LexisNexis.
2. Gupta, S. N. (2019). *The banking law in theory and practice* (4th ed.). Universal Law Publishing.
3. Toor, N. S., & Toor, A. (2022). *Handbook of banking information* (30th ed.). Skylark Publications.
4. Indian Institute of Banking & Finance. (2021). *Legal aspects of banking*. Macmillan India.
5. Nainta, R. P. (2020). *Banking system, frauds, and legal control*. Regal Publications.

Fundamentals of General and Life Insurance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0102	Fundamentals of General and Life Insurance	3	GC	50	50	3	0	3

Course Objectives:

- Provide a comprehensive understanding of the life and general insurance sector, including its structure, policies, and regulatory framework.
- Equip students with knowledge of risk assessment, underwriting, and claim settlement processes in the insurance industry.
- To explore the role of digital transformation and emerging technologies in enhancing the efficiency of the insurance sector.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Describe the evolution, structure, and regulatory framework of the Indian insurance sector.	Understand
CO2	Understand the different types of general and insurance, their underwriting processes, and claim settlement procedures.	Understand
CO3	Understand the applications of digital technologies such as AI, blockchain, and big data in enhancing insurance operations and customer experience.	Understand
CO4	Analyse managerial and financial strategies, including corporate governance, CSR, and asset-liability management in the insurance sector.	Analyse
CO5	Analyse risk management strategies and propose innovative insurance solutions for real-world financial scenarios.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2	1		2		
CO2	3	2	2		2		
CO3	2	3	3		1		2
CO4	2	3	2	3	2	2	2
CO5	3	3	3	2	3	2	2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Indian Insurance Sector: An Overview

Concepts, principles, and functions of insurance- Evolution and history of the insurance sector in India- Organizational structure of the insurance sector, including public and private players- Role and functions of IRDAI in regulation and supervision- Legal and regulatory framework governing insurance operations- Impact of liberalization, privatization, and globalization on the insurance industry- Develop risk management strategies and propose innovative insurance solutions for real-world financial scenarios- Challenges and opportunities in the Indian insurance sector.

Module II: General Insurance

Introduction to general insurance and its importance- Types of general insurance – health, motor, property, marine, travel, liability insurance- Agriculture insurance and government schemes related to crop protection- Risk management and underwriting in general insurance- Claim settlement process, fraud prevention, and customer service- Role of reinsurance in mitigating risks for general insurers- Impact of climate change and natural disasters on general insurance- Emerging trends in general insurance, including parametric insurance.

Module III: Life Insurance

Overview of life insurance and its significance- Types of life insurance policies – term, endowment, whole life, ULIPs, pension plans- Group insurance policies and employee benefit schemes- Micro-insurance models, their importance, and implementation- Underwriting process and premium calculation in life insurance- Risk assessment and mortality tables- Claim settlement procedures, fraud detection, and grievance redressal mechanisms- Recent trends in life insurance, including product innovations and policyholder protection.

Module IV: Managerial Issues of Insurance Sector

Corporate governance in the insurance sector and ethical practices- CSR initiatives in insurance and financial inclusion efforts- Solvency, asset-liability management, and capital adequacy- Financial schemes of the Government of India related to insurance- Marketing strategies and distribution channels in the insurance sector- Role of insurance intermediaries such as agents and brokers- Financial planning and investment strategies for insurance companies- Customer relationship management and service quality in insurance.

Module V: Digital Insurance

Introduction to InsurTech and digital transformation in insurance- Online insurance platforms and their impact on the industry- AI-driven underwriting, automated claims processing, and chatbot services- Cybersecurity concerns in the insurance industry- Big data analytics in risk assessment, fraud detection, and customer insights- Blockchain technology for secure transactions and record-keeping- Role of mobile apps, digital marketing, and social media in insurance- Regulatory challenges and ethical considerations in digital insurance adoption.

Reference:

1. Mishra, M. N., & Mishra, S. B. (2016). *Insurance Principles and Practices*. S. Chand Publishing.

2. Harrington, S. E., & Niehaus, G. R. (2003). *Risk Management and Insurance*. McGraw-Hill Education.
3. Rejda, G. E., & McNamara, M. J. (2021). *Principles of Risk Management and Insurance* (14th ed.). Pearson.
4. Black, K., & Skipper, H. D. (2000). *Life and Health Insurance*. Prentice Hall.
5. Gupta, P. K. (2017). *General Insurance, Principles and Practice*. Himalaya Publishing House.
6. Insurance Principles and Practices – M.N. Mishra & S.B. Mishra
7. Risk Management and Insurance – Scott E. Harrington & Gregory R. Niehaus
8. Principles of Risk Management and Insurance – George E. Rejda & Michael McNamara
9. Life and Health Insurance – Black, Kenneth & Harold D. Skipper
10. General Insurance, Principles and Practice – P.K. Gupta

Principles of Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0103	Principles of Management	3	GC	50	50	3	0	3

Objectives:

1. Provide leaners with a foundational understanding of management principles, theories, and functions.
2. Understand the functional areas of management such as planning, organizing, staffing directing, and controlling.
3. Develop awareness of contemporary management challenges and emerging trends, with a focus on Indian corporate practices.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the meaning, importance, and evolution of management, including classical, neo-classical, and modern theories.	Understand
CO 2	Familiarise business environments, setting up of organizational objectives, and the process of decision-making.	Understand
CO 3	Understand organizational structures and staffing processes aligned with decentralization, departmentalization, and modern workplace dynamics.	Understand
CO 4	Know and analyse leadership styles, motivation factors and control principles to enhance managerial effectiveness.	Analyse
CO5	Analyse contemporary issues in management, emerging challenges such as digitalization, internationalization, workplace diversity, and ethical management through Indian corporate case studies.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	3			1		
CO2	2	3	2		2		
CO3	2	2					
CO4		3					2
CO5	2	2	2		3		3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction

Meaning and importance of management- Management theories- classical, neo-classical and modern thoughts of management. Managerial functions; Managerial roles (Mintzberg). Managerial competencies. Indian Ethos for Management: Value-Oriented Holistic Management.

Module II: Planning

Meaning and importance of Planning. Organisational objective setting; Decision-making environment (certainty, risk, uncertainty); Techniques for individual and group decision-making; Planning vis-à-vis Strategy- meaning and elements of the business firm environment- micro, meso, and macro level; Industry structure and firm strategy, Business-level strategic planning.

Module III: Organising and Staffing

Meaning, process and importance of Organising. Decentralization and Delegation; Factors affecting organisational design; Departmentalization; Organisational structure: traditional and modern, comparative suitability and changes over time; formal- informal organisations. Staffing- Meaning, process and importance of staffing, recruitment, training and development, performance appraisal and management.

Module IV: Directing and Controlling

Motivation- meaning, importance and factors affecting motivation; Leadership- meaning, importance and factors affecting leadership, leadership styles, and followership. Controlling- Principles of controlling; Measures of controlling and accountability for performance.

Module V: Salient Developments and Contemporary Issues in Management

Management challenges of the 21st Century; Sustainable management practices, Factors reshaping and redesigning management purpose, performance and reward perceptions- Internationalization, Digitalization, Entrepreneurship & Innovation, Values & Ethics - Case studies on Indian corporates like Tata, Bhilwara Group, IOC and Godrej, Workplace diversity, Democracy and Sociocracy, Subaltern management ideas from India.

References:

1. Gupta, C. B., & Mathur, S. (2020). Management Principles and Applications. Scholar Tech Press, Delhi.
2. Griffin. (2013). Management Principles and Application. Cengage.
3. Koontz, H., & Weihrich, H. (2012). Essentials of Management: An International and Leadership Perspective. McGraw Hill Publications
4. Kumar, P. (2019). Management: Principles and Applications. JSR Publication House LP, Delhi.
5. Rao, V. S. P. (2020). Management Principles and Applications. Taxmann Publications.
6. Tulsian, P. C., & Pandey, V. (2021). Business Organisation & Management. Pearson Education, India

Bank Operations and Treasury Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	**25-494-0104**	Bank Operations and Treasury Management	3	SC	50	50	3	0	3

Course Objectives:

1. To develop a comprehensive understanding of banking operations, treasury management, and risk mitigation strategies in financial institutions.
2. To equip students with practical skills in credit appraisal, loan structuring, digital banking, and financial market instruments.
3. To foster critical thinking in evaluating emerging banking technologies, regulatory compliance, and customer relationship management.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Explain the principles of retail, corporate, and investment banking, including treasury operations and interbank markets.	Remember & Understand
CO 2	Apply credit appraisal techniques and risk management strateies to assess loan proposals and structured financial products.	Apply
CO 3	Analyse the legal and operational aspects of banker-customer relationships.	Analyse
CO 4	Evaluate the role of fintech, digital payment systems (UPI, NEFT, RTGS), and blockchain in modern banking.	Evaluate
CO 5	Understand strategies for liquidity management, corporate funding, and NPA resolution using securitization and ARCs.	Understand

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2					
CO2	2	3	2	3			
CO3	3	2					
CO4	2	3	3				
CO5	2	2	1	3	2		

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus

Module 1: Banking Operations & Lending

Retail, Corporate & Investment Banking- Treasury & Forex Management, Interbank Markets (Call Money, Repo, Reverse Repo), Deposit Accounts: Types, Opening/Closing Procedures, KYC Compliance, Customer Accounts (Minor, Joint, Partnership, Companies, NRI/NRE). Lending Operations-Credit Management Principles & Appraisal Techniques, Loan Types (Cash Credit, Overdraft, Bills Discounting, Letters of Credit), Secured vs. Unsecured Advances; Charge Creation Methods, Retail Loans (Housing, Education, Vehicle), NPA: Definition, Impact, Priority Lending Regulations. Loan Structuring & Recovery-Credit Risk Modeling & Stress Testing, Loan Syndication, Securitization, Debt Restructuring, NPA Resolution (ARCs, Recovery Strategies). Clearinghouses & Interbank Settlements, Payment Gateways & Emerging Systems.

Module 2: Banker-Customer Relationship

Banker & Customer: Rights & Obligations- Collecting Banker, Duties, Holder in Due Course, Statutory Protections. Paying Banker- Precautions, Cheque Crossing, Endorsements, Dishonor Grounds, Customer Relationship Management (CRM) in Banking.

Module 3: Treasury & Risk Management

Treasury Management- Role, Functions, Structure. Financial Markets & Instruments-Money & Capital Markets, Forex, Derivatives. Cash & Liquidity Management-Cash Flow Forecasting, Working Capital, Payment Automation. Risk Management-Interest Rate, Forex, Credit, Market & Operational Risks, Hedging Strategies.

Module 4: Corporate Treasury & Funding

Foreign Exchange & International Treasury- Exchange Rates, Trade Finance, Multinational Treasury. Treasury Operations & Controls- Policies, Internal Controls, Fraud Prevention, KPIs. Corporate Finance & Treasury- Capital Structure, Funding Strategies, M&As.

Module 5: Technology & Innovations in Banking

Digital Banking & E-Services- Core Banking, Internet/Mobile Banking, Cards, UPI (BHIM, Paytm, Google Pay). Payment Systems & NPCI-NEFT, RTGS, IMPS, UPI. Fintech & Emerging Trends-Open Banking, Blockchain, CBDCs, Smart Contracts. AI & Big Data in Banking-Credit Scoring, Fraud Detection, RPA. Cybersecurity in Banking

References:

1. Varshney, P. N., & Swaroop, D. K. (2018). Banking law and practice. Sultan Chand & Sons.
2. Indian Institute of Banking & Finance. (2018). Risk management. Macmillan Publishers India Private Limited.
3. Indian Institute of Banking & Finance. (2024). Regulatory compliance in banks: With real-world examples & best practices for professionals. Indian Institute of Banking & Finance.
4. Kaul, V. (2020). *Bad money: Inside the NPA mess and how it threatens the Indian banking system*. Harper Business.
5. King, B. (2018). *Bank 4.0: Banking everywhere, never at a bank*. Wiley.
6. Vaidyanathan, R. (2014). Credit risk management for Indian banks. SAGE Publications.
7. Singh, J. (2019). Financial technology (FinTech) and digital banking in India. Notion Press.

Business Research Methods

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0105	Business Research Methods	3	SC	50	50	3	0	3

Course Objectives:

1. To equip students with a strong foundation in research methodology relevant to research in general.
2. To develop the ability to identify, analyze, and define business research problems.
3. To enhance skills in data collection, analysis, and reporting of business.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand research concepts and types and, approaches to business research.	Understand
CO 2	Identify and define research problems in general and specific to banking, insurance and financial sectors.	Analyse
CO 3	Design and structure research studies, applying appropriate methodologies in research.	Apply
CO 4	Select and implement suitable sampling techniques for business research studies.	Apply
CO5	Collect, analyze, interpret data, and present research findings in a structured manner.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	2					
CO2	3	2					
CO3		3	2				
CO4		2	3				
CO5	2	2	3	2			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Research

Meaning, objectives and scope of research- Categories of research: Basic vs. Applied-Types of research: Descriptive, Analytical, Quantitative, Qualitative, Empirical- Research approaches:

Quantitative vs. Qualitative- Research methods vs. research methodology- Overview of the research process. Research in Banking, Insurance and finance sectors.

Module II: Research Problem & Research Design

Selecting a research problem- Techniques for defining a research problem- Formulating research questions and hypotheses (Concept only)- Developing a research plan- Meaning and importance of research design- Key features and concepts in research design- Types of research design: Exploratory vs. Conclusive- Descriptive and Experimental design- Application of research design in risk analysis, credit research, and financial markets.

Module III: Measurement and Scaling

Basic Levels of Scales – Nominal, Ordinal, interval and ratio scales. Comparative and non-comparative scaling technique. Validity and reliability – Designing questionnaire.

Module IV: Sampling & Data Collection

Importance of sampling in business research- Census vs. sample survey decision-making- Probability sampling: Simple random, systematic, stratified, cluster, multistage sampling- Non-probability sampling: Convenience, snowball, judgmental, case study, quota sampling- Sampling errors and bias research- Collection of primary data- Questionnaire design for surveys- Secondary data sources: Financial reports, regulatory data, market studies- Qualitative methods for research.

Module V: Data Analysis and Reporting

Data cleaning, coding, and tabulation analysis- Descriptive and inferential statistics. Testing of hypotheses- process, type I and type II errors. Testing of difference in means, testing of association. Interpretation of research data- Application of statistical software in business research. Research report writing: Structure and components- Types of research reports - Ethics in research & plagiarism- Documentation and bibliography.

Reference:

1. Hair Jr., J. F., Page, M., & Brunsveld, N. (2023). *Essentials of Business Research Methods* (5th ed.). Routledge
2. Bell, E., Harley, B., & Bryman, A. (2022). *Business Research Methods* (6th ed.). Oxford University Press.
3. Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research Methods for Business Students* (8th ed.). Pearson.
4. Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2012). *Business Research Methods* (9th ed.). Cengage Learning.
5. Brooks, C. (2019). *Introductory Econometrics for Finance* (4th ed.). Cambridge University Press.

Financial Markets and Security Trading Operations

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0106	Financial Markets and Security Trading Operations	4	SC	50	50	2	4	6

Course Objectives:

1. To provide a comprehensive understanding of the structure, functioning, regulation of financial markets and security trading.
2. To develop analytical skills for evaluating market trends, conditions and investment opportunities.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Recall and explain the fundamental concepts of financial systems, financial markets, and financial instruments, including equity shares, debentures, bonds, depository receipts, and digital assets.	Remembering & Understanding
CO 2	Apply their knowledge of financial markets to analyze and use various financial instruments, such as money market and capital market instruments.	Apply
CO 3	Demonstrate the use of trading mechanisms and trading platforms in real-world scenarios.	Apply
CO 4	Analyse market trends to interpret price-volume relationships and chart patterns.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2					
CO2	2	3					
CO3		2	2			2	
CO4			3	2			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introductions to Financial Markets

Financial System, Financial Markets, Meaning and Importance, Financial Instruments (equity and preference shares, debentures and bonds, Depository receipts) – Digital assets- Financial intermediaries, Role and Functions, major players in financial service market.

Module II Forms of Financial Markets

Money Market, Call Money market, Bills market. Money market instruments, T Bills, Repo and reverse reops. Commercial papers and Certificate of Deposits, markets financial Guarantees (ECGC & DICGC). Capital Market- Primary and Secondary markets. Functions of primary market, Type of issues, stock exchanges, role and functions-Derivative markets.

Module III: Financial Regulations and Regulatory Institutions

Securities Contract Regulations Act 1956, Companies Act 2013. Reserve bank of India (RBI), Securities and Exchange Board (SEBI) of India and Pension Fund Regulatory Development Authority (PFRDA) and Insurance Regulatory Development Authority (IRDA). Non-banking financial intermediaries and Statutory financial organisations. Corporate Governance and listed companies.

Module IV: Security Trading Operations

Trading and Settlement mechanism, rolling settlement, Trading mechanisms: order types (market, limit, stop-loss) and execution, Trading platforms and exchanges (NSE, BSE, NYSE, NASDAQ, FTSE), Clearing and settlement processes, Market participants, High-frequency trading and algorithmic trading. Application tools for price charting.

Module V: Security Market trends and Analysis

Bullish and Bearish trends-price-volume relationships-market trend analysis-uses of chats and diagrams - Bar and Line Charts – Point and Figure Charts - Moving average analysis –Japanese Candlesticks, Chart patterns, continuous and reversal patterns,

Reference:

1. Frederic S. Mishkin and Stanley G. Eakins. "Financial Markets and Institutions" Publisher: Pearson
2. Prasanna Chandra "Investment Analysis and Portfolio Management" Publisher: McGraw Hill Education
3. Bharati V. Pathak. "Indian Financial System: Markets, Institutions and Services" Publisher: Pearson
4. John C. Hull. "Options, Futures, and Other Derivatives" Publisher: Pearson
5. John J. Murphy. "Technical Analysis of the Financial Markets: A Comprehensive Guide to Trading Methods and Applications" by Publisher: New York Institute of Finance
6. M.Y. Khan "The Indian Financial System: Development and Operations". Publisher: McGraw Hill Education

Additional Materials:

- SEBI (Securities and Exchange Board of India) Publications: For regulatory frameworks and guidelines (relevant for Module III).
- RBI Reports and Bulletins: For understanding the role of RBI and monetary policy (relevant for Module III).
- NSE and BSE Publications: For insights into trading mechanisms, clearing, and settlement processes (relevant for Module IV).

Quantitative Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0107	Quantitative Management	4	SC	50	50	2	3	5

Course Objectives:

1. Develop a comprehensive understanding of the concepts, principles and applications of quantitative techniques in business decision-making.
2. Master foundational principles of probability theory and their application to risk assessment and decision-making in business contexts.
3. Apply hypothesis testing frameworks (e.g., t-tests, ANOVA, chi-square) to validate business assumptions using empirical data.
4. Develop the ability to assess relationships between variables and make estimations and predictions in the field of business.
5. To introduce statistical software tools such as SPSS and MS Excel for practical data analysis and interpretation.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the principles of quantitative management and their application to organizational decision-making.	Understand
CO 2	Understand the fundamental concepts of probability, sampling, hypothesis testing, correlation, regression, time series analysis, and index numbers.	Understand
CO 3	Apply statistical methods to business decision-making contexts to derive data-driven solutions.	Apply
CO 4	Analyze business data using hypothesis testing and statistical techniques to formulate actionable strategies.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1		2					
CO2		2	3				
CO3			3	2			
CO4			2	3			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Prerequisite: Knowledge of Introduction to Descriptive Statistics: Measures of central tendency, Measures of dispersion -Skewness and Kurtosis (to be covered in a Bridge course).

Syllabus:

Module I: Introduction to Quantitative Management

Definition, scope, and historical evolution of quantitative methods in management. Role in modern organizations: Bridging data-driven insights and strategic decisions. Statistical and programming approach to quantitative management. Key concepts: Decision variables, constraints, objective functions, and trade-offs. Quantitative Models: Programming and Simulation models.

Module II: Probability and sampling Distribution

Basic concepts of probability, Conditional Probability, Bayes' Theorem. Probability Distributions-Discrete Probability distributions-Binomial-Poisson, Continuous probability distributions-Uniform-Normal-Exponential. Introduction to Sampling, sampling distribution, t distribution, point and interval estimations.

Module III: Testing of Hypothesis

Developing Null and Alternative hypotheses, Testing of Hypothesis-type I and II errors, parametric test-Z test and t-test for large and small samples- ANOVA-F test, Non parametric tests-chi square test.

Module IV: Correlation and Regression

Correlation Analysis- Karl Pearson's Co-efficient of correlation-Rank Correlation- testing for significance. Regression analysis-simple regression-regression coefficients- Coefficient of Determination-testing for significance, multiple regression (using SPSS or Spread sheet)

Module V: Time series Analysis and forecasting

Overview of Time series Analysis and forecasting: Time series Decomposition models, Forecasting models, moving average, exponential smoothing, trend projection. – Index numbers and methods of constructing index numbers.

References

1. Richard I. Levin, David S. Rubin, Masood Husain Siddiqui, Sanjay Rastogi, "Statistics for Management", Pearson.
2. David R. Anderson, Dennis J. Sweeney, Thomas A. Williams, Jeffrey D. Camm, James J Cochran
3. J. K. Sharma "Business Statistics, 5e", Vikas Publishing.
4. Naval Bajpai, "Business Statistics", Pearson Publication
5. S C Gupta, "Fundamentals of Statistics" Himalaya Publishing House

Professional Skill Training I (PST I)

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
I	25-494-0108	Professional Skill Training I (PST-I) – Foundations of Soft and Professional Skills for BFSI Sector (60 Hrs.)	2	SC	200				60

Course Description

This foundational course introduces students to core technical and soft skills essential for entry-level roles in the BFSI sector. Topics include financial data analysis, digital banking tools, basic regulatory compliance, and communication strategies. Training emphasizes hands-on practice with simulations, role-plays, and case studies to build confidence in real-world scenarios.

Course Objectives:

1. Cultivate soft skills to enhance client interactions, teamwork, and leadership in multicultural settings.
2. Develop proficiency in using financial software (e.g., Excel, Tally) for data analysis and reporting.
3. Cultivate basic client interaction skills, including active listening and professional communication.
4. Familiarize students with foundational regulatory frameworks (e.g., RBI guidelines, KYC norms).

Course Outcome:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Demonstrate sound communication ability professional etiquette during client interactions and team discussions.	Apply
CO2	Apply financial tools to generate basic reports (e.g., balance sheets, cash flow statements).	Apply
CO3	Collaborate effectively in diverse teams to complete assigned tasks.	Apply
CO4	Examine key regulatory requirements in banking operations.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1						3	1
CO2		3	2				
CO3						3	1
CO4	3				2		

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

SYLLABI

SECOND SEMESTER

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0201	Corporate Finance	3	3	0	3	50	50
2	25-494-0202	Legal and Regulatory Framework for Business	3	3	0	3	50	50
3	25-494-0203	Financial Reporting	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0204	Spread Sheet Applications for Finance	4	3	3	6	50	50
5	25-494-0205	Financial Services Marketing	3	3	1	4	50	50
6	25-494-0206	Tax Processing & Management	3	2	3	5	50	50
7	25-494-02xx	Elective -1 (with practical)	4	3	2	5	50	50
8	25-494-0207	Professional Skill Training-II (PST-II) Advanced Client Engagement and Regulatory Compliance for BFSI Sector (30	1	-	-	-	100	-
9	25-494-0208	Internship with Mini Project (1 month)	3	-	-	-	100	0
Total Credit of General Courses			**9**	-	-	-		
Total Credit of Skill Courses			**18**	-	-	-		
Total Credit/Hours/Marks			**27**	**20**	**9**	**29**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

Corporate Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	25-494-0201	Corporate Finance	3	GC	50	50	3	0	3

Course Objectives:

1. Develop the ability to assess investment opportunities and make well-informed capital budgeting decisions to maximize financial returns.
2. Gain an understanding of various sources of capital, along with methods for computing their respective costs, and determine the overall cost of capital for a firm.
3. Explore capital structure theories, analyze financing decisions, and formulate effective financial strategies for business growth.
4. Understand dividend policies and evaluate their influence on a firm's market valuation and shareholder wealth.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
Upon successful completion of this course, students will be able to:		
CO 1	Evaluate investment opportunities using capital budgeting techniques such as NPV, IRR, and Payback Period to make data-driven financial decisions.	Evaluate
CO 2	Compute the cost of various sources of capital and determine a firm's overall weighted average cost of capital (WACC) for effective financial planning.	Apply
CO 3	Assess different capital structure theories and financing strategies to optimize a firm's financial performance and risk management.	Evaluate
CO 4	Explain various dividend policies and evaluate their impact on shareholder wealth and a firm's market valuation.	Evaluate
CO 5	Apply financial management principles to business cases, enhancing decision-making for long-term value creation.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1		2	2	3			
CO2		3		3			
CO3		3		3			
CO4	2	2		3			
CO5		2		3			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Overview of Corporate Finance

Meaning and scope of Corporate Financial Management- Objectives of Financial Management- Function of Corporate Finance-Risk-Return Trade-off- Stakeholder-Manager Conflicts- Corporate Governance; Organisation of the Finance Functions.

Module II: Investment Decision

Capital Budgeting Decisions: Concept of capital budgeting, Need, types and importance of capital investment decisions, Time Value of Money, Capital Budgeting Appraisal Methods with case studies using spreadsheet applications – Pay-back Period, Net Present Value, Present Value Index, Internal Rate of Return, and Modified Internal Rate of Return- Investment in Working Capital (An Overview)

Module III: Sources of Finance and Cost of Capital

Sources of Capital-Equity financing, GDR-ADR, Internal financing, and Debt financing- Cost of Capital: Concept and Significance, Computation of Component

Costs of capital - Costs of Debt, Preference Share Capital, Equity Capital, and Retained Earnings; Composite Cost of Capital.

Module IV: Capital Structure Decision

Meaning and Patterns of Capital Structure, Concept of Optimum and Appropriate Capital Structure; Factors affecting Capital Structure, Theories of Capital Structure - Net Income Approach, Net Operating Income Approach, M-M Approach and Traditional Approach; EBIT-EPS Analysis; Leverage-Operating, Financial, and Composite Leverages

Module V Dividend Decision

Dividend and its forms, Dividend Policy, Impact of Dividends - Relevance and Irrelevance Theories of Dividend Decision: Walter's Approach; Gordon's Approach and MM Approach. I

References:

1. James C. Van Horne, John M. Wachowicz Jr.: Fundamentals of Financial Management, Prentice Hall of India, New Delhi.
2. Richard A. Brealey, Stewart C. Myers, Franklin Allen, Pitabas Mohanty: Principles of Corporate Finance, Tata McGraw Hill Publishing Company Ltd. New Delhi.
3. Pandey I. M.: Financial Management, Vikas Publishing House Pvt. Ltd., New Delhi.
4. Prasanna Chandra: Financial Management – Theory and Practice, Tata McGraw Hill Publishing Company Ltd. New Delhi.
5. Khan M. Y., Jain P. K.: Financial Management – Text and Problems, Tata McGraw Hill Publishing Company Ltd. New Delhi.
6. Lawrence D. Schall, Charles W. Haley: Introduction to Financial Management, McGraw Hill, Inc., New York.

Legal and Regulatory Framework for Business

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	25-494-0202	Legal and Regulatory Framework for Business	3	GC	50	50	3	0	3

Course Objectives:

1. Develop understanding about the legal environment for businesses in India.
2. Equip students with knowledge of corporate laws, contract laws, tax laws, and regulatory frameworks applicable to business operations.
3. Familiarize students with the compliance and governance requirements under Indian law.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Explain the foundational principles of business laws and their implications on business operations.	Understand
CO 2	Analyse the legal provisions under corporate, tax, competition, and digital transaction laws to understand real-world business scenarios.	Analyse
CO 3	Examine corporate governance practices, ethical standards, and dispute resolution mechanisms to know strategies for legally sound and sustainable business decisions.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2			1		2
CO2	3	3	1		2		2
CO3	2	3			3		3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Business Laws and Regulatory Framework

Introduction to Business Laws – Definition, scope, and sources of business law-Constitutional Provisions & Business – Fundamental rights, directive principles, and their impact on business operations-Contract Law – Indian Contract Act, 1872: essentials, performance, breach, and remedies-Sale of Goods Act, 1930 – Conditions and warranties, transfer of ownership, and rights of unpaid

seller-Consumer Protection Act, 2019 – Consumer rights, grievance redressal, and e-commerce rules. Service Quality Standards

Module II: Corporate Laws & Governance

Companies Act, 2013 – Incorporation, types of companies, corporate management, meetings, and winding up-Limited Liability Partnership (LLP) Act, 2008 – Concept, formation, rights, and liabilities-Corporate Social Responsibility (CSR) – Provisions under the Companies Act, mandatory compliance, and sustainability practices-Whistleblower Protection and Ethics – SEBI guidelines, corporate ethics, and legal safeguards

Module III: Competition, Foreign Exchange & Industrial Laws

Competition Act, 2002 – Anti-competitive agreements, cartels, abuse of dominance, and merger regulations-Foreign Exchange Management Act (FEMA), 1999 – FDI, external commercial borrowings (ECB), and current account transactions-Industrial Laws – Factories Act, 1948; Employees' Provident Fund (EPF) & Miscellaneous Provisions Act, 1952; Maternity Benefit Act, 1961-Labour Laws and Gig Economy – Code on Wages, Occupational Safety, and regulations for gig and platform workers.

Module IV Taxation and Digital Business Laws

Income Tax Act, 1961 – Basics of corporate taxation, deductions, and recent amendments. -Goods and Services Tax (GST) – GST structure, input tax credit, compliance, and penalties-Digital Transactions and E-Commerce Laws – Information Technology Act, 2000; data protection rules; cyber frauds and liabilities-Intellectual Property Rights (IPR) – Patents, trademarks, copyrights, and protection of business innovations.

Module V: Dispute Resolution & Emerging Legal Issues

Alternative Dispute Resolution (ADR) – Arbitration and Conciliation Act, mediation, and Lok Adalats-Environmental and Sustainability Laws – Environmental Protection Act, 1986; legal obligations for sustainable business practices-Whistleblower Protection & Anti-Corruption Laws – Prevention of Corruption Act, 1988; legal framework for corporate transparency- Legal Aspects of Startups and MSMEs – Startup India legal provisions, MSME Act, and compliance framework.

References:

1. Kuchhal, M. C., & Kuchhal, V. (2022). Business law. Vikas Publishing.
2. Singh, A. (2021). Principles of mercantile law. Eastern Book Company.
3. Kapoor, N. D. (2020). Elements of mercantile law. Sultan Chand & Sons.
4. Taxmann Publications. (2023). Corporate & industrial laws updates. Taxmann.
5. Gulshan, S. S., & Kapoor, G. K. (2022). Business law including company law. New Age International

Financial Reporting

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	**25-494-0203**	**Financial Reporting**	**3**	**GC**	**50**	**50**	**3**	**0**	**3**

Course Objectives:

1. To provide understanding of accounting process and financial reporting with special focus on the underlying principles, concepts, and policy framework.
2. To develop skills in reading financial reports, and analysing and interpreting financial statements using knowledge of the accounting principles, and financial analysis techniques.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Recall the fundamental accounting principles, concepts, conventions, and qualitative characteristics of financial information, such as relevance, reliability, and comparability.	Remembering
CO 2	Explain the purpose and significance of accounting standards (AS, Ind AS, IFRS) and the differences between accrual and cash basis accounting systems.	Understanding
CO 3	Apply the double-entry system to maintain journals, ledgers, and trial balances, and prepare core financial statements.	Apply
CO 4	Analyze financial statements using accounting ratios and interpret the results using real industry/firm-level data.	Analyse
CO 5	Evaluate the importance of cash flow analysis and distinguish between operating, investing, and financing activities to assess a firm's financial health.	Evaluating

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2					2
CO2	3	2			2		2
CO3	3	3	2				
CO4	3	3	3	2			2
CO5	3	3	3	2	2		2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I Context and Purpose of Financial Reporting

Accounting Principles, Concepts, Conventions and policies. Concepts and conventions; business entity, money measurement, going concern, accruals, periodicity, matching, consistency, materiality, relevance, reliability, substance over form, neutrality, prudence, completeness. Qualitative characteristics of financial information; relevance, faithful representation, comparability, verifiability, timeliness and understandability. Accounting policies: AS, Ind AS and IFRS (an overview)

Module 2 Accounting Process and System

Accounting Equations, Book Keeping and Record Maintenance - Concept of double entry and fundamental principles - Journal, Ledger, Trial Balance, Subsidiary Books; accruals and cash basis accounting; Core financial statements.

Module 3 Financial Statements

Form and contents of financial statements of joint stock companies in India, Important characteristics of Corporate Accounting, Standalone versus Consolidated financial statements, preparation of financial statements.

Module 4 Analysing and Interpreting Financial Statements

Types of Financial Analysis and Tools for analysis. Accounting ratios; statement of profit and loss ratios; balance sheet ratios, and mixed ratios. Computations and interpretations with real industry/firm level data.

Module 5 Cash flow Analysis

Income versus Cash flows; purpose and importance of understanding cash flows; operating, investing and financing cash flow activities; preparing cash flow statements from income and position statements data. Computations and interpretations with real industry/firm level data.

References

1. Study Materials of Institute of Chartered Accountants of India and Institute of Cost Accountants of India.
2. Lawrence Revsine, Daniel Collins, Bruce Johnson, Fred Mittelstaedt (2011). Financial Reporting and Analysis. McGraw-Hill.
3. T.P Ghosh (2015). Illustrated Guide to Indian Accounting Standards. Taxmann Publications
4. Garg Kamal (2019). Beginners Guide to Ind-As and IFRS. Bharat Law House
5. Shukla, M. C., Grewal, T. S.(2017). Advanced Accounts, S. Chand & Company Ltd.
6. Bhattacharyya, Asish K (2018). Corporate Financial Reporting and Analysis, Prentice Hall of India.
7. Gupta, R. L., and Radhaswamy M. (2014) Financial Accounting. Sultan Chand & Sons.
8. Maheshwari, S. N., and Maheshwari, S. K. (2018). Financial Accounting, Vikas Publishing House

Spreadsheet Applications for Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	25-494-0204	Spreadsheet Applications for Finance	4	SC	50	50	3	3	6

Course Objectives:

1. Develop student proficiency in using spreadsheet software (Microsoft Excel and Google Sheets) to perform essential financial tasks, including data entry, formatting, and the application of basic and advanced formulas and functions.
2. Enable students to design, build, and analyze financial models for forecasting, budgeting, and decision-making by incorporating time value of money (TVM) concepts, sensitivity analysis, and scenario planning.
3. Enhance students' ability to apply spreadsheet techniques to solve real-world financial problems, such as investment analysis, loan amortization, lease vs. buy decisions, and financial reporting.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Leverage spreadsheet tools to execute financial calculations and conduct data-driven analysis.	Apply
CO2	Develop and interpret dynamic financial models to support forecasting, scenario planning, and strategic decision-making.	Analyse
CO3	Implement spreadsheet techniques (e.g., macros, pivot tables, automation) to streamline workflows and enhance operational efficiency.	Evaluate
CO4	Design tailored solutions for real-world financial challenges using spreadsheet applications, optimizing accuracy and actionable insights.	Create

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	2	3	2		2	2
CO2	2	3	3	3	2	2	2
CO3		2	3	2		3	2
CO4	2	3	3	3	2	2	3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module 1: Introduction to Spreadsheets

Overview of Excel & Google Sheets (interface, navigation, shortcuts). Essential skills: Data entry, formatting, cell referencing (absolute/relative). Basic financial functions: SUMIF, COUNTIF, IF, PMT, RATE. Importance of spreadsheets in banking & finance.

Module 2: Financial Calculations & Data Analysis

Time Value of Money (TVM): PV, FV, NPV, IRR, XIRR. Loan amortization schedules & bond pricing. Statistical analysis: AVERAGE, STDEV, CORREL, regression tools. Data visualization: Dynamic charts (scatter plots, waterfall charts).

Module 3: Forecasting Techniques

Forecasting techniques: Moving averages, TREND, FORECAST.LINEAR. Sensitivity analysis: Data Tables, Goal Seek, Scenario Manager.

Module 4: Advanced Functions & Automation

Advanced functions: INDEX-MATCH, XLOOKUP, nested IFS. Data management: Pivot Tables, slicers, Power Query (data cleaning). Macros & VBA: Recording macros, automating repetitive tasks. Risk modelling: Monte Carlo simulations (basic introduction).

Module 5: Real-World Banking & Finance Applications

Budgeting & Reporting: Variance analysis, KPI dashboards. Investment Analysis: Portfolio optimization (Sharpe ratio, diversification). Credit Risk: Probability of Default (PD) modelling. Case Studies: Lease vs. buy decisions. Bank stress-testing models.

References:

1. P. K. Gupta. "Financial Analytics with MS Excel", Author: Prof. P. K. Gupta, PHI Learning Pvt. Ltd.
2. Chandan Sengupta. "Financial Modelling Using Excel and VBA", Wiley India
3. S. K. Prasad. "Excel for Financial Analysis and Modelling: A Practical Guide", Publisher: Taxmann Publications.
4. Benninga, S., Principles of Finance with Excel, Oxford University Press.
5. Winston, W., Excel Data Analysis & Business Modelling, Microsoft Press.
6. Fairhurst, D.S., Financial Modelling in Excel For Dummies, Wiley

Software/Tools

- Primary: Microsoft Excel (Power Query, Power Pivot), Google Sheets.
- Optional: Python integration (for advanced learners).

Financial Services Marketing

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	25-494-0205	Financial Services Marketing	3	SC	50	50	3	1	4

Course Objectives:

3. Understanding of the meaning and scope of marketing in general, and of financial services marketing in particular
4. To familiarise the students with the core concepts of marketing, consumer behavior, relationship management and service quality standards.
5. To inculcate the practical competence to apply marketing mix strategies in the financial services industry through accurate target audience analysis, and understanding of service quality parameters.
6. To deliver a foundational understanding of digital marketing campaign structure, schedule, content and measurement.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand core concepts of marketing, customer behaviour and strategic positioning practices.	Understand
CO 2	Understand the shifting dynamics of digital marketing and planning and execution of digital campaigns.	Understand
CO 3	Demonstrate skills in planning and executing a marketing strategy plan covering the 7Ps.	Apply
CO 4	Analyse a marketing plan by identifying and measuring relevant performance indicators.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	2				1	2
CO2	2	2	2			2	3
CO3	2	3	2			3	2
CO4	2	3	3	2		2	2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Marketing

Nature and scope of marketing, Core Concepts, Marketing Mix, Value proposition, Marketing environment, Types of market- consumer, business, global, Product Lifecycle, New product development, STP, Strategy planning.

Module II: Consumer Behaviour

Consumer behavior-meaning and determinants-Stages in consumer decision-making, Customer Perceived Value (perceived benefits and costs), Customer relationship management (CRM) and Marketing information systems (MIS), Customer Lifecycle Management, Creating customer value, satisfaction and advocacy.

Module III: Services Marketing

Unique characteristics of services, 7Ps, SEC evaluation of services, Service Quality (SERVQUAL) and Service Performance (SERVPERF) concepts, measurement, metrics, GAP Analysis, Branding a service – brand equity, audit, extensions and valuation, Relationship marketing.

Module IV: Financial Services Marketing

Financial services environment- regulatory, political, cultural and social, Marketing strategies for financial services, Strategies for branding, pricing, distributing and promoting financial products, Financial services marketing mix, Identifying and addressing GAPs in service.

Module V: New Age Marketing

Nature and scope of digital marketing in finance, Core digital marketing concepts, Digital marketing mix (7Ps online adaptation), Value proposition in digital finance, Digital marketing environment, Digital STP (Segmentation, Targeting, Positioning) and marketing strategy planning. Digital channels -Search Engine Marketing (SEM), social media/mobile/email marketing, influencer/affiliate programs, and programmatic advertising, and ROI measurement.

References:

1. Philip Kotler, Hermawan Kartajaya, Iwan Setiawan. Marketing 5.0: Technology for Humanity, Wiley.
2. Kotler, Keller, Sheth Pearson. Marketing Management, Pearson India
3. Dhruv Grewal and Michael Levy, Marketing, McGraw Hill.
4. K. Douglas Hoffman/John E.G. Bateson. Services Marketing: Concepts, Strategies, and Cases, Cengage Learning India Private Limited.
5. Simon Kingsnorth. Digital Marketing Strategy: An Integrated Approach to Online Marketing, Kogan Page.
6. Ritu Srivastava. Marketing of Consumer Financial Products: Insights From Service Marketing, Springer.
7. Dhananjay Bapat. Marketing of Financial Services, SAGE Publications India.

Tax Processing and Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	25-494-0206	Tax Processing and Management	3	SC	50	50	2	3	5

Course Objectives:

1. To develop a comprehensive understanding of the implications of income tax and GST laws on business decision-making processes.
2. To equip learners with practical skills in tax planning and the computational aspects of income tax and GST.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand key concepts of income tax and GST (e.g., assessee, CGST, ITC) and interpret their legal frameworks (Income Tax Act, GST laws) to distinguish direct/indirect taxes and the dual GST model.	Understand
CO 2	Compute taxable income and liability under various heads applying provisions for clubbing, set-off, and loss carry-forward.	Apply
CO 3	Apply GST principles to determine supply value, calculate tax liability, and utilize ITC in compliance with time-of-supply rules.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	2	1		2	1	3
CO2	2	3	2		2	1	2
CO3	2	3	2	2	2	1	3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Basic Concepts of Income Tax

Meaning of Tax- Principles of Taxation, Direct and Indirect Tax-Components of Income Tax Law (Income tax Act 1961, Annual Finance Act, Income tax rules) – Definitions (Assessee, Assessment, Person, Income, Assessment Year, Previous Year, Agricultural income), Steps for computation of Total Income and Tax Liability (Determination of Residential Status, classification of income under

different heads, Basis of Charge and Rates of taxation (progressive and regressive tax rates). Tax Planning and Management.

Module II: Computation of Total Income and Income Tax Liability

Computation of income under different heads (computation of each head of income separately with common items), clubbing of income of spouse, minor child etc., set-off and carry forward of losses, computation Gross Total Income, Deductions from GTI, New and Old Tax regimes, computation of TI, computation of tax liability. (including simple computation with common items)

Module III Returns and Assessment Process of Companies

Filing of Returns- Types of Returns, Assessment and Audit, Appeals and revisions, procedures, Income tax authorities and jurisdiction. GAAR and DTAA.

Module IV Introduction to GST

Meaning, Need and importance, Tax Cascading, Tax Pyrmiding, Dual GST model (CGST, SGST, UTGST, IGST, GST Council, Definitions under GST Laws, Levy and Collection of Tax- Composite and mixed supplies- composition levy- Forward and reverse charge. Time and Value of Supply, auto population Input tax credit.

Module V Registration, Accounts & Records under GST Law

Compulsory registration, registration procedures, GSTIN, Tax invoices, credit and debit notes, accounts and records under GST, preparation and audit of accounts & records. Computation of Tax Liability and payment of tax. Furnishing of returns, first and revised returns, audit under GST, types of audit, anti-profiteering.

Note: Discuss the proposed Income Tax Bill/Act 2025

References:

1. Girish Ahuja and Ravi Gupta, “Systematic Approach to Income Tax and GST", Commercial Law Publishers.
2. Vinod K. Singhania and Monica Singhania, "Students' Guide to Income Tax including GST", Taxmann Publications (P.) Ltd.
3. V. S. Datey, GST Ready Reckner, Taxmann Publications (P.) Ltd.
4. Study materials (latest) of Institute of Chartered Accountants of India.
5. Study material of the Institute of Cost Accountants of India.

Professional Skill Training II (PST II)

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	**25-494-0207**	Professional Skill Training-II (PST-II) - Advanced Client Engagement and Regulatory Compliance for BFSI Sector (30 Hrs.)	**1**	**SC**	**100**				**30**

Course Description

Building on PST 1, this course focuses on advanced client relationship management, conflict resolution, and compliance with evolving regulations. Students engage in role-plays, case studies on AML/fraud detection, and workshops on ethical decision-making in cross-cultural settings.

Course Objectives

1. Enhance skills in managing complex client relationships and resolving disputes.
2. Deepen understanding of anti-money laundering (AML) and fraud prevention mechanisms.
3. Strengthen ethical judgment in compliance-driven scenarios.

Course Outcomes:

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Analyse client needs to recommend personalized financial products.	Analyse
CO2	Evaluate transactional data to identify potential AML/fraud risks.	Evaluate
CO3	Propose ethical solutions to compliance dilemmas in multicultural teams.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3	2	2				1
CO2	3	2	3			2	
CO3					2	2	3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Internship with Mini Project

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
II	**25-494-0208**	**Internship with Mini Project & Viva-Voce* (1 months**) (50 marks for internship, interim presentation and Mini Project Report, and 50 marks for Viva-voce)	**3**	**SC**	**100**		**-**	**-**	**-**

Course Objective:

The one month internship is designed to provide students with an introductory exposure to the Banking, Financial Services, and Insurance (BFSI) sector. The focus is on understanding basic operations, regulatory frameworks, and customer service functions in banks, NBFCs, or insurance companies.

Expected Outcomes:

1. Gain foundational knowledge of BFSI operations.
2. Understand key financial products and services.
3. Develop basic skills in customer interaction and transaction handling.
4. Familiarize with compliance and risk management practices.
5. Prepare a report summarizing key learnings and observations.

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	3	2					
CO3						3	2
CO4	2	2					1
CO5			2			2	2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation

Contents/Topics Covered:

1. Introduction to BFSI Sector
   - Overview of banking, insurance, and financial services
   - Role of RBI, IRDAI, SEBI, and other regulators
2. Banking Operations
   - Retail banking functions (accounts, loans, deposits)
   - Digital banking and payment systems
   - KYC and AML norms
3. Financial Products & Services
   - Types of loans, insurance policies, and investment products
   - Mutual funds and wealth management basics
4. Customer Service & Sales
   - Handling customer queries
   - Cross-selling financial products
5. Risk & Compliance
   - Basics of credit risk and fraud prevention
   - Regulatory reporting requirements
6. Project Work
   - Observational study on a specific BFSI function
   - Submission of a short internship report

SYLLABI

THIRD SEMESTER

S. No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-0301	International Banking & Finance	3	3	0	3	50	50
2	25-494-0302	Investment Banking Services	3	3	0	3	50	50
3	25-494-0303	Sustainable Banking & Green Finance	3	3	0	3	50	50
		SKILL COURSES:						
4	25-494-0304	Risk Management	3	3	0	3	50	50
6	25-494-03xx	Elective 2 (with practical)	4	3	2	5	50	50
7	25-494-03xx	Elective 3 (with practical)	4	3	2	5	50	50
8	25-494-03xx	Elective 4 (without practical)	3	3	0	3	50	50
9	25-494-0305	Professional Skill Training-III (PST-III) Strategic Decision Making and Risk Management for BFSI Sector (60 Hrs.)	2	-	-	-	200	-
Total Credit of General Courses			**9**	-	-	-	-	-
Total Credit of Skill Courses			**16**	-	-	-	-	-
Total Credit/Hours/Marks			**25**	**21**	**4**	**25**	**550**	**350**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

International Banking & Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
III	25-494-0301	International Banking & Finance	3	GC	50	50	3	0	3

Course Objectives:

1 Understand the fundamental of international banking on the functioning of foreign exchange markets, and use of various instruments.

2 To enhance the level of understanding on risk exposure and risk management approaches in international business.

3 To develop required skills for using derivatives instruments and strategies to manage risks in international finance markets.

4 To analyse the potentials of currency trading and arbitrage possibilities in global finance markets.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the micro structure of the international banking and finance markets, trading motives mechanism, and payoffs.	Understand
CO 2	Applying/taking positions with market instruments in line with market outlook/risk management requirements.	Apply
CO 3	Analysing the technical/ and other parameters of the contract, and connecting with market signals to judge a position.	Analyse
CO 4	Evaluate the international financial market conditions, instrument, currency trends and firm's exposures.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3				3		
CO2		3		2	3		
CO3		3	3	3			
CO4	3	3		3	3		3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation

Prerequisites: Completion of basic course in financial management/banking

Syllabus:

Module I International Banking

Overview of International Banking-Definition, scope, and evolution of international banking. Roles of international banks: cross-border lending, trade finance, foreign exchange, and syndicated loans. Key players: multinational banks, international financial institutions (e.g., World Bank, IMF, BIS), and offshore financial centres. Correspondent banking and global payment systems (SWIFT, CHIPS).

Module II: International Finance and markets

Global Economy -monetary system; Globalization- Balance of payments – significance- preparation of BOP statement – Link between BOP and the economy - Eurocurrency market, international bond market, international equity market, international money market.

Module III: Foreign Exchange Market

Forex market- regulator – FEMA- authorized dealers Exchange Rate Mechanism: Exchange rate quotations, direct and indirect quotes, bid and ask quote, Nominal, real and effective exchange rates, cross currency rates- triangular arbitrage.

Module IV: Foreign Exchange Markets – Instruments and Trading

Spot Market: Meaning, Features, Currency arbitrage: Forward Market: Meaning, Features, Arbitrage in forward market; Market for Currency Futures: Meaning, Forward and Futures Contracts, Hedging in currency Futures Market; Market for Currency Options: Types of Option Market, Types of Options, Option properties and payoffs.

Module V: Risk Exposure and Financing for International Business

Risk exposure -meaning, Types of Exposure, Hedging of exposure. Purchase power parity- interest rate parity. Portfolio investment - FDI-FII -ADR-GDR-IDR. Swap Contracts-Concept, interest rate swaps -currency swaps- speculation and hedging using swaps-economic advantages and value creation using swaps - credit derivatives.

References:

1. M. Bhimasarao. "International Banking and Finance", Himalaya Publishing House
2. H.R. Machiraju. "International Financial Management", New Age International Publishers/PHI Learning
3. Apte.P.G. International Financial Management, TataMcGraw Hill, New Delhi
4. John C Hull, Options Futures and Other Derivatives, Pearson Education.
5. Francis Cherunilam: International Economics, Tata McGraw-Hill Education Private Ltd., New Delhi.
6. Maurice D. Levi: International Finance – The Markets and Financial Management of Multinational Business, Routledge.

Investment Banking Services

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
III	25-494-0302	Investment Banking Services	3	GC	50	50	3	0	3

Course Objectives:

1. To provide understanding on the role of investment banking services in the growth and development of dynamic capital market.
2. To equip students with practical skills in issue management and project financing.
3. To explore fee-based services and corporate financial solutions.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the concept, emergence, role and functions of investment banks and the regulatory framework governing investment banking in India.	Understand
CO 2	Apply knowledge to manage new issues in the primary market, including pre-issue and post-issue management activities	Apply
CO 3	Analyze the processes and challenges involved in venture capital, private equity, factoring, and forfeiting.	Analyse
CO 4	Evaluate the role of investment banks in credit syndication, consortium finance, and portfolio management services.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3				2		
CO2		3				2	
CO3	2	3		2			
CO4	3	3					

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Investment Banking

Concept, Emergence and Functions of Investment Banks- Investment Banking Services- Fund based vs Fee based services -Investment banking vs Merchant Banking - Investment banking in India- Players in Investment banking sector - Regulations for Investment banks

Module II Issue Management

Managing new issues - Primary market in India - Pre issue management - lead merchant banker - appointment of intermediaries - prospectus and offer documents - underwriting - Post issue management obligations- recent developments in issue management.

Module III: Project financing

Venture Capital - Concept and features - Private equity- Investment banking perspectives in private equity - securitization - meaning, features and issues in securitization - credit syndication and consortium finance

Module IV: Factoring

Concept, classifications and functions - International factoring-Forfeiting - difference between factoring and forfeiting - hire purchase and lease financing - types of lease - benefits of leasing - Corporate restructuring

Module V: Fee Based Services

Depository Services -Depository System in India - Stock Broking- role of stock brokers and Sub brokers in capital market - Credit Rating - Concept and rating process - Credit Rating Agencies in India - Equity research and IPO grading - sovereign rating - portfolio management services

References:

1. Joshua Rosenbaum & Joshua Perl, Investment Banking: Valuation, Leveraged Buyouts and Mergers & Acquisitions, John Wiley & Sons Inc., New Jersey
2. Christine Ennew, Trevor Watkins and Mike Wright: Marketing of Financial Services, Butterworth-Heinemann, Woburn MA
3. Lott Tom, Loosvelt, Derek and Jarvis, William, Vault Career Guide to Investment Banking, Vault Inc.
4. J.C. Verma, A Manual of Merchant Banking, Bharath Publishing House, New Delhi
5. M. Y. Khan, Financial Services, Tata McGraw –Hill, New Delhi
6. H.R. Machiraju, Merchant Banking, New Age Publishers, New Delhi
7. S. Gurusamy, Merchant Banking and Financial Services, Tata McGraw Hill, New Delhi
8. Pratap G Subramanyam, Investment Banking: Concepts, Analysis & Cases, Tata McGraw-Hill, New Delhi

Sustainable Banking and Green Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
III	25-494-0303	Sustainable Banking and Green Finance	3	GC	50	50	3	0	3

Course Objectives:

1. To develop an understanding of sustainable banking practices and their role in achieving environmental and social sustainability.
2. To explore green finance instruments and strategies that promote sustainable economic growth and climate risk mitigation.
3. To analyze the impact of regulatory policies, ESG considerations, and ethical banking frameworks in sustainable finance.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Understand the key concepts of sustainable banking and green finance, including ESG principles and ethical banking.	Understand
CO2	Examine various sustainable financial products, policies, and their impact on economic and environmental sustainability.	Analyse
CO3	Assess regulatory frameworks, risks, and challenges in the implementation of green finance initiatives.	Analyse
CO4	Utilize sustainable banking strategies and financial models to support environmental and social initiatives.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3				2		1
CO2		2			3		
CO3	2	3					1
CO4		2		2	3		

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Sustainable Banking and Green Finance

Concept and principles of sustainable banking- Importance of financial institutions in sustainable development- Triple Bottom Line (TBL) approach – People, Planet, Profit- Introduction to green

finance and its significance in climate risk mitigation- Sustainable Development Goals (SDGs), international agreements (Kyoto, Paris, UNFCC) and banking sector alignment- ESG (Environmental, Social, and Governance) factors in banking and finance- Ethical banking, responsible investment, and corporate social responsibility (CSR).

Module II: Sustainable Banking Practices and Policies

Role of central banks and financial regulators in sustainable banking- Global sustainable banking initiatives (Equator Principles, UNEP FI, etc.)- Green banking policies and environmental risk assessment frameworks- Integration of sustainability in credit risk assessment and lending- Climate risk disclosure and reporting standards (TCFD, GRI, etc.)- Case studies on sustainable banking models (e.g., Triodos Bank, Grameen Bank).

Module III: Green Finance Instruments and Markets

Overview of green finance and climate finance- Green bonds, blue bonds, and sustainability-linked bonds- Green loans, carbon credit financing, and impact investing- Role of multilateral institutions (World Bank, IMF, Green Climate Fund)- Private sector participation in sustainable finance- Technological innovations in green finance (FinTech, blockchain, AI)- Challenges and opportunities in scaling green finance.

Module IV: Risk Management and Regulatory Frameworks in Sustainable Finance

Climate-related financial risks and stress testing- Regulatory landscape – Basel norms, SEBI guidelines, and global policies- Role of financial institutions in achieving Net-Zero emissions- Greenwashing risks and ethical concerns in green finance- Climate finance strategies in developing economies- Integration of sustainability in portfolio and wealth management.

Module V: Future Trends and Innovations in Sustainable Banking

Digital banking solutions for sustainability- Role of artificial intelligence and big data in green finance- Sustainable FinTech and innovations in green investment platforms- Emerging trends in carbon markets and biodiversity finance- Policy recommendations for accelerating sustainable finance- Future of banking in a low-carbon economy.

References:

1. Schoenmaker, D., & Schramade, W. (2019). Principles of Sustainable Finance. Oxford University Press.
2. Weber, O., & Feltmate, B. (2016). Sustainable Banking: Managing the Social and Environmental Impact of Financial Institutions. University of Toronto Press.
3. Zadek, S. (2018). Financing Sustainable Development: Implementing the SDGs through Effective Banking. Routledge.
4. Doran, J. (2020). Green Finance and Sustainability: Environmental Economic Policies and Banking Strategies. Palgrave Macmillan.
5. Khan, M. (2021). Green Banking and Sustainable Development. Springer.

Risk Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
III	25-494-0304	Risk Management	3	SC	50	50	3	0	3

Course Objectives:

1. To provide a thorough understanding of the risk management environment.
2. To equip students with the knowledge and skills to identify, assess, and manage various financial risks.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand risk types and sources, **differentiate** risk from exposure, measurement tools (VaR, stress testing) to quantify financial uncertainty.	Understanding
CO 2	Apply time value of money and discounted cash flow techniques to assess and mitigate interest rate risk.	Apply
CO 3	Understand the risk management instruments (futures, options, hedging) to mitigate currency, market, and operational risks.	Understand
CO 4	Analyze drivers of currency, market, and credit risks and evaluate the efficacy of tools (immunization, ERM) in managing financial exposures.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2					
CO2		2		3			
CO3	3	2					
CO4		3		3			1

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Risk Management Environment

Risk-meaning and concept-types and sources of risk-risk vs. exposure-transaction, translation and economic exposure- Risk measurement tools and techniques-Value at Risk (VaR).

Module II: Management of Interest rate risk

Interest rate risk-meaning and concept, interest rate mathematics- time value of money and discounted cashflows- interest vs. yield- assessment of interest rate risk- managing interest rate risk-interest rate risk management instruments (short term and long term)- interest rate futures and options-immunisation.

Module III: Management of Currency Risk

Currency risk-meaning, concept and contributing factors- assessment of currency risk- managing currency risk-currency risk management instruments- currency futures and options.

Module IV: Management of Market Risk

Market Risk-meaning, concept and sources of market risk- assessment of market risk- managing market risk-market risk management instruments- hedging and diversification- risk management using futures and options.

Module V: Other Financial Risks

Credit and Counter party risk-Operational Risk, Country Risk, Legar and Compliance risk-systemic risk-Stress Testing- Risk reporting Enterprise Risk Management (ERM).

References:

1. John C Hull, Options Futures and Other Derivatives, Pearson Education.
2. Kevin Dowd, Measuring Market Risk, John Wiley & Sons
3. Robert W. Kolb & James A. Overdahl, Financial Derivatives: Pricing and Risk Management, John Wiley & Sons
4. Sundaram Janakiraman, Derivatives and Risk Management, Pearson Education
5. Jayanth Rama Varma, Derivatives and Risk Management, TMH
6. Bishnupriya Mishra and Sathya Swaroop Debasish, Financial Derivatives, Excel Books
7. S.L. Gupta, Financial Derivatives: Theory, Concepts and Problems, Prentice Hall of India
8. S.S S Kumar, Financial Derivatives, Prentice Hall of India.

Professional Skill Training III (PST III)

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
III	25-494-0305	Professional Skill Training-III (PST-III) Strategic Decision Making and Risk Management for BFSI Sector (60 Hrs.)	2	SC	200	-	-	-	60

Course Description

This advanced course equips students with skills to tackle dynamic financial challenges, including risk assessment, portfolio optimization, and crisis management. Training includes simulations (e.g., trading floors, liquidity crises), predictive analytics using Python/R, and leadership workshops.

Course Objectives

1. Train students for corporate entry
2. Develop critical thinking to address volatile market scenarios.
3. Train students in advanced risk management tools (e.g., Monte Carlo simulations).
4. Foster leadership skills for guiding teams during financial disruptions.

Course Outcomes:

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Present themselves as industry ready professionals.	Create
CO2	Examine financial strategies using risk-return trade-off frameworks.	Analyse
CO3	Design portfolio diversification plans to mitigate market risks.	Create
CO4	Lead teams in high-pressure scenarios (e.g., simulated market crashes).	Create

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1						3	2
CO2	2	3	2	3			
CO3		2	2	3			
CO4						2	3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

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SEMESTER IV

S.No	Course Code	Course Title	Credits	L	P	Hrs/	Marks	
				Hrs.	Hrs.	Week	CE	SEE
		GENERAL COURSE:						
1	25-494-04xx	Elective 5 - MOOC -1	2	-	-	-	-	100
2	25-494-04xx	Elective 6 - MOOC 2	2	-	-	-	-	100
		SKILL COURSES:			-	-		
3	25-494-0401	Professional Skill Training-IV (PST IV) Innovation and Strategic Implementation in BFSI Sector (30 Hrs.)	1	-	-	-	100	-
4	25-494-0402	Internship with Major Project & Viva-Voce* (4 months)	14	-	-	-	200	300
Total Credit of General Courses			**4**	-	-	-		
Total Credit of Skill Courses			**15**	-	-	-		
Total Credit/Hours/Marks			**19**	-	-	-	**300**	**500**
Total Programme Credit for GCs			**31**	-	-	-	-	-
Total Programme Credit for SCs			**65**	-	-	-	-	-
Grand Total (I+II+III+IV)			**96**	-	-	-	**1950**	**1550**
L=Lecture hour, P=Practical hours, CE=Continuous Evaluation, SEE Semester End Examination								

1. Electives 5 and 6 - MOOC Courses (MOOCs)

As part of the programme, students must successfully complete two elective general courses as mandatory MOOCs, each worth 2 credits, subject to the University's "Regulations for Online Courses (MOOCs)." To facilitate the students, an assigned faculty member will act as the MOOC Coordinator, offering guidance and assistance during the students' MOOC progression. This initiative incorporates flexibility and innovation into the curriculum, enriching the academic experience while adhering to structured timelines and institutional guidelines. The course code for MOOC courses will begin from 25-494-0441 onwards as it is deemed to be offered in the fourth semester. The list of MOOC courses approved by the Centre Council alone can be opted by the students. Though the marks and grades of these courses are included in the fourth semester, students can strategically plan, register and complete the courses since the first semester. This may ensure ample time for completion and the inclusion of their marks and grades in the fourth-semester mark list.

Sl.No	Course Code	Elective Course
1	25-494-0441	MOOC Course 1
2	25-494-0442	MOOC Course 2

2. Professional Skill Training

The final phase of the Professional Skill Training (PST) with a duration of 30 hours is included in the fourth semester. The contents of the PST in the fourth semester will be as per the comprehensive plan for the PSTs spread across all the semesters including the fourth semester. Students are encouraged to participate in training programmes organized by state/national level Institutes/Centres or Departments of Universities including DDUKK/Professional bodies such as NISM, BFSI, AIMA etc. to satisfy the requirements for acquiring credits for the PSTs in various semesters. In order to attend such training programmes, students have to obtain prior permission from the Centre by submitting the details of the institution offering the training programme. The credits for the participation in such training programme shall be awarded only based on the training evaluation report submitted by the students along with the participation certificates. The associated training costs are to be borne by the students.

Professional Skill Training IV (PST IV)

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
IV	25-494-0401	Professional Skill Training-IV (PST IV) Innovation and Strategic Implementation in BFSI Sector (30 Hrs.)	1	SC	100	-	-	-	30

Course Description

This capstone course focuses on innovation, fintech integration, and strategic implementation. Students design solutions for real-world challenges (e.g., blockchain applications, AI-driven customer service) and present actionable strategies to industry mentors.

Course Objectives

1. Encourage innovation in addressing emerging BFSI trends (e.g., digital wallets, open banking and so on).
2. Refine strategic planning skills for sustainable business growth.
3. Prepare students for leadership roles through project management training.
4. **Course Outcomes:**

Course Outcomes (COs)		**Revised Bloom's Taxonomy Level**
After completion of the course, the student will be able to:		
CO1	Create fintech-driven solutions to enhance operational efficiency (e.g., chatbots for customer support).	Create
CO2	Evaluate the feasibility of strategic initiatives using cost-benefit analysis.	Analyse
CO3	Implement a project plan integrating regulatory, technical, and ethical considerations.	Create

CO – PSO Mapping Table:

CO/PSO	**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**	**PSO6**	**PSO7**
CO1		3	3				2
CO2	2	3	2	2			
CO3	3	2					2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

3. Internship with Major Project & Viva-Voce

SEM	**Course code**	**Course Title**	**Credit**	**GC/ SC**	**Mark**		**Hours**		
					CE	**SEE**	**L**	**P**	**L+P**
IV	**25-494-0402**	**Internship with Major Project & Viva-Voce* (4 months**) (200 marks for CE, 200 marks for Major Project Report and 100 marks for Viva-voce)	**14**	**SC**	**200**	**300**	**-**	**-**	**-**

Course Description

The entire fourth semester is dedicated to an extensive internship of 4 months in the BFSI sector. Along with the internship, the students are required to complete a Major Project directly related to their internship experience and participate in a viva-voce after the close of the internship period. The final semester project (major project), aligned with the internship, will undergo continuous evaluation throughout the semester by internal faculty. Together, the internship, major project and viva-voce in the fourth semester carry a total of 14 credits. The evaluation will focus on various aspects, including the time spent with the company or organization, the quality and relevance of the project or report submitted, the viva-voce (with external expert also), the perceived value of the internship, and the learning outcomes achieved by the student. Detailed operational guidelines regarding the modus operandi and other relevant aspects of Internships, Major Project, CE process and Viva-voce will be made available through an internal circular.

Objective:

The 4 months internship offers an in-depth, hands-on experience in the BFSI sector, allowing students to work on live projects, analyze financial data, and contribute to operational or strategic functions in banks, insurance firms, or investment companies.

Expected Outcomes:

1. Develop a comprehensive understanding of BFSI business models.
2. Gain hands-on experience in core areas like credit appraisal, investment analysis, or insurance underwriting.
3. Enhance analytical and decision-making skills in financial services.
4. Understand advanced regulatory and technological trends (Fintech, AI in BFSI).
5. Submit a detailed project report with findings and recommendations.

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	**3**				2		
CO2	3	3	2	2		3	
CO3		2	3	2			1
CO4	2	2	3				3
CO5		2	2	2		2	2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation

Proposed Contents/Topics Covered:

1. Advanced Banking Operations
    - Credit appraisal and loan processing
    - Treasury and forex operations
    - NPA management and recovery processes
2. Investment & Wealth Management
    - Portfolio analysis and asset allocation

- Mutual funds, SIPs, and equity research basics

3. Insurance & Risk Management
   - Underwriting processes and claim settlement
   - Actuarial principles and risk assessment
4. Fintech & Digital Banking
   - Role of AI, blockchain, and UPI in banking
   - Cybersecurity and fraud detection mechanisms
5. Regulatory & Compliance Framework
   - Basel norms, RBI guidelines, and IRDAI regulations
   - Corporate governance in financial institutions
6. Strategic Business Functions
   - Financial statement analysis
   - Business development and client acquisition strategies
7. Project Work
   - Live project in credit analysis, investment research, or digital banking etc
   - Presentation and detailed report submission

SYLLABI

ELECTIVE COURSES – WITH PRACTICAL

Sl.No	Course Code	Elective Course
1	25-494-0A11	Mutual Fund Management
2	25-494-0A12	Currency Management
3	25-494-0A13	Equity & Bond Analysis
4	25-494-0A14	Wealth Management
5	25-494-0A15	Corporate Restructuring
6	25-494-0A16	Credit Analysis
7	25-494-0A17	Financial Modelling
8	25-494-0A18	Financial Analytics
9	25-494-0A19	Data Visualisation Tools
10	25-494-0A20	Python for Banking and Finance
11	25-494-0A21	Artificial Intelligence (AI) for Finance
12	25-494-0A22	Actuarial Science

- **CODE for the particular Elective Course with Practical: 25-494-0AXX**
- **Where 'A' stands for semester number in which it is offered.**
- **'XX' stands for unique two-digit number for a particular elective course.**

Mutual Fund Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A11	Mutual Fund Management	4	SC	50	50	3	2	5

Course Objectives:

1. To provide an in-depth understanding of mutual fund operations, regulations, and portfolio management from the perspective of fund houses.
2. To develop skills in designing, managing, and evaluating mutual fund schemes in alignment with investor needs and market trends.
3. To equip students with practical knowledge of performance analysis and compliance in mutual fund operations.
4. To familiarize students with sales, distribution, and marketing strategies employed by mutual fund houses to attract and retain investors.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Recall key concepts such as NAV, expense ratio, types of mutual funds, and regulatory frameworks like SEBI guidelines.	Remembering
CO2	Explain the functioning of mutual fund houses, including fund allocation, asset management, and investor servicing.	Understanding
CO3	Analyse the pricing aspects of fund schemes and tax implications of fund investing.	Analyse
CO4	Apply with simulated mutual fund portfolios to make meaningful risk-return analysis and investor profiling.	Apply
CO5	Evaluate the performance of mutual fund schemes using metrics like Sharpe ratio, alpha, and beta.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	2	2					
CO3		3					
CO4		2		3		2	
CO5				3			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module 1: Introduction to Funds Management

Mutual funds: concept, meaning and significance, classifications and structure of mutual funds, fund operations, Asset Management Company and its organization structure, role and support function of service providers, Net Asset Value (NAV), growth of fund industry.

Module II: Investors Protection and Mutual Fund Regulation

Investors Rights, facilities available to Investors. Market Imperfection and Investment Risks , the need for Regulation. Regulators in India: role and functions of SEBI and AMFI, Investor Grievance Redress Mechanism, AMFI Code of Conduct for Intermediaries.

Module 3: Fund Distribution and Channel Management Practices

The role and importance of fund distributors, types of fund distributors, modes of distribution, pre-requisites to become Distributor, revenue and commission disclosure by SEBI, distributors vs Investment Advisors, Diligence Process by AMCs, mandatory and non-mandatory disclosures.

Module IV: Pricing and Taxation of Funds

Net Assets of Mutual Fund Scheme and NAV, Entry and Exit Load, Total expense ratio and pricing of fund units. Tax implications of mutual fund investing: tax-efficient investing strategies, STT and stamp duty, capital Gains and Dividend income, provisions for setting off of Capital Losses, Tax benefit under Section 80C, TDS and applicability of GST

Module V: Investor services and Innovations

Investment Plans and Services, NFO Price/On-going Offer Price, Cut-off Time and Time Stamping, KYC Requirements. Fund performance: measures of risk and return, benchmarks and performance, quantitative measures of Fund Performance and tracking Error. Recent Trends and Innovations: ETFs, Sustainable and socially responsible investing, Robo-advisors and fintech in asset management.

Reference:

1. Preeti Singh, "Mutual Funds in India: Marketing Strategies & Investment Practices", McGraw Hill Education.
2. Fredman and Wiles: How Mutual Funds work, Prentice Hall of India.
3. Mutual Fund Products & Services. Indian Institute for Banking & Finance, Taxmann.
4. Prasanna Chandra, "Investment Analysis and Portfolio Management" McGraw Hill Education.
5. V. A. Avadhani, "SEBI & Mutual Funds: Regulations & Compliance", Himalaya Publishing House
6. Charles P. Jones, Investments Analysis and Management, John Wiley & Sons
7. SEBI Mutual Fund Regulations (Latest Circulars)
8. AMFI Study Material – For NISM certification
9. Case Studies from ICRA, CRISIL, and AMFI – For real-world fund analysis

Currency Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A12	Currency Management	4	SC	50	50	3	2	5

Course Objectives:

1. Analyze the structure, participants, and emerging trends in global currency markets, including the role of central banks in ensuring stability.
2. Evaluate the theoretical foundations and practical implications of exchange rate systems and underlying theories.
3. Critique international and domestic regulatory frameworks governing currency transactions and their alignment with macroeconomic policies.
4. Design risk management strategies to mitigate currency exposures using internal techniques and external instruments.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the structure and functioning of currency markets, including types of exchange rates, market participants, and the role of central banks.	Understand
CO 2	Understand currency systems, exchange rate theories, and the regulatory frameworks governing currency management.	Understand
CO 3	Analyse different types of currency exposures and associated risks, and examine their impact on financial decision-making and arbitrage opportunities.	Analyse
CO 4	Evaluate risk management strategies and financial instruments used in mitigating currency risks.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	3				2		
CO3		2		2	2		
CO4		3		3			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Currency Markets

Currency markets: meaning and significance, exchange rates, inter-banks and merchant rates, spot and forward rates, TT rates, bid-ask-spread, depth and breadth of currency markets, factors Influencing Exchange Rates, market participants and classifications, role of central banks in currency market development, emerging trends in global currency markets.

Module II: Currency systems

Currency systems: meaning and importance, influencing factors, types, fixed-flexible-floating systems, pegged exchange rates, crawling peg, clean and dirty float. Theories of exchange rates: Purchasing Power Parity (PPP) Theory, Balance of Payment (BOP) theory, Interest Rate Parity Theory, Mint Parity Theory, Portfolio balance approach, monetary approach to exchange rates.

Module III Regulatory framework for Currency Management

International and Domestic Regulatory Frameworks for Central Banks: an overview, Compliance Considerations in Currency Transactions for Central Banks, Anti-Money Laundering (AML) and Know Your Customer (KYC) Requirements for Central Banks, COFEPOSA and FEMA, exchange control measures, Capital and Current Account Convertibility. Currency accounts: NOSTRO, VOSTRO and LORO accounts.

Module IV: Currency Market Exposure & Risks

Currency market exposure: concept and meaning, types of currency exposures, transaction, translation (accounting) and economic (operating) exposures, currency exposures vs currency risks, factors contributing to currency risks, role of central banks in currency markets stability, currency market exposure and arbitrage trading, triangular arbitrage.

Module V: Currency Exposure/Risk Management

Risk management strategies: Identification and assessment of currency risks, instruments and techniques of currency risk management, internal (passive) strategies- shifting vs sharing of risk- exposure netting, matching, offsetting, leading and lagging, invoicing and ALM strategies, external (active) strategies, money market vs capital market hedge- currency forwards, options and swaps- interest rate and cross currency swaps. Real-life Case Studies on Currency Risk Management in Central Banks.

References:

1. Vivek Viswan V. & Dr. M.M. Sulphey, Foreign Exchange Management and International Finance, Viva Books
2. C Jeevanandam. Foreign Exchange and Risk Management, Sultan Chand and Sons.
3. V.K. Bhalla. International Financial Management, Anmol Publications.
4. Foreign Exchange Facilities for Individuals- Indian Institute of Banking and Finance MacMillan publishers India
5. Alan C Shapiro, Multinational Financial Management, Prentice-Hall of India.
6. R.L. Varshney and S. Bhashyam. International Financial Management, Himalaya Publishing House.

Equity and Bond Analysis

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A13	Equity and Bond Analysis	4	SC	50	50	3	2	5

Course Objectives:

1. To familiarize students with basic approaches of security analysis – fundamental and technical analysis.
2. Train the students to develop necessary skills for security analysis. Make them able to analyse the impact of macro-economic, industry, corporate events on security prices.
3. To familiarize students with the concept of market efficiency, its implications and limitations.
4. Develop the skill sets to construct, revise and evaluate portfolio.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the basic approaches of security analysis – fundamental and technical analysis.	Understand
CO 2	Analyse the impact of macro-economic, industry, corporate events on security prices.	Analyse
CO 3	Understand the concept of market efficiency and Modern Portfolio Theory, its implications and limitations.	Understand
CO 4	Develop the skill sets to construct, revise and evaluate portfolio.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1	3						
CO2		2		2			
CO3	2						
CO4		3	2	3			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Foundational Aspects of Equities and Bonds

Introduction to Equity Securities: Definitions, types, characteristics, role in portfolios. Equity Valuation Fundamentals: Basic models like DDM, DCF, relative valuation. Intrinsic value, market price, multiples (P/E, P/B). Introduction to Fixed-Income Securities: Bond characteristics, types (govt, corporate, munis, etc.), bond indenture, covenants.

Module II: Equity Analysis – Fundamental and Technical Analysis

Relationship between macroeconomic variables and financial markets. Industry Life- Cycle; Business Cycles and Industries; Analysis of Competition in the Industry, Technological Changes and Industry. Economy-Industry-Company (EIC) Framework, Analysis of Financial Statements to understand value drivers. Valuation of stock based on projected cashflow, Relative valuation and Valuation Multipliers. Meaning and assumptions of technical analysis - Charting Techniques - Dow Theory – Elliot Wave Theory - Bar and Line Charts – Point and Figure Charts - Moving average analysis – Relative Strength Analysis – Japanese Candlesticks - Technical Indicators.

Module III: Market Efficiency

Efficient Market Hypothesis, Various Forms of market efficiency and Testing Implications. Behavioural Finance- Limits of Arbitrages, Heuristics and Biases, Implications.

Module IV: Modern Portfolio Theory

Definition of Risk, Risk Aversion, Benefits of Diversification, Markowitz risk- return optimization with Two Stocks. Portfolio Optimisation with Black Litterman Approach. Capital Assets Pricing Model (CAPM), CML and SML, Empirical tests of CAPM, Limitations of CAPM and Market Anomalies. Arbitrage Pricing Theory (APT), Multifactor Models, Fama-French Model, Factor-Based Investing.

Module V: Portfolio Management

Passive vs. Active Portfolio Management, The conventional theory of performance evaluation, Composite Portfolio performance measures (Treynor; Sharpe; Jensen; and Information ratio performance measures) Asset Allocation Strategies.

References

2. David G. Luenberger: Investment Science, Oxford University Press.
3. Frank K. Reilly, Keith C. Brown: Investment Analysis and Portfolio Management (Indian Edition), Thomson – South Western.
4. Zvi Bodie, Alex Kane and Alan J. Marcus, Investments, M cGraw Hill.
5. Burton Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company.
6. Prasanna Chandra. Investment Analysis and Portfolio Management, Tata McGraw-Hill.
7. Bhalla V.K.: Investment Management–Security Analysis and Portfolio Management, S. Chand and Company Ltd.

Wealth Management

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A14	Wealth Management	4	SC	50	50	3	2	5

Objectives:

1. Understand wealth management fundamentals, including its scope, components, roles of advisors, and India's regulatory/ethical frameworks, while exploring trends like ESG investing and digital transformation's impact.
2. Design client-specific financial plans by analyzing risk profiles, recommending tax-efficient strategies, and constructing portfolios (traditional/alternative assets) for HNWIs using asset allocation techniques.
3. Address financial risks via insurance evaluation, retirement planning, and technology (fintech/AI) integration to ensure long-term security and optimize wealth management practices.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Develop a comprehensive understanding of the concepts, scope, and importance of wealth management including its key components such as financial planning investment management, and risk management.	Understand
CO 2	Demonstrate the ability to create goal-based and comprehensive financial plans by collecting and analyzing client data, assessing risk profiles, and recommending appropriate asset allocation strategies.	Analyse
CO 3	Construct and evaluate investment portfolios using strategic asset allocation techniques, considering both traditional and alternative investment products.	Create
CO 4	Identify and mitigate financial risks through effective insurance planning, including life, health, and general insurance products.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3	2	1	1	2	1	1
CO2	2	3	2	2		1	1
CO3	2	3	1	3	1		1
CO4	2	2				1	1

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Financial Planning

Overview of wealth management: concepts, scope, and importance, Key components of wealth management: financial planning, investment management, and risk management- Role of wealth managers and financial advisors, Licensing requirements of financial advisors in India-Regulatory framework and ethical considerations in wealth management. Emerging Trends in Wealth Management - Sustainable and ESG (Environmental, Social, Governance) investing, Impact of geopolitical events on wealth management, Changing demographics and their impact on wealth management, Future of wealth management in a digital world.

Module II: Financial Planning Process

Financial Plan, Goal-based Financial Plan, Comprehensive Financial Plan, Financial Blood-Test Report (FBR), Financial Planning in India. Financial Planning Process: Client Data Collection, Client Data Analysis, Client Life Cycle, Wealth Cycle, Risk Profiling and Asset Allocation. Tax Planning-Basics of taxation (income tax, capital gains tax, inheritance tax, etc.), Tax-efficient investment strategies, Tax planning for individuals and businesses, International tax considerations. Estate Planning: Background, Assets & Liabilities, Nomination, Inheritance Law, Will, Trust.

Module III: Investment Strategies and Portfolio Management

Investment products and services-Portfolio building and strategic asset allocation-fixed and flexible asset allocation-Asset allocation in speculation vs diversification perspective-Portfolio evaluation and annual rebalancing of portfolios. Application of gold as an investment hedge. Wealth Management for High-Net-Worth Individuals (HNWIs), Unique needs of HNWIs, Private banking and family office services, Customized investment solutions, Philanthropy and legacy planning for HNWIs. Alternative Investments - Hedge funds, private equity, and venture capital, Real estate and REITs, Commodities and precious metals, Cryptocurrencies and digital assets, Risks and rewards of alternative investments.

Module IV: Risk Management, Insurance Planning, Retirement Planning

Life, health and general insurance-Identifying and mitigating financial risks- Types of insurance: life, health, property, and liability, Role of insurance in wealth protection and estate planning, Evaluating insurance products and strategies. Retirement needs assessment, Pension

plans and retirement accounts (401(k), IRA, etc.), Social security and government benefits, Strategies for building a retirement corpus, Withdrawal strategies during retirement.

Module V: Technology in Wealth Management

Role of fintech in wealth management, Robo-advisors and automated investment platforms, Big data and AI in portfolio management, Cybersecurity and data privacy concerns

Note: Case Studies and Practical Applications: Real-world case studies in wealth management, Simulations and role-playing exercises, Developing customized wealth management plans

References

1. Bharathi V. Pathak, Wealth Management in India: A Practitioner's Perspective, Pearson India
2. G. Victor Hallman, Jerry S. Rosenbloom Private Wealth Management: The Complete Reference for the Personal Financial Planner
3. Harold Evensky, Stephen Horan, Thomas Robinson, The Wealth Management Handbook: A New Perspective, Wiley
4. Michael M. Pompian, Investment Strategies for High-Net-Worth Individuals, Wiley Finance.
5. John L. Maginn, Donald L. Tuttle, Dennis W. McLeavey (Editors), The CFA Institute Investment Series: Managing Investment Portfolios, Wiley.

Additional Resources:

1. SEBI (Securities and Exchange Board of India) Guidelines: Regulatory framework documents for ethical wealth management practices.
2. CFA Institute Materials: Research papers on ESG investing and fintech integration.
3. RBI Publications: Reports on India's financial markets and risk mitigation strategies.

Corporate Restructuring

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	**25-494-0A15**	**Corporate Restructuring**	**4**	**SC**	**50**	**50**	**3**	**2**	**5**

Objectives:

1. Introduce fundamental concepts, drivers, and types of corporate restructuring.
2. Analyze methods for mergers, acquisitions, and divestitures, including valuation techniques.
3. To evaluate financial restructuring strategies such as debt/equity restructuring and leveraged buyouts.
4. To assess legal frameworks governing restructuring in India.
5. To apply theoretical knowledge to real-world case studies from Indian industries.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Recall key concepts, types, and regulatory frameworks of restructuring.	Remember
CO 2	Use financial tools for restructuring decisions.	Apply
CO 3	Diagnose challenges in cross-border M&A and insolvency resolution.	Analyse
CO 4	Evaluate case studies to assess success/failure of restructuring strategies.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2		3	2	2			
CO3	2	2			3		1
CO4	2	2		2			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module 1: Introduction to Corporate Restructuring

Concepts, drivers (economic, competitive, regulatory). Types: Expansion (M&A), Contraction (divestitures), Financial, Legal. Valuation methods: Asset-based, DCF, market comparables.

Module 2: Mergers, Acquisitions, and Divestitures

Types of M&A (horizontal, vertical, conglomerate). Process: Due diligence, negotiation, integration. Divestitures: Spin-offs, sell-offs, equity carve-outs.

Module 3: Financial Restructuring

Debt restructuring: Rescheduling, debt-equity swaps. Equity restructuring: Buybacks, rights issues. Leveraged buyouts (LBOs), management buyouts (MBOs).

Module 4: Legal and Regulatory Framework in India

SEBI regulations, NCLT role, Takeover Code. Insolvency and Bankruptcy Code (IBC 2016): Resolution process, NCLT case studies.

Module 5: Case Studies and Contemporary Issues

Indian case studies: Tata-Corus, Kingf Airlines, Jet Airways, Bhushan Steel. Cross-border M&A challenges, ESG considerations.

Reference

1. Rajesh Chakrabarti. "Corporate Restructuring in India", McGraw Hill Education India
2. Sanjay Singh. "Mergers and Acquisitions: Text and Cases", PHI Learning (Prentice-Hall of India)
3. R.P. Gupta. "Financial Restructuring and Turnaround Management", Himalaya Publishing House.
4. S.K. Datta "Insolvency and Bankruptcy Code: Law and Practice", LexisNexis India
5. S. Ranganatham & S. Rao. "Corporate Restructuring: Valuation and Strategies", Taxmann Publications

Additional Resources:

1. Insolvency and Bankruptcy Code, 2016 (Official Gazette).
2. SEBI Takeover Regulations, NCLT rulings.
3. Journals: *Vikalpa, IIMB Management Review*.

Credit Analysis

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A16	Credit Analysis	4	SC	50	50	3	2	5

Objectives:

1. Provide a comprehensive understanding of credit analysis principles, lending processes, and regulatory frameworks to assess creditworthiness and manage risks effectively.
2. Equip learners with tools to perform financial and non-financial analyses for informed credit decisions.
3. Develop proficiency in evaluating asset quality, loan provisioning, and strategies to mitigate Non-Performing Loans (NPLs) through securitization and restructuring.
4. Enable critical evaluation of diverse lending products (consumer loans, revolving credit, Letters of Credit) and their associated risks.
5. Foster awareness of credit regulations, documentation standards, and ethical practices to ensure adherence to legal and institutional guidelines.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Understand the significance of credit analysis, the seven C's, lending processes, and regulatory requirements in credit decision-making.	Understand
CO2	Apply ratio analysis, cash flow evaluation, and DuPont models to assess liquidity, profitability, leverage, and operational efficiency of borrowers.	Apply
CO3	Evaluate macroeconomic trends, industry dynamics, and business models to complement financial data in credit risk assessment.	Evaluate
CO4	Classify assets, calculate loan loss provisions, and determine borrowing causes linked to operating/capital cycles and repayment sources.	Evaluate
CO5	Critically evaluate NPLs and contributing sources, and the risks and structures of consumer installment loans and other types of credit.	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2		3		2			
CO3	2				2		
CO4		2		2			
CO5	2						

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Overview of Credit Analysis and Lending Process

Credit analysis: meaning, significance and objectives, credit risks, seven C's, credit analysis process. Lending process: credit process, documentation, loan pricing and profitability analysis, credit regulations.

Module II: Financial and Non-financial Aspects of Credit Analysis

Financial analysis: Ratio analysis, liquidity, profitability, efficiency, leverage and market performance measures, DuPont analysis and Value Added measures. Analysis of cash flows and critical challenges. Non-financial analysis: economy analysis, industry analysis and business analysis.

Module III: Asset classification, Loan Provisioning and Borrowing Causes

Asset quality: significance in lending, quantitative and qualitative review of asset quality, asset classification. Loan loss provisioning: relevance and and startegic implications. Borrowing causes and its judgment, operating and capital investment cycles and sources of repayment.

Module IV: Non-Performing Loans (NPLs) and Asset Management Companies (AMCs)

Non-Performing Loans (NPLs): definition and legal implications to borrowing and lending firms, Asset Management Companies (AMCs), role and functions, Securitisation of NPLs, modes of securitisation, risks in securitisation, debt restructuring and measures to prevent and control NPLs, current trends in NPLs of Indian banks.

Module V: Lending Activities and Incidental Risks

Consumer installment lending, types and characteristics, dealer agreement, recourse and dealer reserve, risks faced in installment-based lending. Floor plan lending, characteristics, benefits and risks. Accounts receivable and inventory lending, Participation loan, need, importance and risks involved. Revolving credit, Letter of Credit, types, risks to the lender, Loan commitments and un-funded lines of credit.

References

1. Arnold Ziegel. Fundamentals of Credit and Credit Analysis: Corporate Credit Analysis, Amazon Digital Services.
2. C Joseph. Advanced Credit Risk Analysis and Management, John Wiley & Sons Inc.
3. Jonathan Golin And Philippe Delhaise. The Bank Credit Analysis Handbook: A Guide for Analysts, Bankers and Investors, Wiley Finance.
4. DD Mukherjee. Credit Appraisal, Risk Analysis & Decision Making - An Integrated Approach to on and off-Balance Sheet Lending, Snow White Publications

Financial Modelling

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A17	Financial Modelling	4	SC	50	50	3	2	5

Course Objectives:

1. Develop students' proficiency in using spreadsheets to create abstract models that simulate real-world financial decision-making scenarios.
2. Enable students to construct financial decision-making models for areas such as inventory management, receivables, cash flow, working capital estimation, financing decisions, investment analysis, and dividend policies.
3. Provide hands-on practice in applying optimization techniques for portfolio optimization and Value at Risk (VaR) estimation in the context of investment analysis.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Understand the uses and applications of MS Excel's built-in general and financial functions to create effective financial models.	Understand
CO2	Understand the financial modeling process, key features of financial models, and the critical factors to consider when constructing efficient and robust financial models.	Understand
CO3	Enhance practical application skills through case studies **to** develop financial models tailored to various decision-making scenarios**.**	Apply
CO4	Develop the ability to recommend improvements, reconstruct models, and create error-free financial models by acquiring advanced competencies in financial modeling.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7
CO1			3				2
CO2			2				2
CO3			3	2			3
CO4			3	3			3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Spread Sheets and Financial Modelling

Introduction to MS Excel, Understanding Advanced Features of Excel, VLOOKUP, HLOOKUP, Match Function, Index Function, Index plus Match Function, What if Analysis, Goal seek Analysis-Modelling Database Functions in Excel-Introduction to Financial Modelling, approach to Financial Modelling, Guidelines for Creating Effective Financial Model. Modelling EMI, DEI, WEI, FEI-Creation of Amortisation Schedule- Application of advanced excel features to retrieve information from Amortisation Schedule/data bases.

Module II: Creating Financial Models in MS Excel

Project evaluation through excel modelling-Discount Rate-cost of debt-cost of Equity-modelling CFATs-XNPV-XIRR. Risk Analysis in Project Appraisal. Cash book modelling-inventory modelling-working capital estimation modelling.

Module III: Forecasting Financial Statements in MS Excel

Scenario Analysis and Sensitivity Analysis-Common uses of Scenarios-Sources of Scenarios-Data Tables. Case studies on Scenario and Sensitivity Analysis of companies. Forecasting Financial Statements using Excel-Case studies.

Module IV: Modelling Asset Pricing in MS Excel

Expected Return and Asset Pricing Modelling-Single factor model (CAPM), three factor model (FFM), four factor model (Carhart), five factor model (FFM). Modelling portfolio return and risk-Jenson Alpha-portfolio optimization-MPT Case studies.

Module V: Risk analysis related to valuation

PDURATION-NPER-IMPT-Modelling valuation of Bonds and Shares-sensitivity and risk analysis related to valuation. Value at Risk (VaR)

References

1. Michael Rees, Principles of Financial Modelling: Model Design and Best Practices Using Excel and VBA, Wiley
2. Joachim Häcker & Dietmar Ernst, Financial Modelling: An Introductory Guide to Excel and VBA Applications in Finance, Palgrave
3. Danielle Stein Fairhurst, Using Excel for Business and Financial Modelling: A Practical Guide, Wiley
4. Jules Nkansah Love to Excel: A Financial Modelling Master class for the Analyst in You, Partridge
5. Danielle Stein Fairhurst, Financial Modelling in Excel for Dummies, Wiley

Financial Analytics

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	**25-494-0A18**	**Financial Analytics**	**4**	**SC**	**50**	**50**	**3**	**2**	**5**

Course Objectives:

1. Develop a rigorous understanding of statistics and its applications to analyze financial data and support data-driven decision-making in banking and finance.
2. Apply basic econometric techniques to analyze, estimate and forecast time series data emphasizing their economic and statistical significance.
3. Assess the significance of different interest rate models, yield curve frameworks and asset pricing models in the field of banking and finance.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Develop understanding of the basic time series analysis.	understanding
CO2	Apply the concepts of time-series analysis in modelling and forecasting.	Apply
CO3	Apply the concepts of interest rate modelling in financial decision-making process.	Apply
CO4	Assess the significance of yield curve frameworks and asset pricing models in the field of banking and finance	Evaluate

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2		2	3			2
CO2		1	2	3		1	2
CO3	2			3		1	
CO4	3	1		3	1		2

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Prerequisites: Basic knowledge of statistics

Syllabus:

Module I: Introduction to Financial Analytics

Meaning, uses in decision making, tools and skills required for doing analytics in finance, Discussion on the basics of probability, random variables, density and distribution function, different discrete & continuous distributions, and descriptive statistics.

Module II: Financial Time Series Analysis

Time series data, stationarity, auto-covariance, ACF, PACF, white noise, joint test of autocorrelation, Identify the orders of AR, MA, ARMA models, fit the model, generate forecasts and evaluate the forecasts based on statistical and economic significance. Volatility Basics: Introduction to ARCH/GARCH models for financial data. Model Evaluation: Statistical metrics (RMSE, MAE) and economic significance (profit/loss analysis).

Module III Interest Rate Models in Banking and Finance

Concept of Interest and Yield. Spread, Yield Curve framework. Construction: Bootstrapping, cubic spline methods. Short-Rate Models: Vasicek and Cox-Ingersoll-Ross (CIR) models (calibration only). Model Comparison: strengths, limitations, and real-world applications (e.g., bond pricing). Tools for interest rate modelling: Excel Solver, R (Yield Curve package). Case Study: Calibrating Vasicek/CIR models to historical interest rate data.

Module IV: Yield Curve Frameworks & Asset Pricing

Nelson-Siegel and Svensson Models: Theory, parameter interpretation, and implementation. Asset Pricing Basics: CAPM, Fama-French factor models, Carhart four factor model and their use in portfolio management. Derivatives Pricing Primer: Forwards, futures, and vanilla options (Binomial and Black-Scholes theory).

Module V: Risk Analytics & Financial Decision-Making

Value-at-Risk (VaR): Historical simulation, parametric methods. Stress Testing: Scenario analysis for portfolios and interest rate shocks. Model Risk: Limitations of quantitative models in banking and finance.

References

1. Chris Brooks, Introductory Economics for Finance, Cambridge University Press.
2. Ruey S. Tsay, Analysis of Financial Time Series (Third Edition), Wiley Publication.
3. Christopher Dougherty, Introduction to Econometrics, Oxford University Press, Indian Edition.
4. D. N. Gujarati and D.C. Porter, Essentials of Econometrics, McGraw Hill, International Edition.
5. Jan Kmenta, Elements of Econometrics, Indian Reprint, Khosla Publishing House

Data Visualization Tools

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	T+P
-	25-494-0A19	Data Visualization Tools	4	SC	50	50	3	2	5

Course Objectives:

1. To introduce students to the principles and techniques of data visualization.
2. To equip students with the skills to use Power BI and Excel for visualizing financial data.
3. To enable students to create interactive dashboards and reports for effective decision-making.
4. To teach students how to communicate insights from financial data through visual storytelling.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the principles of data visualization and its importance in banking and finance.	**Understand**
CO 2	Analyze financial datasets and create visualizations using Power BI and Excel.	**Analyze**
CO 3	Design interactive dashboards and reports for financial data analysis.	**Create**
CO 4	Communicate insights effectively through visual storytelling.	**Apply**

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2		2		1		
CO2		2	3	2			
CO3			3	2			
CO4	1		2				

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Data Visualization

Importance of data visualization in banking and finance. Principles of effective data visualization. Types of visualizations: Bar charts, line charts, scatter plots, heatmaps, etc. Introduction to Power BI and Excel.

Module II: Data Visualization with Excel

Basic chart types in Excel: Bar, line, pie, and scatter plots. Advanced visualizations: Pivot charts, sparklines, and conditional formatting. Creating dashboards in Excel. Case study: Visualizing financial data (e.g., sales trends, budget analysis).

Module III: Power BI Essentials & Data Handling

Introduction to Power BI & BI Concepts: Overview of Business Intelligence (BI). Power BI ecosystem: Desktop, Service, and Mobile. Power BI licensing (Free vs Pro vs Premium). Installation and interface overview. Data Extraction, Transformation & Modeling: Connecting to data sources (Excel, CSV, SQL, Web, APIs). Data transformation using Power Query Editor. Data modeling: Relationships, cardinality, and cross-filter directions.

Module IV: Power BI Reporting & DAX

Introduction to DAX (Data Analysis Expressions): DAX syntax and functions (SUM, AVERAGE, MIN, MAX, COUNT). Calculated columns vs. measures. Advanced DAX functions (CALCULATE, ALL, DISTINCT). Basic Reporting in Power BI: Types of visualizations: Bar, Column, Line, Pie, Matrix, Table, Card, KPIs. Using slicers and filters. Conditional formatting and drill-down.

Module V: Advanced Power BI & Case Studies

Advanced Data Visualization Techniques: Custom visuals from Power BI Marketplace. Drill-through, hierarchies, and tooltips. Data Insights & Advanced Analytics: Time intelligence with DAX (YTD, QTD, MTD). AI capabilities: Key Influencers, Decomposition Tree, Quick Insights. Power BI Service & Collaboration: Publishing reports to Power BI Service. Collaboration tools: Workspaces, apps, and Row-Level Security (RLS).Data refresh and scheduling. Case Studies and Applications: Visualizing stock market data and loan portfolio performance. Creating dashboards for customer segmentation and financial performance. Reporting financial performance to stakeholders.

References:

1. Cole Nussbaumer Knaflic, Storytelling with Data, Wiley Publishers
2. Brett Powell, Microsoft Power BI Cookbook, Packt Publishing.
3. Michael Alexander, Excel Data Analysis and Visualization, Wiley Publishers
4. Mico Yuk and Stephanie Diamond, Data Visualization for Dummies, John Wiley & Sons.
5. Power BI Documentation by Microsoft

Python for Banking and Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
	25-494-0A20	Python for Banking and Finance	4	SC	50	50	3	2	5

Course Objectives:

1. To introduce students to Python programming and its applications in banking and finance.
2. To equip students with the skills to analyse and manipulate financial data using Python.
3. To enable students to build financial models and perform predictive analytics using Python.
4. To teach students how to visualize and communicate insights from financial data effectively.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Understand the syntax and structure of Python programming.	Understand
CO2	Analyze and manipulate financial datasets using Python libraries like pandas and numpy.	Analyze
CO3	Build financial models and perform predictive analytics using Python.	Create
CO4	Visualize financial data and communicate insights effectively using Python tools.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1			2				1
CO2		2	3	2			
CO3			2	3			
CO4			3	2			1

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Python Basics for Banking and Finance

Introduction to Python and its relevance in banking and finance. Setting up the Python environment (Anaconda, Jupyter Notebook). Basic data types, variables, and operations.

Conditionals and Boolean expressions. Iteration and looping. Sequences: Strings, tuples, and lists. Functions: Arguments, return values, scope, and recursion.

Module II: Data Structures and File Handling

Dictionaries and sets. File handling: Reading and writing text and CSV files. Text processing and regular expressions. Applications: Cleaning and pre-processing financial data.

Module III: Python Libraries for Financial Analysis

Introduction to pandas and numpy. Data manipulation and analysis. Time series analysis for financial data. Statistical analysis using scipy and statsmodels.

Module IV: Financial Modeling and Machine Learning

Introduction to financial modeling. Building models for loan amortization and portfolio optimization. Machine learning basics with scikit-learn. Applications: Credit scoring, stock price prediction, and customer segmentation.

Module V: Data Visualization and Reporting using Python

Data visualization using matplotlib and seaborn. Interactive visualizations with plotly and bokeh. Building dashboards with Dash. Case studies: Visualizing stock market trends and loan portfolio performance.

References:

1. Wes McKinney, Python for Data Analysis, O'Reilly Media
2. Yves Hilpisch, Python for Finance, O'Reilly Media
3. Aurélien Géron, Hands-On Machine Learning with Scikit-Learn, Keras, and TensorFlow, O'Reilly Media
4. Jake VanderPlas, Python Data Science Handbook, O'Reilly Media
5. Shayne Fletcher and Christopher Gardner, Financial Modelling in Python, John Wiley & Sons

Artificial Intelligence (AI) for Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
	25-494-0A21	Artificial Intelligence (AI) for Finance	4	SC	50	50	3	2	5

Course Objectives:

1. Understand the fundamentals of Artificial Intelligence (AI) and its applications in finance, including machine learning, deep learning, and natural language processing, to solve real-world financial problems.
2. Apply AI-based tools and techniques for financial decision-making, risk management, fraud detection, and customer service automation in the banking and finance sector.
3. Analyze emerging trends and ethical considerations in AI for finance, such as explainable AI (XAI), blockchain integration, and regulatory technology (RegTech), to prepare for future advancements in the industry.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Understand the fundamentals of AI and its applications in finance.	Understand
CO2	Apply machine learning and deep learning techniques to solve financial problems.	Apply
CO3	Use NLP and automation tools to streamline financial processes.	Apply
CO4	Evaluate and implement AI-based financial tools for decision-making and risk management.	Evaluate
CO5	Analyze emerging trends and ethical considerations in AI for finance.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1		2	2				2
CO2		3	3				
CO3		2	3				2
CO4		3	2				
CO5	1	2		2	2		3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to AI and Its Applications in Finance

Overview of Artificial Intelligence (AI)- Definition, history, and evolution of AI, Key concepts: Machine Learning (ML), Deep Learning (DL), Natural Language Processing (NLP), Types of

AI: Narrow AI, General AI, and Superintelligent AI, Role of AI in Finance, Applications of AI in banking, investment, insurance, and fintech, Benefits of AI in finance: automation, predictive analytics, fraud detection, and customer service, Challenges and ethical considerations in AI adoption. AI Tools and Platforms-Overview of popular AI tools and platforms (e.g., TensorFlow, PyTorch, IBM Watson), Introduction to cloud-based AI solutions (e.g., AWS, Google Cloud, Azure)

Module II: Machine Learning for Financial Decision-Making

Fundamentals of Machine Learning (ML) - Supervised, unsupervised, and reinforcement learning Key algorithms: regression, classification, clustering, and decision trees. Applications of ML in Finance - Credit scoring and risk assessment, Portfolio optimization and asset management, Algorithmic trading and market prediction. Case Studies - Real-world examples of ML in finance (e.g., robo-advisors, fraud detection systems)

Module III: Deep Learning and Predictive Analytics in Finance

Introduction to Deep Learning (DL) -Neural networks and their architecture, Convolutional Neural Networks (CNNs) and Recurrent Neural Networks (RNNs). Applications of DL in Finance - Sentiment analysis for stock market prediction, Fraud detection using anomaly detection techniques, Customer behavior analysis and personalized financial services. Hands-on Practice - Building and training deep learning models for financial datasets

Module IV: Natural Language Processing (NLP) and Automation in Finance

Fundamentals of NLP - Text preprocessing, tokenization, and sentiment analysis. Applications of NLP in finance: chatbots, document analysis, and customer support. Automation in Finance - Robotic Process Automation (RPA) for repetitive tasks, AI-driven automation in loan processing, claims management, and compliance. Case Studies - Examples of NLP and automation in banking and finance.

Module V: AI-Based Financial Tools and Future Trends

AI Tools for Financial Analysis - Overview of AI-based tools for financial modeling, forecasting, and risk management -Tools for portfolio management and trading (e.g., QuantConnect, Alpaca). Emerging Trends in AI for Finance - Blockchain and AI integration, Explainable AI (XAI) for transparent decision-making, AI in regulatory technology (RegTech) and compliance.

Reference:

1. AI and Machine Learning for Financial Professionals" by Al Naqvi, Publisher: Wiley.
2. Yves Hilpisch. “Artificial Intelligence in Finance: A Python-Based Guide" Publisher: O'Reilly Media.
3. Jannes Klaas. “Machine Learning for Finance: Principles and Practice for Financial Insiders" Publisher: Packt Publishing
4. Sofien Kaabar. Deep Learning for Finance: Creating Machine and Deep Learning Models for Trading in Python" Publisher: Independently Published
5. Steven Bird, Ewan Klein, and Edward Loper. Natural Language Processing with Python: Analyzing Text with the Natural Language Toolkit" Publisher: O'Reilly Media
6. Yves Hilpisch. Python for Finance: Mastering Data-Driven Finance". Publisher O'Reilly Media.

Actuarial Science

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
	25-494-0A22	Actuarial Science	4	SC	50	50	3	2	5

Course Objectives:

1. Understand the fundamental actuarial concepts of mortality, longevity, morbidity and associated terms connected to actuarial valuation.
2. Practice the application of life contingencies and survival models to insurance products.
3. Perform reserve valuation for pensions and annuities.
4. Practice the use of actuarial software for liability modelling.
5. Analyze regulatory capital requirements and solvency margins.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Recall fundamental actuarial concepts, including mortality, longevity, morbidity, and key actuarial notation ($_{ax}$, $^{A}_{x}$).	Remembering
CO 2	Apply life contingencies and survival models to price and evaluate life insurance and annuity products.	Apply
CO 3	Analyse reserve valuations for pensions and annuities using prospective/retrospective methods and Thiele's differential equations.	Analyse
CO 4	Evaluate solvency margins and regulatory capital requirements (Solvency II, IFRS 17) to assess insurer financial stability.	Analyse
CO 5	Design actuarial liability models using software (Excel, R, or Prophet) to simulate cash flows and risk scenarios.	Create

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	3	3		2			
CO3		3		3			
CO4	3			2	2		
CO5		3	3	3		2	

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Actuarial Science

Role of actuaries in banking, insurance, and pension funds. Key actuarial assumptions: Mortality, lapse, expense, and interest rates. Probability and survival models: Life tables, force of mortality (μ_x). Present value of cash flows and actuarial notation ($_{ax}$, $^{A}_{x}$).

Module II: Life Insurance Valuation

Pricing life insurance products (term, whole life, endowment). Net premiums vs. gross premiums. Policy reserves: Prospective vs. retrospective methods. Thiele's differential equation for reserve calculations.

Module III: Pension Fund & Annuity Valuation

Defined Benefit (DB) vs. Defined Contribution (DC) plans. Projected Unit Credit (PUC) method for pension liabilities. Annuity valuation: Immediate, deferred, and variable annuities. Impact of longevity risk on pension funding.

Module IV: Risk Management & Solvency

Solvency II framework: SCR (Solvency Capital Requirement), MCR (Minimum Capital Requirement). IFRS 17: Insurance contract valuation (CSM, LIC, RA). Stress testing and scenario analysis for actuarial liabilities. Reinsurance and its role in risk mitigation.

Module V: Advanced Topics & Case Studies

Embedded options in insurance contracts (guarantees, surrender options). Machine learning in actuarial modelling (predictive mortality models). Case Studies: Valuation of a life insurance portfolio under Solvency II. Pension fund deficit analysis. Dynamic policyholder behaviour modelling.

References:

1. Wüthrich, M. V., & Merz, M. (2022). Statistical foundations of actuarial learning and its applications. Springer.
2. Chan, W., & Tse, Y. (2021). *Financial mathematics for actuaries* (3rd ed.). World Scientific.
3. Dickson, D.C.M. – Actuarial Mathematics for Life Contingent Risks (Core).
4. Booth, P. – Modern Actuarial Theory and Practice (Regulatory focus).
5. Olivieri, A. – Introduction to Insurance Mathematics (Pricing/Reserving).
6. Kaas, R., Goovaerts, M., Dhaene, J., & Denuit, M. (2008). Modern actuarial risk theory: Using R (2nd ed.). Springer.
7. Pitacco, E., Denuit, M., Haberman, S., & Olivieri, A. (2009). Modelling longevity dynamics for pensions and annuity business. Oxford University Press.

Software/Tools

- Primary: Excel (VBA), R (actuar package), Prophet (for insurance modeling).
- Regulatory Guides: EIOPA Solvency II guidelines, IFRS 17 handbook.

SYLLABI

ELECTIVE COURSES – WITHOUT PRACTICAL

Sl.No	Course Code	Elective Course
1	25-494-0A31	Rural Banking and Micro Finance
2	25-494-0A32	Fintech Applications in Banking and Finance
3	25-494-0A33	Behavioural Finance
4	25-494-0A34	Financial Audit

- **CODE for the particular Elective Course without Practical: 25-494-0AXX**
- **Where 'A' stands for semester number in which it is offered.**
- **'XX' stands for unique two-digit number for a particular elective course.**

Rural Banking and Microfinance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
	25-494-0A31	Rural Banking and Microfinance	3	SC	50	50	3	0	3

Course Objectives:

1. To provide fundamental knowledge about rural banking and microfinance and their role in economic development.
2. To familiarize students with financial institutions and policies supporting rural banking and microfinance initiatives.
3. To introduce key financial products and services tailored for rural development and financial inclusion.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO1	Describe the basic concepts, structure, and role of rural banking and microfinance.	Understand
CO2	Understand the role of rural financial institutions and the regulatory framework governing rural banking.	Understand
CO3	Understand the various financial products and services offered in rural banking	Understand
CO4	Analyse the impact and effectiveness of different microfinance models in financial inclusion.	Analyse
CO5	Identify innovative solutions using emerging trends and technology for improving rural banking.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	3						
CO3	3						
CO4	2	2			2		
CO5			2	2			3

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Foundations of Rural Banking and Microfinance

Role of rural banking and microfinance in economic development- Importance of financial inclusion for rural development- Characteristics and challenges of rural banking- Evolution

and growth of microfinance institutions (MFI)- Key differences between traditional banking and rural banking.

Module II: Rural Financial Institutions and Regulatory Framework

Role of commercial banks, regional rural banks (RRBs), and cooperative banks- NABARD (National Bank for Agriculture and Rural Development) and its functions- Self-Help Groups (SHGs) and Joint Liability Groups (JLGs)- Government initiatives and policies for rural banking- Regulatory framework governing rural banking and microfinance in India.

Module III: Financial Products and Services in Rural Banking

Agricultural and rural credit schemes- Microcredit and its role in financial empowerment- Rural savings and deposit schemes- Insurance and pension schemes for rural populations- Digital banking and financial technology in rural finance.

Module IV: Microfinance Models

Different models of microfinance (Grameen model, SHG-Bank linkage model, etc.)- Role of microfinance in poverty alleviation and women empowerment- Success stories and case studies in microfinance- Challenges faced by microfinance institutions- Risk management in microfinance lending.

Module V: Innovations and Emerging Trends in Rural Banking

Role of technology in rural banking (mobile banking, digital lending, etc.)- Impact of fintech on financial inclusion- Sustainability and ethical issues in microfinance- Policy recommendations for strengthening rural banking- Future prospects of rural banking and microfinance in India.

References:

1. Ledgerwood, J. (2013). The New Microfinance Handbook: A Financial Market System Perspective. World Bank Publications.
2. Yunus, M. (2007). Creating a World Without Poverty: Social Business and the Future of Capitalism. PublicAffairs.
3. NABARD. (2021). Annual Report on Rural Banking and Financial Inclusion. NABARD Publications.
4. Harper, M. (2002). Microfinance: Evolution, Achievement, and Challenges. ITDG Publishing.
5. Armendáriz, B., & Morduch, J. (2010). The Economics of Microfinance (2nd ed.). MIT Press.
6. IIBF. (2017). Rural Banking: Policies and Practices. Macmillan India.
7. Mohan, R. (2006). Economic Growth, Financial Deepening and Financial Inclusion. RBI Bulletin.

Fintech Applications in Banking and Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A32	Fintech Applications in Banking and Finance	3	SC	50	50	3	0	3

Course Objectives:

1. Understand the foundational concepts, evolution, and ecosystem of Fintech, including the roles of technology, regulation, customer demand, and key global/Indian players.
2. Familiarise and understand the technologies driving Fintech innovations such as blockchain, AI, APIs, and digital payment systems, and their applications in lending, wealth management, and cryptocurrencies.
3. Evaluate the regulatory frameworks, risks, and emerging trends in Fintech, including RegTech, open banking, CBDCs, and the ethical implications of AI-driven financial services.
4. Apply theoretical knowledge to real-world scenarios through case studies of digital payment platforms, P2P lending, robo-advisors, and blockchain use cases in finance.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the fundamentals of fintech and its impact on the banking and finance industry.	Understand
CO 2	Understand application of fintech innovations in digital payments, lending, blockchain, and wealth management.	Understand
CO 3	Evaluate the role of RegTech and emerging trends in shaping the future of financial services.	Evaluate
CO 4	Experience the fintech-based solution to address real-world challenges in banking and finance.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	3						
CO2	2	3					
CO3		2					3
CO4		3	2	2			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Fintech

Overview of Fintech-Definition, evolution, and scope of fintech, Key drivers of fintech innovation: technology, regulation, and customer demand. Fintech Ecosystem- Key players: startups, banks, regulators, and investors, Global and Indian fintech landscape. Technologies Driving Fintech - Blockchain, AI, machine learning, big data, and cloud computing, Role of APIs and open banking.

Module II: Digital Payments and Lending

Digital Payment Systems-Types of digital payments: mobile wallets, UPI, NFC, and cryptocurrencies, Payment gateways and processors. Peer-to-Peer (P2P) Lending and Crowdfunding- Models of P2P lending and crowdfunding platforms, Risks and regulatory frameworks. Case Studies-Examples of successful digital payment and lending platforms (e.g., PayPal, Paytm, LendingClub)

Module III: Blockchain and Cryptocurrencies in Finance

Fundamentals of Blockchain Technology- How blockchain works: decentralization, consensus mechanisms, and smart contracts, Applications of blockchain in finance. Cryptocurrencies and Digital Assets-Overview of Bitcoin, Ethereum, and other cryptocurrencies, Regulatory and security challenges. Use Cases in Banking and Finance- Cross-border payments, trade finance, and identity verification

Module IV: Robo-Advisors and Wealth Management

Introduction to Robo-Advisors-How robo-advisors work: algorithms, portfolio management, and customer interaction, Benefits and limitations of robo-advisory services. Wealth Management Platforms- AI-driven investment tools and personalized financial planning, Integration of ESG (Environmental, Social, Governance) investing. Case Studies-Examples of robo-advisory platforms (e.g., Betterment, Wealthfront).

Module V: Regulatory Technology (RegTech) and Future Trends

Introduction to RegTech- Role of RegTech in compliance, risk management, and fraud detection Key technologies: AI, big data, and blockchain. Emerging Trends in Fintech-Open banking and API-driven financial services, Insurtech and embedded finance, Central Bank Digital Currencies (CBDCs), Digital Rupee.

Reference:

1. Pranay Gupta and T. Mandy Tham. "Fintech: The New DNA of Financial Services", Publisher: De Gruyter

2. Susanne Chishti and Janos Barberis. "The Fintech Book: The Financial Technology Handbook for Investors, Entrepreneurs, and Visionaries" Publisher: Wiley
3. Daniel Drescher. "Blockchain Basics: A Non-Technical Introduction in 25 Steps. Publisher: Apress
4. Chris Skinner. “Digital Banking: The Revolution in Financial Services" Publisher: Marshall Cavendish International
5. Peter Scholz and Michael Trübestein. "Robo-Advisory: Investing in the Digital Age". Publisher: Springer
6. Douglas W. Arner, Janos Barberis, and Ross P. Buckley. "RegTech: Financial Technology for Regulatory Compliance and Risk Management" Publisher: Routledge

Behavioural Finance

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A33	Behavioural Finance	3	SC	50	50	3	0	3

Course Objectives:

1. To provide a comprehensive understanding of behavioural finance by exploring the psychological factors influencing investment decisions and market behaviour.
2. To analyse behavioural factors affecting market efficiency, portfolio management, and corporate finance decisions while evaluating external influences such as emotions and social dynamics.
3. To introduces behavioural game theory, strategic decision-making, and real-world applications of behavioural finance concepts in investment strategies.

Course Outcome:

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Understand the key behavioural finance concepts, including cognitive biases and psychological factors influencing investment decisions.	Understand
CO 2	Analyse the impact of heuristics, biases, and bounded rationality on financial markets and investor decision-making.	Analyse
CO 3	Evaluate the role of emotions and social influences on investment behaviour and financial market dynamics.	Evaluate
CO 4	Apply behavioural game theory and strategic decision-making principles to real-world financial scenarios.	Apply

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	1	2					1
CO2		3	2				
CO3		3					2
CO4		3		2			

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Behavioural Finance and Investment Decision Making

Nature, scope, objectives, and significance of behavioural finance – Investment decision cycle – Judgment under uncertainty – Cognitive biases in numerical perception – Representativeness and anchoring – Exponential and hyperbolic discounting – Asymmetric perception of gains and losses – Experimental measurement of discount factors – Psychological influences on financial markets – The rise of the rational market's hypothesis and its challenges.

Module II: Utility, Rationality, and Decision-Making under Risk

Expected Utility Theory (EUT) and rational thought – Decision-making under risk and uncertainty – Theories based on expected utility – Investor rationality and market efficiency – Bounded rationality and Herbert Simon's perspective – Allais and Ellsberg paradoxes – Rationality from economic and evolutionary perspectives – Heuristics and biases in financial decision-making – Influence of cognitive psychology and limits to arbitrage.

Module III: Behavioural Factors and Financial Markets

Efficient Markets Hypothesis (EMH) – Information and its impact on market efficiency – Adaptive Market Hypothesis, Market predictability and arbitrage constraints – Asset management and behavioural biases – Active portfolio management and sources of underperformance – Psychological influence on financial markets – Fundamental vs. technical analysis – Noise trader risk and professional arbitrage – Systematic investor sentiment and speculative bubbles.

Module IV: External Influences, Emotions, and Investor Behaviour

Fear and greed in financial markets – Emotions and financial decision-making – Neurophysiology of risk-taking – Personality traits and risk attitudes – Influence of external factors such as geomagnetic storms on stock market returns – Emotional regulation and investor sentiment – Social influences on investing behaviour – Behavioural corporate finance and market timing – Capital structure and dividend policy decisions influenced by behavioural factors.

Module V: Behavioural Game Theory and Strategic Decision-Making

Nature of behavioural game theory – Mixed strategies and iterated games – Bargaining and signalling – Learning and adaptation in financial markets – Psychological biases in strategic decision-making – Case studies on market entry, monopoly, and impasses in bargaining – Self-serving biases in financial decision-making – Experimental studies on decision-making with real and play money – Practical applications of behavioural finance in investment strategies.

References:

1. Ackert, L. F., & Deaves, R. (2010). *Behavioural finance: Psychology, decision-making, and markets*. Cengage Learning.
2. Chandra, P. (2017). *Behavioural finance*. Tata McGraw-Hill Education.
3. Forbes, W. (2009). *Behavioural finance*. John Wiley & Sons.
4. Kahneman, D., & Tversky, A. (2000). *Choices, values, and frames*. Cambridge University Press.
5. Shefrin, H. (2002). *Beyond greed and fear: Understanding behavioural finance and the psychology of investing*. Oxford University Press.
6. Shleifer, A. (2000). *Inefficient markets: An introduction to behavioural finance*. Oxford University Press.
7. Thaler, R. H. (1993). *Advances in behavioural finance: Vol. I*. Russell Sage Foundation.
8. Thaler, R. H. (2005). *Advances in behavioural finance: Vol. II*. Princeton University Press.

Financial Audit

SEM	Course code	Course Title	Credit	GC/ SC	Mark		Hours		
					CE	SEE	L	P	L+P
-	25-494-0A34	Financial Audit	3	SC	50	50	3	0	3

Course Objectives:

1. To develop a comprehensive understanding of financial auditing principles, standards, and regulatory frameworks.
2. To equip students with practical skills to plan, execute, and document audit procedures.
3. To enable critical analysis of financial statements and internal controls for effective risk assessment.

Course Outcomes:

COs and Revised Bloom's Taxonomy Level

Course Outcomes (COs)		Revised Bloom's Taxonomy Level
After completion of the course, the student will be able to:		
CO 1	Explain the principles, objectives, and ethical guidelines governing financial audits.	Understand
CO 2	Internalise and perform audit procedures such as vouching, verification, and sampling to gather evidence.	Apply
CO 3	Assess risks, internal controls, and materiality to formulate audit strategies.	Analyse

CO – PSO Mapping Table:

CO/PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PS7
CO1	2	1			1		
CO2		3	2			2	
CO3	1	3	2				1

Note: Correlations Levels: 1 = Low, 2 = Medium, 3 = High, "-" = No correlation.

Syllabus:

Module I: Introduction to Financial Audit

Definition, objectives, and types of audits (statutory, internal, external). Roles of auditors: independence, professional ethics (ICAI Code of Ethics). Audit vs. investigation; fraud detection responsibilities. Case Study: Ethical dilemmas in auditing (e.g., conflict of interest). Activity: Debate on auditor liability in corporate fraud.

Module II: Audit Standards and Legal Framework

GAAS (Generally Accepted Auditing Standards) and ISA (International Standards on Auditing). Legal requirements: Companies Act 2013, RBI guidelines for banks. Regulatory bodies: ICAI, SEBI, PCAOB. Case Study: Comparative analysis of ISA 700 vs. Indian Auditing Standards. Activity: Group discussion on enforcement challenges in cross-border audits.

Module III: Audit Planning and Risk Assessment

Audit planning: objectives, scope, and timelines. Risk models (inherent, control, detection risk); materiality thresholds. Internal control evaluation: COSO framework. **Case Study**: Audit failure due to poor risk assessment (e.g., Satyam scandal). **Activity**: Develop an audit plan for a hypothetical banking institution.

Module IV: Audit Procedures and Evidence

Substantive procedures: vouching, verification, analytical review. Sampling methods (statistical vs. non-statistical). Audit documentation: working papers, checklists. Workshop: Prepare audit documentation for a sample transaction trail. Activity: Analyze discrepancies in bank reconciliation statements.

Module V: Audit Reports and Emerging Trends

Types of audit reports (unqualified, qualified, adverse, disclaimer). Key elements of an audit report: emphasis paragraphs, key audit matters. Technology in auditing: data analytics, AI, blockchain. Case Study: Analysis of Enron's audit report and its implications. Activity: Group presentation on blockchain's impact on audit transparency.

Reference Books & Materials

1. D.S. Rawat. "Auditing: Principles and Practice" Taxmann Publications
2. B.N. Tandon ."Practical Auditing", Sultan Chand & Sons
3. Arun Kumar and Rachana Sharma, "Auditing: Theory and Practice", PHI Learning (Prentice-Hall of India)
4. A.K. Singhania, "Auditing and Assurance", Taxmann Publications
5. Alvin Arens et al., "Auditing and Assurance Services", Pearson
6. Brenda Porter, "Principles of External Auditing", Wiley
7. Robyn Moroney et al. "Auditing: A Practical Approach", Wiley
8. ICAI Study Materials – Indian auditing standards and practical guidelines.
9. "International Standards on Auditing (ISA)" by IFAC – Comprehensive ISA reference.

Additional Materials

1. ICAI's ″Handbook on Auditing Standards″.
2. Case Studies: Enron, Satyam, and Lehman Brothers audits.

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