



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

548

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

M.Com. COMPUTER APPLICATIONS

PEO 1	Graduates can pursue higher education and other career oriented programs globally.
PEO 2	Graduates have wider scope of employment opportunities in the field of Finance, Banking, Insurance, Accounting, Taxation and Research etc.
PEO 3	Graduates develop competencies in computer applications by designing, developing and apply the software in the Era of Digitalization.
PEO 4	Graduates should be able to start their own business enterprise or demonstrate their entrepreneurial skills for their organizations in supportive and leadership roles.
PEO 5	Apply critical thinking which improves cognitive skills and logical decision making as business leaders.
PEO 6	analyse and interpret the financial risks and events.

PROGRAMME OUTCOMES (POs)

Postgraduate (M.A., M.Sc., M.Com., **M.Com(CA)**, M.B.A., M.C.A., etc.,) is a 2 – year degree Programme with 4 semesters consisting the following Programme Outcomes (POs) under various criteria including critical thinking, problem solving, effective communication, societal/ citizenship/ ethical credibility, sustainable growth and employable abilities.

PO 1	Critical Thinking: Intellectual exploration of knowledge towards actions in clear and rational manner by understanding the logical connections between ideas and decisions and also exhibit the advanced knowledge of business laws.
PO 2	Problem Solving: Understanding the task/ problem followed by planning and narrow execution strategy that effectively provides the solution, understand the economic, business environment in the basic tools of business analysis
PO 3	Effective Communication: Knowledge dissemination by oral and verbal mechanisms to the various components of our society.
PO 4	Societal/ Citizenship/ Ethical Credibility: Realization of various value systems/ moral dimensions and demonstrate the empathetic social concern as well as equity in all the decisions, executions, actions, development of social qualities, analytical ability and skills
PO 5	Environmental Concern and Sustainable Growth: Understanding the emerging environmental challenges and provide the possible contribution in sustainable development that integrates environment, economy and employment.
PO 6	Skill Development and Employable Abilities: Adequate training in relevant skill sector and creating employable abilities among the post graduates, expertise in handling problem solving techniques skills and acquire to pursue higher education, research and development of entrepreneurial skills for promoting industrial and business activities



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

549

PROGRAMME SPECIFIC OUTCOMES (PSOs)

On completion of **M.Com (CA) Programme**, the students are expected/will be able to

PSO 1	develop as professionally competent citizens by applying the knowledge of Commerce with the ability to think clearly, rationally and creatively to support in evolving solutions to the social/public/scientific issues with responsible democratic participation and also eligible for higher studies such as M.Phil., Ph.D., MBA, B.Ed., ACS, CMA and CA
PSO 2	enterprise resourcefulness to identify, plan, formulate, design and evaluate solutions for complex problems that address the specific needs with appropriate consideration for Societal, Cultural, Environmental and Industrial domains.
PSO 3	develop holistically to ignite the lateral thinking ability in problem solving, acquisition of new skills, open-minded and organized way of facing problems with self – awareness and evolving analytical solutions and also be employable in educational institutions, banking sectors and also proficient in entrepreneurship.
PSO 4	create and initiate innovations effectively and communicate efficiently with the computing community and society at large to bridge the gap between computing industry and academia and also able to apply the concepts and techniques in commerce
PSO 5	understand, assess and commit to professional and ethical principles, norms and responsibilities of the cyber world through Digital Literacy and gain the ability for work efficacy as a part of a team and engage effectively with diverse stakeholders
PSO 6	acquire ability and willingness to embark on new ventures and initiatives with critical thinking and desire for more continuous learning focusing on life skills.

DISTRIBUTION OF CREDITS (PG PROGRAMME)

SEMESTER	COURSES	NUMBER OF COURSES	HOURS	CREDITS	TOTAL CREDITS
I–IV	CORE	15	6	3 – 5	71
I–IV	ELECTIVE	4	4 – 6	3 – 4	13
I–IV	SBS (Skill)	4	1 – 2	1 – 2	5
III	NME	1	6	4	4
III	INTERNSHIP	1	–	1	1
	TOTAL CREDITS				94

Extra credits may be earned through SWAYAM Courses/other online courses

Passed in the BoS Meeting held on 27/02/2025

Signature of the Chairman



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

550

MASTER OF COMMERCE WITH COMPUTER APPLICATIONS

COURSE STRUCTURE

SEMESTER – I

S. No	Course Code	Course Title	Hrs. / Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC11	Core – 1: Advanced Company Accounts – I*	6	3	25	75	100	5
2.	24PCCC12	Core – 2: Applied Costing*	6	3	25	75	100	5
3.	24PCCC13	Core – 3: Computerized Accounting and Office Automation	6	3	25	75	100	5
4.	24PCCCP1	Core – 4: Lab: Office Automation	6	3	40	60	100	5
Elective – 1: **			4	3	25	75	100	3
5.	24PCCE11	Strategic Human Resource Management*						
	24PCCE12	Financial Markets and Institutions *						
6.	24PCCSP1	SBS – 1: Lab: Tally	2	3	40	60	100	1
		TOTAL	30		–	–	600	24

**One elective course to be chosen from TWO courses

*Common to M.Com and M.Com (CA)

SEMESTER – II

S. No.	Course Code	Course Title	Hrs. / Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC21	Core – 5: Advanced Company Accounts – II*	6	3	25	75	100	3
2.	24PCCC22	Core – 6: Accounting for Managers*	6	3	25	75	100	3
3.	24PCCC23	Core – 7: Database Management System	6	3	25	75	100	5
4.	24PCCCP2	Core – 8: Lab: RDBMS	6	3	40	60	100	5
5.	24PCCE21	Elective – 2: Organizational Behavior*	4	3	25	75	100	4
6.	24PCCSP2	SEC: Lab: Basic Python	2	3	40	60	100	2
7.		Internship*	–	–	–	–	–	–
		TOTAL	30				600	22

SEC– Skill Enhancement Course

*Common to M.Com and M.Com (CA)



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

551

M.Com. COMPUTER APPLICATIONS – II YEAR

COURSE STRUCTURE – SEMESTER – III

S. N	Course Code	Course Title	Hours/Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC31	Core – 9: Customer Relationship Management*	6	3	25	75	100	5
2.	24PCCC32	Core – 10: GST and Taxation*	6	3	25	75	100	5
3.	24PCCC33	Core – 11: Business Research Methods*	6	3	25	75	100	5
		Elective – 3: **						
4.	24PCCE31	Applied Data Analytics and Machine Learning	4	3	25	75	100	3
	24PCCE32	Python and R for Data Analytics						
5.	24PCCSP3	SEC: LAB: Data Analytics Lab using MS–Excel	2	3	40	60	100	1
6.	24PCCN31	SEC: NME: Tourism Development*	6	3	25	75	100	4
7.	24PCCP31	Internship*	–	–	–	–	100	1
		TOTAL	30				700	24

**One elective course to be chosen from TWO courses

*Common to M.Com and M.Com (CA)

SEMESTER – IV

S. No	Course Code	Course Title	Hours/Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC41	Core – 12: Corporate and Economic Laws*	6	3	25	75	100	5
2.	24PCCC42	Core – 13: Business Environment and Policy*	6	3	25	75	100	5
3.	24PCCC43	Core – 14: Logistics and Supply Chain Management*	6	3	25	75	100	5
4.	24PCCCV1	Core – 15: Project with Viva	6	3	40	60	100	5
		Elective – 4: **						
5.	24PCCE41	E–Commerce*	4	3	25	75	100	3
	24PCCE42	Cyber and Data Security						
6.	24PCCSP4	SEC: Lab: Web Designing	2	3	40	60	100	1
		TOTAL	30	–	–	–	600	24

**One elective course to be chosen from TWO courses

*Common to M.Com and M.Com (CA)

Passed in the BoS Meeting held on 27/02/2025

Signature of the Chairman



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

552

COURSE STRUCTURE – SEMESTER – III

S. N	Course Code	Course Title	Hours/ Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC31	Core – 9: Customer Relationship Management*	6	3	25	75	100	5
2.	24PCCC32	Core – 10: GST and Taxation*	6	3	25	75	100	5
3.	24PCCC33	Core – 11: Business Research Methods*	6	3	25	75	100	5
		Elective – 3: **						
4.	24PCCE31	Applied Data Analytics and Machine Learning	4	3	25	75	100	3
	24PCCE32	Python and R for Data Analytics						
5.	24PCCSP3	SEC: LAB: Data Analytics Lab using MS–Excel	2	3	40	60	100	1
6.	24PCCN31	SEC: NME: Tourism Development*	6	3	25	75	100	4
7.	24PCCP31	Internship*	–	–	–	–	100	1
		TOTAL	30				700	24

**One elective course to be chosen from TWO courses

*Common to M.Com and M.Com (CA)

CA – Class Assessment (Internal)

SE – Summative Examination

SEC – Skill Enhancement Course

NME – Non –Major Elective

T – Theory

P – Practical



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

553

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC31	CUSTOMER RELATIONSHIP MANAGEMENT	CORE – 9	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability	✓	Skill Oriented			✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics	✓	Gender	✓	Environment and Sustainability	✓	Human Values	✓	Other Values	✓

COURSE DESCRIPTION:

The course focuses on helping in recognizing the key elements need to be addressed and reflects the need to create an integrated cross-functional focus – one that emphasizes retaining as well as winning customers

COURSE OBJECTIVES:

To make the students

- understand the evolution, benefits, and types of Customer Relationship Management (CRM) systems.
- analyze key CRM concepts such as customer value, loyalty, satisfaction, and retention.
- develop CRM strategies by focusing on customer-centricity and setting measurable objectives.
- integrate CRM with marketing strategies and explore its application in various business sectors and address the challenges and implementation of CRM, including technology tools and performance metrics.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	be aware of the nuances of customer relationship	Upto K5
CO 2	analyze the CRM link with the other aspects of marketing	Upto K5
CO 3	receive the basic knowledge of the Role of CRM in increasing the sales of the company	Upto K5
CO 4	be aware of the different CRM models in service industry	Upto K5
CO 5	be aware and analyze the different issues in CRM	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY
K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

554

CUSTOMER RELATIONSHIP MANAGEMENT

UNIT – I:

Evolution of Customer Relationship CRM– Definition, Emergence of CRM Practice, Factors responsible for CRM growth, CRM process, framework of CRM, Benefits of CRM, Types of CRM, Scope of CRM, Customer Profitability, Features Trends in CRM , CRM and Cost–Benefit Analysis, CRM and Relationship Marketing.

UNIT – II:

CRM Concepts Customer Value, Customer Expectation, Customer Satisfaction, Customer Centricity, Customer Acquisition, Customer Retention, Customer Loyalty, Customer Lifetime Value. Customer Experience Management, Customer Profitability, Enterprise Marketing Management, Customer Satisfaction Measurements, Web based Customer Support.

UNIT – III:

Planning for CRM Steps in Planning–Building Customer Centricity, Setting CRM Objectives, Defining Data Requirements, Planning Desired Outputs, Relevant issues while planning the Outputs, Elements of CRM plan, CRM Strategy: The Strategy Development Process, Customer Strategy Grid.

UNIT – IV:

CRM and Marketing Strategy CRM Marketing Initiatives, Sales Force Automation, Campaign Management, Call Centres. Practice of CRM: CRM in Consumer Markets, CRM in Services Sector, CRM in Mass Markets, CRM in Manufacturing Sector.

UNIT – V:

CRM Planning and Implementation Issues and Problems in implementing CRM, Information Technology tools in CRM, Challenges of CRM Implementation. CRM Implementation Roadmap, Road Map (RM) Performance: Measuring CRM performance, CRM Metrics.

TEXT BOOKS:

1. Mukesh Chaturvedi, Abinav Chaturvedi, *Customer Relationship Management– An Indian Perspective*, 2010 Excel Books, 2nd edition
2. Francis Buttle, Stan Maklan, *Customer Relationship Management: Concepts and Technologies*, 3rd edition, Routledge Publishers, 2015

REFERENCE BOOKS:

1. Jagdish N.Sheth, Atul Parvatiyar & G.Shainesh, *Customer Relationship Management, Emerging Concepts, Tools and Application*, 2010, TMH.
2. Kumar, V., Reinartz, Werner *Customer Relationship Management Concept, Strategy and Tools*, 1st edition, Springer Texts, 2014

DIGITAL TOOLS:

- https://www.investopedia.com/terms/c/customer_relation_management.asp
- <https://www.salesforce.com/in/crm/what-is-crm/#:~:text=CRM%20stands%20for%20customer%20relationship,relationships%20to%20grow%20your%20business.>
- https://en.wikipedia.org/wiki/Customer_relationship_management

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	3	3
CO2	3	3	2	3	2	2
CO3	3	2	3	3	3	2
CO4	3	3	3	3	3	3
CO5	3	3	3	2	3	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

555

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC32	GST AND TAXATION	CORE– 10	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability	✓	Skill Oriented		✓	Entrepreneurship		✓
	National	✓	Local	✓	Regional	✓	Global	
Curriculum Enrichment	Professional Ethics	✓	Gender		Environment and Sustainability	✓	Human Values	Other Values

COURSE DESCRIPTION:

This course is designed to make the students to have in-depth knowledge about Goods and Services Tax.

COURSE OBJECTIVES:

To make the students

1. understand the objectives, Canons of Taxation, Characteristics of a Good Tax system in India
2. acquire the knowledge of the GST Council and GST Council Secretariat
3. receive knowledge on goods exempt from Goods and Services Tax
4. gain knowledge on Place of Supply, Time of supply of Goods and Value of Supply
5. know about Refund of Taxes in the Case of Zero rated Supplies.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	understand the objectives, Canons of Taxation, Characteristics of a Good Tax system in India	Upto K5
CO 2	acquire the knowledge of the GST Council and GST Council Secretariat	Upto K5
CO 3	impart knowledge on goods exempt from Goods and Services Tax	Upto K5
CO 4	understand the knowledge on Place of Supply, Time of supply of Goods and Value of Supply	Upto K5
CO 5	know about Refund of Taxes in the Case of Zero rated Supplies	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY
K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

556

GST AND TAXATION

UNIT– I: TAXATION AND TAX SYSTEM IN INDIA

Taxation – History – Definition – Features – Characteristics or elements – Objectives – Canons of Taxation – Characteristics of a Good Tax system in India – Tax system in India – Indian constitution and Tax system in India – Taxation powers of Union Govt. and State Governments – Allocation of Revenues between the Centre and the States – Features and Problems of Indian Tax System – Reform of Tax System in India – Classification of Taxes – Direct and Indirect Taxes – Merits and Demerits – Differences – Direct taxes in India & State level – Indirect taxes in India, levied by Central Government, levied by State Governments, local Government – Specific Duties and Advolorem Duties – Proportional, Progressive, Regressive and Degressive Taxes – Single and Multiple Tax systems – Multiple Tax Systems.

UNIT– II: GOODS AND SERVICE TAX (GST)

GST – Introduction – History – Constitutional Amendment – Meaning of GST – Worldwide GST – Enactment of GST Bills – Dimensions of GST – Effect of GST on Indian Economic Growth – Action Plan of GST Council – Scope – Promulgation – GST Council : Constitution, Functions, Quorum, Decision-making – Introduction – Constitution of GST Council – Quorum and Decision-making – Functions, Power, Nature of GST Council – Dispute Mechanism – Role of the GST Council – GST Council Secretariat – AUDIT under GST – Threshold for Audit – Rectifications after Return Based on Results of Audit under GST – Audit by Tax Authorities – Obligations of the Audit Findings of Audit – Special Audit – Time Limit for Special Audit – Cost – Findings of Special Audit – Major Chronological Events – Administration of GST – GST Bills – Differences between Present Tax Structure and GST – Existing Indirect Taxes Structure – Indirect Taxes to be Integrated with GST – Impact on Small Enterprises – Strengths of Goods and Services Tax in India – Threats of GST in India – Objectives of GST – Challenges – Opportunities – Justification of GST – Salient Features of GST Model – Types of GST in India – CGST, SGST, IGST and UTGST – GST Impact on Central Government – GST Impact on State Governments – Exemptions under GST – Advantages and Disadvantages of GST – Major Benefits of GST – Impact of GST on the Indian Economy – Impact of GST and its Implications – Other Effects of GST in India – GST Rates.

UNIT– III: EXEMPTED GOODS AND SERVICES UNDER GST

Goods Exempt from Goods and Services Tax – Services Exempt from Tax – Meaning of Original Works – Meaning of Legal Service – Meaning of Recognized Sport Body.

UNIT– IV: CONCEPT OF SUPPLY UNDER GST

Introduction to supply – Meaning – Scope – Meaning of Related Persons – Import of Services Job Work – Time of supply – Value of Supply – Inter-State Supplies – Intra-State Supplies – Illustration on Place of Supply, Time of supply of Goods and Value of Supply.

UNIT– V: LEVY AND COLLECTION OF GST

Taxable event under GST – Provisions relating to Levy and Collection of CGST – The Liability of Composite Supply and Mixed Supply – Meaning of Mixed Supply – Composition Levy – Aggregate Turnover – Input Tax Credit – Eligibility and Conditions for availing Input Tax Credit – Exempt Supplies – Apportionment of Credit and Blocked Credits – Non-availability Input Credit Job Work – Matching, Reversal and Reclaim of ITC – Refund of Un-utilised Input Tax Credit – Transfer of ITC – Export of Services – Import of Goods – Provisions Relating to Import of Goods – Import of Goods – Provisions Relating to Import of Goods – Import of Services – Zero Rated Supply – Refund of Taxes in Case of Zero Rated Supplies – Export of Services – Import of Goods – Import of Services – Zero rated supply – Refund of Taxes in the Case of Zero rated Supplies – Illustrations : Exercises on Input Tax Credit – Exercises on Levy and Collection.



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

557

TEXT BOOK:

Reddy.T.S and Hari Prasad Reddy.Y, *Business Taxation (Goods and Services Tax – GST)*, Margham Publications, Chennai –17. (2021)

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	1	2	1	2
CO2	3	2	3	2	2	1
CO3	3	2	3	3	1	2
CO4	2	3	2	2	3	3
CO5	3	2	3	3	2	1

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

558

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC33	BUSINESS RESEARCH METHODS	CORE– 11	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability	✓	Skill Oriented		✓	Entrepreneurship		✓
	National	✓	Local	✓	Regional	✓	Global	✓
Curriculum Enrichment	Professional Ethics	✓	Gender		Environment and Sustainability		Human Values	Other Values

COURSE DESCRIPTION:

This Course is about the basic research knowledge and application of Statistical tools.

COURSE OBJECTIVES:

To make the students

1. develop an idea about various research designs and techniques.
2. understand the application of different methods of data collection.
3. understand the sampling techniques of research and its application.
4. understand the significance of data processing.
5. become familiar in style of preparing research report.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	apply a range of quantitative and / or qualitative research techniques to social science research	Upto K5
CO 2	develop necessary critical thinking skills in order to evaluate different methods used in data collection	Upto K5
CO 3	organize and conduct research in a more appropriate sampling method manner	Upto K5
CO 4	demonstrate knowledge and understanding of data processing	Upto K5
CO 5	write a research report and thesis	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY
K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

559

BUSINESS RESEARCH METHODS

UNIT – I:

Introduction to Research – Meaning – Types of Research – Pure and Applied Research – Experimental and Non-experimental Research – Research Design – Steps in Preparing a research design – The Problem – Criteria of a Problem – Hypothesis – Advantages of Hypothesis – Criteria of a good Hypothesis – Types of research hypothesis.

UNIT – II:

Methods of Data collection – Field Method – Sample Survey Method – Steps in conducting a Survey – Pilot Survey – Advantages of Pilot Survey – Case Study Method – Advantages and limitations of case study – Primary and secondary data – Techniques of data collection – Questionnaire and Schedule – Difference between a schedule and a questionnaire – Guidelines for designing a good questionnaire – Pre-testing – Advantages of pre-test – Advantages and limitations of a questionnaire – questionnaire through Google Link – Interview – Types of interviews – Advantages and limitations of interview technique – Observation – Types of observation.

UNIT – III:

Sampling Techniques – Sampling Process – Methods – Random or probability sampling Methods – Non-probability methods – Sample Size – Sampling and non-sampling errors.

UNIT – IV:

Data Processing – Editing – Coding – Tabulation – Measurement of Scale – Rating Scales and Attitude Scales – Types – Likert's Summated Rating Scales – Thurston's Equal Appearing Interval scale – Guttman's cumulative scale.

UNIT – V:

Report writing – Types of research reports – Outline/contents of a research report – Guidelines for writing the research report.

TEXT BOOK:

Kothari C.R. (2010), *Research Methodology Methods and Techniques*, New Age International (P) Ltd., Publishers, New Delhi.

REFERENCE BOOKS:

1. Krishnaswami R and Ranganatham M (2019), *Methodology of Research in Social Sciences*, Himalaya Publishing House Pvt., Ltd., Mumbai.
2. Thanulingom N (2015), *Research Methodology*, Himalaya Publishing House Pvt., Ltd., Mumbai.
3. Peer Mohamed and Shazuli Ibrahim S.A.N. (2013), *Research Methodology*, Pass Publications Educational Publishers, Madurai.

DIGITAL TOOLS:

1. www.researchgate.net
2. <http://www.jotform.com>
3. <http://towardsdatascience.com>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	2	2	2
CO2	3	2	3	2	3	3
CO3	3	3	2	3	2	2
CO4	2	3	3	2	3	2
CO5	3	3	2	3	2	3

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

560

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCE31	APPLIED DATA ANALYTICS AND MACHINE LEARNING	ELECTIVE – 3	4	–	3

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented		✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓

COURSE DESCRIPTION:

This course focuses on the application of data analytics and machine learning techniques to solve real-world problems, equipping students with the skills to analyze data, build predictive models, and make data-driven decisions

COURSE OBJECTIVES:

To make the students

- understand basics of data analysis in Python
- interpret the data analysis pipeline via usage of NumPy and Pandas.
- examine methods of working with textual and time series data
- investigate machine learning techniques with Scikit-Learn
- understand advanced machine learning techniques.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	demonstrate data analysis with apt knowledge in foundational concepts of Python	Upto K5
CO 2	demonstrate getting, cleaning and manipulation of data using NumPy and Pandas	Upto K5
CO 3	use Python for Statistical Data analysis	Upto K5
CO 4	use Scikit-Learn for advanced Data analysis	Upto K5
CO 5	explain advanced machine learning techniques	Upto K5

K1– KNOWLEDGE (REMEMBERING), K2–UNDERSTANDING, K3–APPLY,
K4–ANALYSE, K5–EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

561

APPLIED DATA ANALYTICS AND MACHINE LEARNING

UNIT – I:

Introduction to Data Analysis with Python Introduction to Data Analysis with Python: Data Analysis – Understanding Nature of Data –Data Analysis Process – Quantitative and Qualitative Data Analysis–Introduction to Python – PyPI, SciPy.Getting started with Python – Explore the first data set – The Jupyter notebook.

UNIT – II:

Working across the entire data analysis pipeline Working across the entire data analysis pipeline, – Getting, cleaning and manipulating the data – Numpy library – Ndarray – Basic Operation Shape Manipulation – Array Manipulation – General Concepts – Pandas Library– Introduction to Pandas Data Structures – Index functionalities – Operations between Data Structures – Interacting with Databases.

UNIT – III:

Working with textual and time-series data Working with textual data – Working with time-series data – Databases in Python – Statistical data analysis.

UNIT – IV:

Basics of machine learning with Scikit-learn Basics of machine learning with Scikit-learn – Introduction to machine learning –Fitting a first model – Cost functions and outliers – Linear regressions – Gradient descent – Feature engineering.

UNIT – V:

Advanced machine learning techniques Advanced machine learning techniques: K-nearest neighbours – Logistic regressions – Decision trees and SVMs – Clustering and Dimensionality reduction – Introduction to deep learning.

TEXT BOOKS:

1. Fabio Nelli (2018), *Python Data Analytics with Pandas,Numpy and Matplotlib*, 2nd Edition, Apress, New York.
2. Paul Barry, Shroff (2011), *Head First Python*, 1st Edition, O'Reilly Media, USA.
3. Mark Lutz, Shroff (2011), *Programming Python*, 4th Edition, O'Reilly Media, USA

REFERENCE BOOKS:

1. Wes McKinney, *Python for Data Analysis*, 2nd Edition, O'Reilly publication, USA.
2. Martin C Brown (2001), *Python the Complete Reference*, McGraw Hill, USA.
3. Mark Lutz, Shroff (2010), *Python Pocket Reference*, 3rd Edition, O'Reilly Media, USA.
4. Ashok Namdev Kamthane, Amit Ashok Kamthane (2018),

DIGITAL TOOLS:

<https://pandas.pydata.org/pandas-docs/version/1.4.4/pandas.pdf>

[https://mrcet.com/downloads/digital_notes/CSE/IV%20Year/MACHINE%20LEARNING\(R17A0534\).pdf](https://mrcet.com/downloads/digital_notes/CSE/IV%20Year/MACHINE%20LEARNING(R17A0534).pdf)

Note: Latest edition of the books may be used.

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	1	2	1	3	3	1
CO2	1	2	1	3	3	1
CO3	1	2	1	3	3	1
CO4	1	2	1	3	3	1
CO5	1	2	1	3	3	1

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

562

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCE32	PYTHON AND R FOR DATA ANALYTICS	ELECTIVE – 3	4	–	3

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented			✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional		✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓	

COURSE DESCRIPTION:

Python comes with numerous packages and tools which can be used in data analytics. Python can be used for deep learning, making predictions, and making visualizations. R is one of the most widely used tools for data analytics. R has a number of tools that can be used for statistical analysis.

COURSE OBJECTIVES:

To make the students

- understand the basics of Python
- learn Bio Python
- understand the features of R
- learn data handling
- identify the use of bio conductor

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	describe the basics of Python	Upto K5
CO 2	explain the necessity for programming in biology	Upto K5
CO 3	apply R programming	Upto K5
CO 4	discuss Data handling	Upto K5
CO 5	apply R in Phylogenetic	Upto K5

K1– KNOWLEDGE (REMEMBERING), K2–UNDERSTANDING, K3–APPLY
K4–ANALYSE, K5–EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

563

PYTHON AND R FOR DATA ANALYTICS

UNIT – I: INTRODUCTION TO PYTHON

Installation of Python – Variables – Types – Strings – Jupiter notebooks – Objects – Functions – Control structures – Operators – User-Defined Functions – Data Structures – List, Tuple – Dictionary.

UNIT – II: NUMPY AND SCIPY

Numpy library – Ndarray – Basic Operations – Conditions and Boolean Arrays – Shape Manipulation – Array Manipulation – General Concepts – Structured Arrays – Reading and Writing Array on Files – SciPy Library for Statistics: linalg sub package – Normality Correlation – t-Test– Chi-Test– ANOVA.

UNIT – III: R PROGRAMMING

Introduction to R – Installing R – Features of R – Reserved words – Operators, –Strings – Data types and operations – Basic Data types – Vectors – List, Matrices – Arrays – Factors – Data frames – Flow control – Decision making – Loop Control Statements –Loops.

UNIT – IV: VISUALISATION USING R

R as a Deluxe Calculator – Creating Objects and Assigning Values – Graphics: Simple Plotting – Advanced Plotting – Using Color in Plots – Using Subscripts and Superscripts in Graph Labels – Interactive Graphics – Saving Graphical Output – Loops.

UNIT – V: DATA HANDLING

Feature selection models – Data Preprocessing – Normalization – Methods – Data reduction – Data sampling – Heat maps – Classification: Based on analogy – rules – probabilities – statistics and prediction with R.

TEXT BOOKS:

1. Fabio Nelli (2018), *Python Data Analytics with Pandas, Numpy and Matplotlib*, 2nd Edition, Apress, New York.
2. Wes McKinney, *Python for Data Analysis, 2nd Edition*, O'Reilly publication, USA.
3. Jeeva Jose (2018), *Beginner's Guide for Data Analysis using R Programming*, Khanna Book Publishing Co. Ltd., New Delhi.
4. Norman Matloff (2011), *The Art of R programming – A tour of statistical software design*, 1st Edition, No Starch Press, USA.

REFERENCE BOOKS:

1. Mark Lutz (2009), *Learning Python*, O'Reilly Media Publication, USA.
2. Martin C Brown (2001), *Python: The Complete Reference*. McGraw-Hill Media, USA.
3. Gentleman R, Carey V.J, Huber W, Irizarry, RA, and Dudoit, S, *Bioinformatics and Computational Biology Solutions Using R and Bioconductor*, Springer, New York

DIGITAL TOOLS:

www.sthurlow.com/python/
www.learnpython.org
www.codecademy.com/en/tracks/python

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	2	2	2	1	2
CO2	2	2	2	2	1	2
CO3	3	3	3	3	2	3
CO4	3	3	3	3	3	3
CO5	3	3	3	3	3	3

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

564

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDIT
23PCCSP3	LAB: DATA ANALYTICS LAB USING MS-EXCEL	SEC LAB	–	2	1

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	40	60	100

Curriculum Design and Development	Employability	✓	Skill Oriented			✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓

COURSE DESCRIPTION:

This course is designed to make the students to have knowledge in Data Analytics using MS-EXCEL.

COURSE OBJECTIVES:

Data analytics using Excel involves using the software's features and functions to explore, analyze, and visualize data for insights and decision-making, including cleaning, organizing, summarizing, and identifying trends.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	understand Data Analytics process for decision-making using Excel	Upto K5
CO 2	execute the Sort, Filter, What-if Analysis, Charts and Pivot table tools.	Upto K5
CO 3	analyse the Statistical and Mathematical functions using Excel.	Upto K5
CO 4	examine the Financial Analysis tool in Excel.	Upto K5
CO 5	build-up the skills in Advanced concepts of Excel.	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY

K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

565

LAB: DATA ANALYTICS LAB USING MS-EXCEL

1. Create a table Student_mark with the following fields and check the data validation on each subject mark [Sub_mark must be in between of 0 to 50] when entering the student details on the table.
 - I. Roll_no, Name, Sub1_mark, Sub2_mark, Sub3_mark.
 - a. Calculate the total, result and grade of each student.
2. Create a table Exam-Timetable with the following fields and check the exam date validation [Exam_date must be in between of 12th to 30th November, 2022] when preparing the exam Timetable schedule.
 - II. Class, Subject, Subject_code, Exam_date.
3. Create a table Course Classes with the following conditions.
 - a. The heading must contain Class, Course_level, Venue, Max_participants, Instructor, Day, start_time, Cost.
 - b. Sort the table by
 - i. Course_level
 - ii. Start_time
 - iii. Cost
 - c. Filter the record by
 - i. The instructor is David.
 - ii. The day is Monday.
 - iii. The time is after 17:00
 - iv. The venue is the Multimedia Hall
 - v. The time is greater than or equal to 20:00
4. Create a table Travel agent with the following fields and filter the table to find holidays that meet all of the following criteria:
 - I. Country, Resort_name, No_days, Travel_method, Price.
 - a. Destination is Spain
 - b. Travel Method is Plane
 - c. Travelling Price is Greater than ₹7000.
 - d. Travelers who are stay in the particular resort
 - e. Travelers who are spending vacation days are greater than 10 days
5. Create a table Student with following conditions.
 - a. The heading must contain, Roll. No., Name, Mark1, Mark2, Mark3, Total, average and result with manual entry.
 - b. Use functions
 - i. To find total, average, Result, and the minimum and maximum marks for each subjects.
 - ii. Round the average to the nearest highest integer.
 - iii. Use filters
 - a. To retrieve the name of the students who has secured the top 3 marks.
 - b. Sort the names in the ascending and descending order
6. Manipulate the departmental store maintenance with the following requirements:
 - a. Create a table department with the following fields:
 - b. Item_code, Item_name, Quantity, Rate, Price.
 - c. Calculate the total selling amount.
 - d. Calculate the total cost of each product.



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

566

- e. Find the total quantity of each product.
- f. Find the Costliest product.
- g. Find the Cheapest product.
- h. Count the number of selling of each product.
- i. Count the specific product and its quantity is greater than equal to 5.
- j. Count the product with their name is beginning with a particular character.
7. Create a table Sales with the following fields and retrieve the particular record using HLookup() and VLookup() functions.
 - a. Product_id, Product_name, Date, Sales, and Cost.
 - i. To find out the sales and cost of the particular date.
 - ii. To find out the date that has placed the highest sales.
 - iii. To find out the date that has placed the lowest sales.
 - iv. To find out the product that has placed the lowest sales.
 - v. To find out the product that has placed the highest sales.
8. In a month, a wholesaler may sell 1 to 10 T-shirts for ₹10.50 each, 11 to 25 T-shirts for ₹8.75 each, 26 to 40 T-Shirts for ₹6.50 each, 41 to 60 T-Shirts for ₹4.50 each and 61 to 100 T-Shirts for ₹2.50 each. Use the IF statement and mathematical formulas to determine the following values:
 - a. Create a table wholesaler with the following fields: i. Date, Customer_name, Quantity, Price.
 - b. Calculate the product price based on quantity.
 - c. Calculate the total invoice amount for each customer.
 - d. Calculate the total selling amount for every week in a month.
 - e. Count the wholesale order in the range of 1 to 10 T-Shirts.
9. Import the employee records with the following fields into excel and calculate the Net salary for all employees, then export the employee salary sheet into other file format.
 - i. Emp_ id, Emp_ name, Designation, DOJ, Basic Salary, HRA, Other Allowances, EPF, Professional Tax, IT, Gross Salary, Deduction, and Net Salary.
 - ii. Calculate the Net Salary using the following formula:
 - a. Gross Salary = Basic Salary + HRA + Other Allowances
 - b. Deduction = IT + EPF + Professional Tax.
 - c. Net Salary = Gross Salary – Deduction.
10. Create a table Sales with the following fields
 - I. Company_branch, Months [Jan To Dec].
 - a. Generate a bar chart to summarize the sales report in month-wise.
 - b. Generate a pie chart to summarize the sales report in branch-wise.

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	2	3	2	2	3	3
CO2	3	3	2	2	2	3
CO3	3	3	2	2	2	3
CO4	3	3	2	2	3	3
CO5	3	2	3	2	2	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

567

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCN31	TOURISM DEVELOPMENT	SEC NME	6	–	4

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	III	25	75	100

Curriculum Design and Development	Employability	✓	Skill Oriented			✓	Entrepreneurship		✓
	National	✓	Local	✓	Regional	✓	Global		✓
Curriculum Enrichment	Professional Ethics	✓	Gender		Environment and Sustainability		Human Values	✓	Other Values

COURSE DESCRIPTION:

This Course is designed to form a systematic knowledge about the impacts of the tourism industry on destinations and local communities.

COURSE OBJECTIVES:

1. To introduce the basic concepts of Tourism
2. To make the students understand the Growth of Tourism In India
3. To make the students understand the Tourism Marketing
4. To enhance students' knowledge on Tourism Promotion
5. To give an exposure to the students about International Organization in Tourism

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	gain in-depth knowledge on the concepts of tourism	Upto K5
CO 2	learn the development in India and land for all seasons.	Upto K5
CO 3	understand the tourist Marketing and tourist products	Upto K5
CO 4	know the sales support, advertising and public relation	Upto K5
CO 5	gain knowledge on international union of official travel organisation	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY

K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

568

TOURISM DEVELOPMENT

UNIT– I: INTRODUCTION OF TOURISM

Introduction – Meaning – nature of Tourism – Elements of Tourism – An ancient phenomenon, Accounts of famous travellers – The Grand Tour – paid holidays – Types of Tourism.

UNIT– II: GROWTH OF TOURISM IN INDIA

A land for all seasons – Development of Tourism in India – the formation of the Ministry of Tourism – setting up of the development of Tourism.

UNIT– III: TOURISM MARKETING

Marketing in Tourism – The Tourist product – Tourist market – market segmentation – Marketing process and functions.

UNIT– IV: TOURISM PROMOTION

Advertising – sales support – public relations – Tourist Publicity – Evolution and modern trends.

UNIT– V: INTERNATIONAL ORGANIZATIONS IN TOURISM

International union of official travel organization (IUOTO), WTO – PATA – IATA – ICAO – constitution – objectives – services.

TEXT BOOKS:

1. BATIA A.K. *Tourism Development Principles & Practices* (second edition), Sterling publishers private limited New Delhi.

E – Mail: ghai@nde.vsnl.net.in www.sterlingpublisher.com

2. BATIA A.K. *International Tourism Management* (second edition), Sterling publishers private limited New Delhi.

E – Mail: ghai@nde.vsnl.net.in www.sterlingpublisher.com

DIGITAL TOOLS:

- <http://www.tamilnadutourism.org/>
- <https://tourismnotes.com/travel-tourism/>
- <https://tourism.gov.in/sites/default/files/2020-04/chadigarh.pdf>
- <https://saudigazette.com.sa/article/55270>
- <https://www.twn.my/title2/resurgence/207-208/cover4.doc>
- https://www.tutorialspoint.com/tourism_management/tourism_management_market_segmentation.htm
- https://www.researchgate.net/publication/332480809_THE_DEVELOPMENT_OF_MARKETING_IN_TOURISM_INDUSTRY
- <https://noblestudios.com/top-pr-trends-travel-tourism/>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	1	2	1	2	2	1
CO2	2	1	2	3	3	1
CO3	1	2	3	2	1	2
CO4	2	1	1	1	1	2
CO5	2	3	3	2	1	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

569

COURSE STRUCTURE – SEMESTER – IV

S. No	Course Code	Course Title	Hours/Week	Exam (Hrs.)	CA	SE	Total Marks	Credits
1.	24PCCC41	Core – 12: Corporate and Economic Laws*	6	3	25	75	100	5
2.	24PCCC42	Core – 13: Business Environment and Policy*	6	3	25	75	100	5
3.	24PCCC43	Core – 14: Logistics and Supply Chain Management*	6	3	25	75	100	5
4.	24PCCCV1	Core – 15: Project with Viva	6	3	40	60	100	5
		Elective – 4: **						
5.	24PCCE41	E-Commerce*	4	3	25	75	100	3
	24PCCE42	Cyber and Data Security						
6.	24PCCSP4	SEC: Lab: Web Designing	2	3	40	60	100	1
		TOTAL	30	–	–	–	600	24

CA – Class Assessment (Internal)

SE – Summative Examination

SEC – Skill Enhancement Course

NME – Non –Major Elective

T – Theory

P – Practical



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

570

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC41	CORPORATE AND ECONOMIC LAWS	CORE – 12	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	25	75	100

Curriculum Design and Development	Employability	✓	Skill Oriented		✓	Entrepreneurship		✓
	National	✓	Local	✓	Regional	✓	Global	✓
Curriculum Enrichment	Professional Ethics	✓	Gender		Environment and Sustainability	✓	Human Values	Other Values

COURSE DESCRIPTION:

This course provides a comprehensive overview of key corporate and economic laws in India, including the Foreign Exchange Management Act, Competition Act, Intellectual Property Rights, Prevention of Money Laundering Act, and Real Estate Regulation. It focuses on legal provisions, regulatory frameworks, and compliance mechanisms relevant to business operations and governance.

COURSE OBJECTIVES:

To make the students

- analyse current and capital account transactions and dealings in foreign currency under FEMA
- understand unethical competitive practices and forums for redressal of consumer disputes under Competition Act and Consumer Protection Act
- understand the procedure for obtaining patents and copyright under The Copyright and Patents Act
- evaluate offences and punishment for money laundering under Prevention of Money Laundering Act and explain the registration and related procedures under Real Estate Act

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	recall important provisions of FEMA	Upto K5
CO 2	examine the provisions of the Competition Act, 2002 and Consumer Protection Act to govern commercial competition and protect a consumer	Upto K5
CO 3	summarise the process relating to obtaining copyrights and patents.	Upto K5
CO 4	examine the provisions of Money Laundering Act	Upto K5
CO 5	analyse provisions relating to regulation of real estate	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY

K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

571

CORPORATE AND ECONOMIC LAWS

UNIT – I: INTRODUCTION TO FOREIGN EXCHANGE MANAGEMENT ACT, 1999

Foreign Exchange Management Act, 1999: Introduction – Definitions – Current Account transactions – Capital Account transactions – Realisation, repatriation and surrender of foreign currency – Remittance of assets – Possession and retention of foreign currency or foreign coins – Authorised person – Adjudication and Appeal

UNIT – II: COMPETITION ACT, 2002

Objective – Prohibition of Agreements, Prohibition of Abuse of Dominant Position – Regulation of combinations – Competition Commission of India: Duties, Powers and Functions of Commission – Appellate Tribunal.

UNIT – III: LAW RELATING TO INTELLECTUAL PROPERTY RIGHTS

Law relating to intellectual property rights: Introduction – The Copyright Act, 1957: Works in which copyright subsist – Ownership of copyright and the rights of the owner – Assignment of copyright – Disputes with respect to assignment of copyright – Term of copyright – Registration of copyright – Infringement of copyright. The Patents Act, 1970: Inventions not patentable – Applications for patents – Publication and examination of applications – Grant of patents and rights conferred – Register of patents. Trademarks Act, 1999: Conditions for registration – Procedure for and duration of registration – Effect of registration – Collective marks.

UNIT – IV: PREVENTION OF MONEY LAUNDERING ACT, 2002

Prevention of Money Laundering Act, 2002: Offence of money laundering – Punishment for money laundering – Attachment, adjudication and confiscation – Obligations of Banking Companies, Financial Institutions and Intermediaries – Summons, Search and Seizure – Appellate Tribunal.

UNIT – V: REAL ESTATE (REGULATION AND DEVELOPMENT) ACT, 2016

Real Estate (Regulation and Development) Act, 2016: Introduction – Salient features of the Act – Registration of Real Estate Project – Registration of Real Estate agents – Functions and duties of promoter – Rights and duties of Allottees – Offences, penalties and adjudication – Specimen agreement for sale to be executed between the promoter and the allottee.



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

572

TEXT BOOK:

1. Munish Bandari (2022), *A Textbook on Corporate and Economic Laws*, 33rd Edition, Bestword Publications, New Delhi
2. Amit Vohra and Rachit Dhingra (2022), *Economic, Business and Commercial Laws*, 18th Edition, Bharat Book House, Siliguri
3. Pankaj Garg (2021), *Taxmann's Corporate and Economic Laws*, 7th Edition, Taxmann Publications, New Delhi

REFERENCE BOOKS:

1. Sekar G and Saravana Prasath B (2022), *Students' Handbook on Corporate and Economic Law*, Commercial Law Publishers (India) Pvt. Ltd., New Delhi
2. Taxmann (2021), *FEMA & FDI Ready Reckoner*, 15th Edition, Taxmann Publications, New Delhi
3. Ahuja V.K. and Archa Vashishtha (2020), *Intellectual Property Rights (contemporary Developments)*, Thomson Reuters, Toronto, (CAN)

DIGITAL TOOLS:

<https://resource.cdn.icai.org/67333bos54154-m3cp1.pdf>

<https://resource.cdn.icai.org/67335bos54154-m3cp3.pdf>

<https://resource.cdn.icai.org/68523bos54855-cp1.pdf>

<https://resource.cdn.icai.org/68524bos54855-cp2.pdf>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	2	2	2	1
CO2	3	3	3	3	1	2
CO3	3	2	2	2	2	1
CO4	3	3	2	2	2	2
CO5	2	2	3	3	1	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

573

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC42	BUSINESS ENVIRONMENT AND POLICY	CORE – 13	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented		✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓

COURSE DESCRIPTION:

This course is designed to understand the concept of Business Environment, Social responsibility, Industrial policy, Consumer protection Act, and Industrial sickness

COURSE OBJECTIVES:

To make the students

- understand the basic concept of Business and social responsibility
- acquaint with the concept of factors affecting business environment
- gain knowledge on the Industrial Policies
- learn the various aspects of consumer protection act and privatization
- have exposure on the Industrial sickness and small scale sector

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	exhibit the elementary knowledge of business and social responsibility	Upto K5
CO 2	understand the external and internal influences of business environment.	Upto K5
CO 3	acquire the knowledge of industrial policy and new industrial policy	Upto K5
CO 4	gain knowledge about consumer protection act, and have knowledge in privatization.	Upto K5
CO 5	acquire knowledge about industrial sickness	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY
K4 – ANALYSE, K5 – EVALUATE

Passed in the BoS Meeting held on 27/02/2025

Signature of the Chairman



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

574

BUSINESS ENVIRONMENT AND POLICY

UNIT – I:

Business: Introduction–concept–nature and scope–characteristics of business.

Social responsibility: Meaning–objectives of business–Arguments for and against of social responsibility.

UNIT – II:

Business Environment: Definition–Elements of External and Internal Environment–Demographic factor–Economic Environment–Geographical and Ecological Environment–Social and Cultural Environment–Political and Legal–Technological environment.

UNIT – III:

Industrial Policy: meaning–features–industrial licensing policy–objectives–legislative measures–IDR Act, 1951–New Industrial policy, 1991–changes in new industrial policy–criticism of New Industrial Policy 1991.

UNIT – IV:

Consumer Protection Act, 1986 – Objectives–Rights of consumer–consumer disputes redressal agencies–remedial action Privatization: Meaning–privatization in India–forms of privatization–Arguments for and against privatization.

UNIT – V:

Industrial Sickness–Definition–causes–extent of industrial sickness–BIFR–drawback of BIFR–Non–banking Financial Institutions for Development–Industrial Development Bank of India (IDBI)–Industrial Finance Corporation of India (IFCI)–State Industrial Development Corporations (SIDCOs)–Unit Trust of India (UTI)–EXIM Bank–NABARD

TEXT BOOK:

Sankaran S (2019), *Business Environment*, Margham Publications, Chennai.

REFERENCE BOOKS:

1. Chidambaram K and Alagappan V (2008), *Business Environment*, Vikas Publishing House Pvt. Ltd., Noida
2. Francis Cherunilam (2009), *Business Environment Text and Cases*, Himalaya Publishing House, Mumbai.
3. Gupta C (2011), *Business Environment*, Sultan Chand and Sons, New Delhi.

DIGITAL TOOLS:

1. <http://www.toppr.com>
2. <https://www.enterprise-development.org>
3. <https://en.m.wikipedia.org>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	2	2	2	1
CO2	3	3	3	3	1	2
CO3	3	2	2	2	2	1
CO4	3	3	2	2	2	2
CO5	2	2	3	3	1	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

575

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCC43	LOGISTICS AND SUPPLY CHAIN MANAGEMENT	CORE – 14	6	–	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented			✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional		✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓	

COURSE DESCRIPTION:

This course is designed to deal with effective management, organizing and monitoring of storage and distribution of goods. The aim is to manage the entire order cycle in the most efficient way so that it enhances business development and ensures sustainability and customer satisfaction.

COURSE OBJECTIVES:

To make the students

develop basic fundamentals of business logistics

acquire the knowledge about supply chain management

gain knowledge of transportation and their characteristics

receive basic knowledge on logistics information

know about coordination in supply chain.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	gain the functions and importance of logistics management.	Upto K5
CO 2	provide the customer service and various approaches to study channels.	Upto K5
CO 3	understand effective transportation system, and cost characteristics by mode.	Upto K5
CO 4	acquire the knowledge of logistics into an integrated process.	Upto K5
CO 5	understand the concepts related to pricing obstaclesto coordination in a supply chain, goals and incentives	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY

K4 – ANALYSE, K5 – EVALUATE

Passed in the BoS Meeting held on 27/02/2025

Signature of the Chairman



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

576

LOGISTICS AND SUPPLY CHAIN MANAGEMENT

UNIT – I: SUPPLY CHAIN MANAGEMENT AND CUSTOMER SERVICE

Introduction – Definition of Logistics – Definition of supply chain – importance Of logistics and supply chain – objectives of business logistics – logistics and supply chain management – functions of logistics management – supply chain Macro processes in a firm Customer service – definition – elements – dimension of customer service – Value added services vs basic customer service capability – performance areas of value added services.

UNIT – II: SUPPLY CHAIN RELATIONSHIPS AND WAREHOUSES MANAGEMENT

Channel structure – relationship management – Channel relationships – Leadership– logistical service alliances – factors stimulating service based alliances Various approaches to study channels – Description Institutional Approach – Classification of middlemen – merchant middlemen – functional middlemen (Agent Middlemen) – graphic approach – conditions for successful supply chain relationships – warehouse benefit – Service benefits of warehousing – types of warehouses – private warehouses – Public warehouses – functions of public warehouses – documents used in public Warehouses.

UNIT – III: TRANSPORTATION, TRANSPORTATION COST AND THEIR CHARACTERISTICS

Importance of effective transportation system – Modes of transportation – Air – Package Carriers – trucks – trucks vs rail – rail – water / transport – pipeline – Intermodal / transportation – Trailer on flatcar(TOFC) OR Piggyback container on flat car(COFC) – Coordinated air truck – concor – Cost characteristics by mode – Rail – Highway – water – air – pipeline – transportation rates – Volume related rates – distance related rates – demand related rates.

UNIT – IV: LOGISTICS INFORMATION SYSTEM

Information functionality – Linking logistics into an integrated process – principles of logistics – Information – information architecture – application of information technologies – electronic Data interchange (EDI) – personal computers – artificial intelligence or expert system – Communication – bar coding and scanning.

UNIT – V: COORDINATION IN SUPPLY CHAIN

Bullwhip effect – evils of bullwhip effect/impact of bullwhip effect – obstacles to coordination in a supply chain –incentives obstacles – information processing obstacles – Operational obstacles – pricing obstacles – behavioural obstacles – managerial action to Enhance supply chain profit – goals and incentives – information accuracy – operational Performance – pricing strategies to stabiles orders

TEXT BOOK:

Natarajan L (2020), *Logistics And Supply Chain Management*, Margham Publication, Chennai

DIGITAL TOOLS:

<https://examstime.in/logistics-and-supply-chain-management-study-materials/>

<https://www.coursera.org/learn/supply-chain-logistics>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	1	3	2	3	2	2
CO2	2	3	3	2	2	3
CO3	1	2	2	3	2	3
CO4	2	3	2	3	3	3
CO5	2	3	3	2	2	3

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

577

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCCV1	PROJECT WITH VIVA	CORE– 15	–	6	5

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	40	60	100

Objectives:

1. To facilitate the students to undertake project work.
2. To help the students to acquire expertise in programming languages.

Each student should undertake a project under the guidance of staff member and should submit the report in not less than 50 pages in A4 size paper. The report must be submitted at the end of the Fourth Semester. The project report shall be valued jointly by the internal and external examiners. Marks are awarded for the project report and viva voce.



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

578

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCE41	E – COMMERCE	ELECTIVE – 4	4	–	3

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented		✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓

COURSE DESCRIPTION:

This course is designed to help the students understand the basic concepts of E-commerce and its application in current scenario.

COURSE OBJECTIVES:

To make the students

- acquire the basic concept of E-commerce.
- enable with network security and firewall.
- receive knowledge on E-security and mobile commerce.
- gain knowledge on E-marketing and its application
- know and apply various digital payment methods.

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	understand the basic concept of E-commerce and its applications	Upto K5
CO 2	gain knowledge on EDI	Upto K5
CO 3	analyse e-security and the web	Upto K5
CO 4	gain knowledge on e-marketing and its application	Upto K5
CO 5	apply various digital payment methods	Upto K5

K1 – KNOWLEDGE (REMEMBERING), K2 – UNDERSTAND, K3 – APPLY
K4 – ANALYSE, K5 – EVALUATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

579

E – COMMERCE

UNIT– I:

E-commerce – meaning–definition–Comparison of Electronic commerce and Traditional commerce– Advantages–limitations–need–Evolution of E –commerce–Growth of E-commerce in India– classification of E –commerce.

UNIT– II:

Electronic Data Interchange (EDI) – Process–Benefits –EDI standards– Internet Based EDI –EDI Implementation. Consumer Electronic commerce – importance of B2C–process in B2C–Type of Buyers–Consumer Electronic Commerce in India.

UNIT– III:

E-security–security threats–E-security protection– Types of firewall–Dimensions of E-commerce security. Mobile Commerce– Definition–Difference between E-commerce and M-commerce–advantages–application of M-commerce–Types of mobile payment.

UNIT– IV:

E-marketing–meaning–advantages of E-marketing mix–objective –E-marketing plan –E-Advertising –format of web–advertising –Intelligent Agents –definition –features –E customer relationship management–advantage of technologies enabled business.

UNIT– V:

E-payment –Benefits–components of Electronic system–Electronic Fund Transfer (EFT)–credit card system on the internet–Component of online credit processing –Popular Electronic payment methods–Security schemes in Electronic payment system –Digital signature– Online transaction protocols.

TEXT BOOKS:

1. Abiramidevi K and Alagammai. M (2019), *E-commerce*, Margham Publications, Chennai.
2. Ravi kalakota and Andrew B.Whinstan (2006), *Frontiers of Electronic Commerce*, Darling Kindersley (India)Pvt .Ltd.,

REFERENCE BOOKS:

1. Rayadu .C.S (2004), *E-commerce and E-Business*, Himalaya Publishing House, Mumbai.
2. BharatBhaskar (2006), *Electronic Commerce*, Tata McGraw Hill Publishing Co. Ltd, New Delhi.

DIGITAL TOOLS:

1. <https://e-commerce guide.com/guides/what-is-e-commerce/>
2. <https://feinternational.com/blog/what-is-ecommerce-an-introduction-to-the-industry>
3. <https://www.abetterlemonadstand.com/what-is-ecommerce/>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	3	3
CO2	3	3	2	3	2	2
CO3	3	2	3	3	3	2
CO4	3	3	3	3	3	3
CO5	3	3	3	2	3	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

580

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDITS
24PCCE42	CYBER AND DATA SECURITY	ELECTIVE – 4	4	–	3

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	25	75	100

Curriculum Design and Development	Employability		✓	Skill Oriented			✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓	
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓	

COURSE DESCRIPTION:

Cyber security is the application of technologies, processes, and controls to protect systems, networks, programs, devices and data from cyber-attacks. It aims to reduce the risk of cyber-attacks and protect against the unauthorized exploitation of systems, networks, and technologies.

COURSE OBJECTIVES:

To make the students

- understand threats and risks in cyber security landscape
- interpret cyber security framework and regulations
- examine data security and integrity regulations
- discuss network security management
- recall cyber security disasters

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	develop plans to mitigate risks and threats to cyber security	Upto K5
CO 2	solve vulnerabilities in cyber security frameworks	Upto K5
CO 3	solve issues in integrity issues in cyber security	Upto K5
CO 4	implement radical changes in cyber security management	Upto K5
CO 5	formulate strategies to overcome cyber security disasters	Upto K5

K1– KNOWLEDGE (REMEMBERING), K2–UNDERSTANDING, K3–APPLY,
K4–ANALYSE, K5–EVALUATE, K6–CREATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

581

CYBER AND DATA SECURITY

UNIT – I: CYBER SECURITY LANDSCAPE

Cyber security Landscape: Threats that are related to current and emerging trends, cyber security awareness, high profile cybercrime statistics and methods, the importance and functions of Governance, Risk Management, and Compliance in Cyber security program management, best practices in risk management including the domains of risk assessment and risk treatment, the structure and content of Cyber security–related strategy, plans, and planning. types of vulnerabilities and frauds in different domains eg. Financial and Banking, Ecommerce, Telecom, GDPR.

UNIT – II: CYBER SECURITY FRAMEWORKS

Cyber security Frameworks: International and industry–specific cyber security regulations, challenges to organisation, multiple security regulations, Define key concepts and terminology in Cyber security, threats to cyber security, strategies to identify and remediate vulnerabilities in information assets, the systemic components (including personnel) necessary for an effective cyber security program, NIST Framework.

UNIT – III: DATA SECURITY

Data Security: Data Integrity and Security, digital security, Data volume and velocity, Big data, multiple data sources, data diversity, Data (dis)organization, Unique data storage requirements, Security tools, Inflexible reporting and query systems.

UNIT – IV: MANAGING NETWORK SECURITY

Managing Network Security: The threats to data from information communication technology (ICT), the issues and practices associated with managing network security, Identify the practices, tools, and methodologies associated with assessing network security, the components of an effective network security program. Phishing attacks on sites, digital advertising spoofing, Search indexing

UNIT – V: CYBER SECURITY INCIDENTS AND DISASTERS

Cyber security Incidents and Disasters: Hacking attempts, web site defacement, denial of service attacks, information disclosures, natural and man–made cyber security disasters, the components of a cyber security contingency planning program, contingency strategies including data backup and recovery and continuity of cyber security operations, the components and structure of an effective cyber security disaster recovery program, the components and structure of an effective cyber security incident response program. Digital ecosystem, Cloud computing.

TEXT BOOKS:

1. Nina Godbole, SunitBelapure(2016), *Cyber Security*, Wiley India, New Delhi.
2. AvantikaYadav (2017), *Cyber security*, Narosa Publishing House Pvt Ltd. New Delhi.
3. Tim Mather, SubraKumaraswamy, ShahedLatif (2010), *Cloud Security and Privacy*, OREILLY Media, USA.



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

582

REFERENCE BOOKS:

1. Nina Godbole, *Information Systems Security*, Wiley India, New Delhi.
2. Kenneth J. Knapp, *Cyber Security & Global Information Assurance*, Information Science Publishing.
3. Thomas J Mowbray (2016), *Cyber Security Managing Systems, Conducting Testing and Investigating Intrusions*, Wiley India Pvt. Ltd, New Delhi.

DIGITAL TOOLS:

1. [https://mrcet.com/pdf/Lab%20Manuals/IT/CYBER%20SECURITY%20\(R18A05\).pdf](https://mrcet.com/pdf/Lab%20Manuals/IT/CYBER%20SECURITY%20(R18A05).pdf)
2. <http://www.uptti.ac.in/classroom-content/data/cyber%20security%20unit-3.pdf>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	3	3	3	2	2
CO2	3	3	3	3	2	2
CO3	3	3	3	3	2	2
CO4	3	3	2	3	2	2
CO5	3	3	2	3	2	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

583

COURSE CODE	COURSE TITLE	CATEGORY	T	P	CREDIT
24PCCSP4	LAB: WEB DESIGNING	SEC LAB	–	2	1

YEAR	SEMESTER	INTERNAL	EXTERNAL	TOTAL
II	IV	40	60	100

Curriculum Design and Development	Employability		✓	Skill Oriented		✓	Entrepreneurship			✓
	National	✓	Local	✓	Regional	✓	Global			✓
Curriculum Enrichment	Professional Ethics		Gender		Environment and Sustainability		Human Values		Other Values	✓

COURSE DESCRIPTION:

Web Designing lab introduces a comprehensive overview of the HTML and PHP.

COURSE OBJECTIVES:

1. To develop the skill & knowledge of Web page design.
2. To define the principle of Web page design.
3. To acquire programming skills using PHP in Web designing.
4. Visualize the basic concept of HTML
5. Recognize the elements of HTML

COURSE OUTCOMES (COs):

After the completion of the course, the students will be able to

No.	Course Outcomes	Knowledge Level (According to Bloom's Taxonomy)
CO 1	understand the basic concept of HTML	Upto K5
CO 2	identify the tools which will be suitable for the requirement of the webpage.	Upto K5
CO 3	implement HTML tools and Style Sheets effectively in the Web Pages	Upto K5
CO 4	apply PHP to design and effectiveness of the Web Pages	Upto K5
CO 5	design the web page using PHP attributes	Upto K5

K1– KNOWLEDGE (REMEMBERING), K2–UNDERSTANDING, K3–APPLY,
K4–ANALYSE, K5–EVALUATE, K6–CREATE



SOURASHTRA COLLEGE, MADURAI – 625004

(An Autonomous Institution Re-accredited with 'A' grade by NAAC)

M.Com. COMPUTER APPLICATIONS – SYLLABUS

(Under CBCS based on OBE)

(For the students admitted from the academic year 2024 – 2025 onwards)

584

LAB: WEB DESIGNING

LIST OF PROGRAMS

1. Write a HTML program to design a Bio-Data.
2. Write a HTML program to create a webpage with four frames (Picture, table, list, and hyperlink).
3. Write a HTML program to create a web page using style sheet.
4. Write an HTML code to display your education details in a tabular format.
5. Write HTML code to create a Web page of pink colour and display a moving message in red colour.
6. Write a HTML program to create a webpage of pink color and display a moving message in red color.
7. Write a HTML program to illustrate List tags.
8. Write PHP program to get name of the user from a form and show greeting text.
9. Write PHP program for Age calculator.
10. Write a PHP program to design personal information.
11. Write a PHP program to calculate Date and Time function.
12. Write a PHP program to design Curriculum Vitae.
13. Write a PHP program to generate a list of first 20 prime numbers

TEXT BOOKS:

1. Mastering, (2014.), *HTML5 and CSS3*, Made Easy!, TeachUComp Inc.
2. Mario Lurig .(2018). *PHP Reference: Beginner to Intermediate PHP5*. First Edition

REFERENCE BOOKS:

1. Dr.VakaMuraliMohan, S.Pratap Singh (2013), *The Modern Approach to Web Technologies* , Scirech Publication ,1st Edition
2. Ivan Bayross,(2018) *Web Technologies part II*, BPB publications, New Delhi, 2nd Edition.
3. Adams, A. (2022). *PHP Programming–The Complete Guide*. Code Academy. First Edition.
4. Altaf Hussain. (2016). *Learning PHP 7 High Performance Paperback*. Packt Publishing Limited. Fourth Edition

DIGITAL TOOLS:

https://www.w3schools.com/html/html_intro.asp

<https://www.javatpoint.com/what-is-html>

Mapping of CO with PSO

	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	3	2	2	3
CO2	3	3	2	3	3	3
CO3	3	2	2	2	2	2
CO4	3	3	2	2	3	3
CO5	3	3	3	3	3	2

3. Advanced Application 2. Intermediate Development 1. Introductory Level