



Programme and Course Outcomes



GOVERNMENT COLLEGE NEDUMANGAD

**UNDER GOVERNMENT OF KERALA
NEDUMANGAD, THIRUVANANTHAPURAM, KERALA- 695541
*Accredited by NAAC with 'B' Grade***

Government college Nedumangad.

Course Outcomes, Program Outcomes and Program Specific Outcomes

1. Commerce
2. History
3. Economics
4. English
5. Hindi
6. Mathematics
7. Physics (PCA)
8. Political Science
9. Physical Education
10. Malayalam

DEPARTMENT OF COMMERCE

Programme : B.Com

SEMESTER – I

Foundation Course I: CO 1121 – *METHODOLOGY AND PERSPECTIVES OF BUSINESS EDUCATION*

Course outcome:

1. Understand business and its role in society.
2. Identify the significance of entrepreneurship
3. Comprehend the business environment
4. Initiate the students to undertake business activities
5. Ensure a holistic, comprehensive and integrated perspective to business education.

Core Course I: CO 1141 – *ENVIRONMENTAL STUDIES*

Course outcome:

1. Enable the students to acquire basic ideas about environment.
2. Aware about the need and importance of environmental protection.
3. Develop knowledge and understanding of the environment and enable the students to contribute towards maintaining and improving the quality of the environment.

Core Course II: CO 1142 - *Functional Application of Management*

Course outcome:

1. Familiarise the students with various aspects of organizational management.
2. Give an understanding on the functional application of management.

Complementary Course I: CO 1131 – MANAGERIAL ECONOMICS

Course outcome:

1. Familiarise the students with the economic principles and theories underlying various business decisions.
2. Equip the students to apply the economic theories in different business situations.
3. Acquaint the students with the application of economics in the context of managerial decision making.

SEMESTER – II

Foundation Course II: CO 1221-*INFORMATICS AND CYBER LAWS*

Course outcome:

1. Review the basic concepts and fundamental knowledge in the field of informatics.
2. Aware about the nature of the emerging digital knowledge society and the impact of informatics on business decisions.
3. Awareness about the cyber world and cyber regulations.

Core Course III: CO 1241 - *BUSINESS COMMUNICATION AND OFFICE MANAGEMENT*

Course Outcome:

1. Develop communication skills among students relevant to various business situations
2. Impart knowledge on the management of Modern Offices.
3. Explore the talents in business communication and enable the students to understand the appointment and role of a Company Secretary in business.

Core Course IV: CO 1242 - *FINANCIAL ACCOUNTING*

Course Outcome

1. Familiarize the students with Accounting Standards.
2. Equip the students to prepare the accounts of special business areas.

3. Impart knowledge and understanding of the principles and concepts of financial accounting and develop the skill required for the preparation of financial statements and accounts of various business areas.

Complementary Course II: CO 1231 - *BUSINESS REGULATORY FRAMEWORK*

Course outcome:

1. Provide a brief idea about the framework of Indian business Laws
2. Enable the students to apply the provisions of business laws in business activities
3. Motivate the students to take up higher studies in business Laws

SEMESTER – III

CORE COURSE V: CO 1341- *ENTREPRENEURSHIP DEVELOPMENT*

Course outcome:

1. Familiarise the students with the latest programs of the government authorities in promoting small and medium industries.
2. Impart knowledge regarding how to start new ventures.
3. Equip the students to have a practical insight for becoming an entrepreneur.

Core Course VI CO 1342: *COMPANY ADMINISTRATION*

Course Outcome:

1. Familiarise the students about the salient provisions of Indian Companies Act 2013.
2. Acquaint the students about Management and Administration of Companies, Compliance requirements, investigation into the affairs of the company and Winding up procedure.

Core Course VII: CO 1343 - *ADVANCED FINANCIAL ACCOUNTING*

Course Outcome:

1. Create awareness of accounts related to dissolution of partnership firms.
2. Acquaint students with the system of accounting for different branches and departments.
3. Enable students to prepare accounting of consignments and joint venture.
4. Equip the students with the preparation of accounts of various business areas.

Complementary Course IV: CO 1331- *INFORMATION TECHNOLOGY IN BUSINESS*

Course Outcome:

1. Review the basic concepts and functional knowledge in the field of IT.
2. Expose the students to computer application in the field of Business.
3. Expose the students to the innovations in information technology and its potential application in business.

Elective Course I: Stream 1 – FinanceCO 1361.1 - *FINANCIAL MANAGEMENT***Course Outcome:**

1. Familiarise the students with the conceptual framework of financial management.
2. Enable the students to understand the practical application of financial management.
3. Provide conceptual and analytical insights to make financial decisions skilfully.

SEMESTER – IVCore Course VIII CO 1441 *Capital Market***Course Outcome:**

1. Provide the students with a clear-cut idea about the functioning of Indian Capital Market
2. Provide an in-depth knowledge on Capital Market

Core Course IX CO 1442 *BANKING THEORY AND PRACTICE***Course Outcome:**

1. Provide basic knowledge of the theory and practices of banking.
2. Familiarize the students with the changing scenario of Indian Banking.
3. Expose the students to the changing scenario of Indian banking.

Core Course X: CO 1443 - *CORPORATE ACCOUNTING***Course Outcome:**

1. Enable the students to develop awareness about corporate accounting in conformity with the provisions of Companies Act, IAS and IFRS.
2. Enable the students to prepare and interpret financial statements of joint stock companies in different situations.
3. Expose the students to the accounting practices prevailing in the corporate.

Complementary Course III: CO 1431 - *BUSINESS STATISTICS***Course Outcome:**

1. Enable the students to gain understanding of statistical techniques as are applicable to business.
2. Enable the students to apply statistical techniques for quantification of data in business.
3. Develop the skill for applying appropriate statistical tools and techniques in different business situations.

Elective Course II: Stream 1 - FinanceCO 1461.1 - *PROJECT FINANCE***Course Outcome:**

1. Provide knowledge on the concept of project finance.

2. Highlight the sources and application of finance.
3. Enable the students to learn the process and issues relating to preparation, appraisal, review and monitoring of projects.

SEMESTER – V

Core Course: XI: CO – 1541: *FUNDAMENTALS OF INCOME TAX*

Course Outcome:

1. Familiarize the students about the fundamental concepts of Income Tax
2. Enable the students to acquire the skills required to compute Gross Total Income with more emphasis on income from salary and income from house property.
3. Impart the basic knowledge and understanding of the concepts and practices of Income Tax Law in India.

Core Course XII: CO 1542 - *COST ACCOUNTING*

Course Outcome:

1. Familiarize the students with cost concepts.
2. To make the students learn cost accounting as a separate system of accounting
3. Impart knowledge of cost accounting system and acquaint the students with the measures of cost control.

Core Course XIII: CO 1543- *ACCOUNTING FOR SPECIALISED INSTITUTIONS*

Course Outcome:

1. Familiarise the students with the accounting practices prevailing in various specialised institutions.
2. Acquaint the students with the preparation of final accounts of the specialized
3. Develop the skill for the preparation of final accounts of specialised institutions and enable the students to acquire professional competence in accounting.

Open Course 1. CO 1551.3 *CAPITAL MARKET OPERATIONS*

Course Outcome:

1. Create an interest among students towards stock market investment
2. Familiarize the students with capital market operations

Elective Course III: Stream 1 - Finance

CO 1561.1 Financial Markets and Services

Course Outcome:

1. Provide a general awareness about the financial markets and services
2. Familiarize the students with the structure and functioning of the financial markets and financial service sector in India

SEMESTER – VI

Core Course XIV: CO 1641 – *AUDITING*

Course Outcome:

1. Understand the principles and practice of auditing
2. Familiarise students with the principles and procedure of auditing.
3. Enable the students to understand the duties and responsibilities of auditors.

Core course XVI: CO 1643 - *MANAGEMENT ACCOUNTING*

Course Outcome:

1. Develop professional competence and skill in applying accounting information for decision making.
2. Equip the students to interpret financial statements with specific tools of management accounting.
3. Enable the students to have a thorough knowledge on the management accounting techniques in business decision making.

ELECTIVE COURSE VI: CO 1661.6 *MARKETING MANAGEMENT*

Course Outcome:

1. Provide knowledge of the concepts, principles, tools and techniques of marketing.
2. Help the students to understand marketing concepts and its applications
3. Make the students aware of modern methods and techniques of marketing.

CO 1661.1 – *INCOME TAX LAW AND ACCOUNTS*

Course Outcome:

1. Equip the students with the practical skill and knowledge of Income Tax Law and Accounts.
2. Enable the students to understand the provisions of Income Tax for computing Total Income and Tax Liability of various persons.
3. Familiarize the students with the procedure of income tax assessment.

Program Outcome

The Bachelor of Commerce aims to provide students with the knowledge, tools of analysis and skills with which to understand and participate in the modern business and economics world, to prepare them for subsequent graduate studies and to achieve success in their professional careers

1. Graduates of this degree will be knowledgeable across the core requirements of the degree.

Graduates will be able to:

- ❖ Demonstrate knowledge of major theories and models in key areas of organisational behaviour.
- ❖ Analyse organisational problems and generate realistic solutions based on current academic research in organisational behaviour
- ❖ Demonstrate a knowledge of macroeconomic theory as it relates to current macroeconomics policy and issues

- ❖ Demonstrate a knowledge of microeconomic theory as it relates to markets, firms, government policy, and resource allocation
- ❖ Demonstrate a knowledge of key concepts underlying quantitative decision analysis
- ❖ Apply basic mathematical and statistical skills necessary for analysis of a range of problems in economics, actuarial studies, accounting, marketing, management and finance

2. Graduates of this degree will be knowledgeable of an area of specialisation in the Faculty.

Graduates, subject to their areas of specialisation, will be able to:

- ❖ Demonstrate knowledge of the theories, concepts and findings of the Faculty specialisations

3. Graduates of this degree will be knowledgeable of domestic and international economic and organisational environments.

Graduates will be able to:

- ❖ Analyse commerce /business issues in the international contexts
- ❖ Compare international contexts and issues through the lens of the commerce disciplines
- ❖ Evaluate national and international debates and discussions on economic, commercial, and business issues

4. Graduates of this degree will be knowledgeable of disciplines outside the faculty.

Graduates will be able to:

- ❖ Demonstrate an understanding of the concepts, principles, theories and arguments of their selected areas of study outside the core disciplines of economics and business.

Program Specific Outcome

Graduates of the degree will have the capacity to:

- ❖ Work collaboratively and productively in groups.
- ❖ Use basic mathematical and statistical tools of analysis.
- ❖ Apply critical and analytical skills and methods to the identification, evaluation and resolution of complex problems.
- ❖ Engage confidently in self-directed study and research.
- ❖ Communicate ideas effectively in both written and oral formats.
- ❖ Operate effectively in multicultural and diverse environments.
- ❖ Use effectively information from diverse sources.
- ❖ Be proficient in the use of appropriate information technologies.
- ❖ Critically evaluate new ideas, research findings, methodologies and theoretical frameworks in a specialised field of study.
- ❖ Recognise and understand the ethical responsibilities of individuals and organisations in society.
- ❖ Analysis and evaluation of evidence in the commerce disciplines in support of an argument, proposition or solution to problems in organisations and in

society.

- ❖ Strategic and critical thinking in relation to business and commerce related issues.
- ❖ Knowledgeable across disciplines.
- ❖ Synthesis of knowledge across disciplines.
- ❖ Problem solving through the application of appropriate theories, principles and data.
- ❖ Skilled in the use of computer systems and software used in commerce and business through practical assignments, exercises and demonstrations.
- ❖ Aware of cultural differences and able to account for these in developing solutions to commerce related problems.
- ❖ Effective communicators on matters related to economics and commerce
- ❖ Participants in discussion and debate on national and international issues related to the disciplines of the faculty.
- ❖ Effective decision makers in business and commerce.
- ❖ Ethical and collegial in professional practice.

Programme :M.Com

SEMESTER 1

PAPER 1 – *CONTEMPORARY MANAGEMENT CONCEPTS AND THOUGHT.*

Course Outcome:

1. Create awareness and interest among the students in modern management concepts and thought
2. Enable the students to choose appropriate functional area of management in their future studies.

PAPER 2-*MANAGEMENT INFORMATION SYSTEM*

Course Outcome:

1. Make the students aware of the need for information systems, its application in managerial decision making.
2. Make the students aware of the recent trends in information system.

PAPER 3 – *RESEARCH METHODOLOGY*

Course Outcome:

1. Provide an insight into the fundamentals of social science research
2. Understand the need, significance and relevance of research and research design
3. Acquire practical knowledge and required skills in carrying out research

PAPER 5- *ADVANCED CORPORATE ACCOUNTING*

Course Outcome:

1. Make the students to understand International Financial Reporting

Standards and tools & techniques in various accounting situations.

2. Expose the students to advanced accounting issues and practices like Investment, Consolidation of financial statements, Liquidation etc.

SEMESTER II

PAPER 1- *E-BUSINESS & CYBERLAWS*

Course Outcome:

1. Equip the students with the emerging trends in business
2. Equip the students to introduce and explore the use of information technology in all aspects of business
3. Familiarise with the students cyber world and cyber regulations

PAPER 2- *BUSINESS ETHICS AND CORPORATE GOVERNANCE*

Course Outcome:

1. Impart knowledge on Business Ethics and Social responsibility of Business
2. Provide knowledge of various factors influencing the corporate sector

PAPER 3- *QUANTITATIVE TECHNIQUES*

Course Outcome:

1. Impart expert knowledge in the application of quantitative techniques in research.
2. Impart knowledge in the use of SPSS in processing and analysis of data

PAPER 4-*INTERNATIONAL BUSINESS*

Course Outcome:

1. Provide an understanding of international business and its various dimensions

PAPER 5-*STRATEGIC MANAGEMENT*

Course Outcome:

1. Create a conceptual awareness on various strategies
2. Familiarise students with the formulation and implementation of strategies

SEMESTER III

PAPER 1-*INCOME TAX PLANNING AND MANAGEMENT*

Course Outcome:

1. Expose the students to the latest provisions of Income Tax Act.
2. Identify the Tax Planning and Assessment Procedures for Individuals, Firms and Companies.

PAPER 2-*SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT*

Course Outcome:

1. Provide the students a comprehensive understanding on the areas of security analysis and portfolio management and acquainting them with various tools and techniques for making prudent investment decisions.
2. Identify the principles of security analysis and the development of skills in portfolio management.
3. Understand the inputs from IFM and Financial services

PAPER 3- *STRATEGIC FINANCIAL MANAGEMENT*

Course Outcome:

1. Convey the basic concepts of strategic financial management.
2. Impart knowledge on strategies that support corporate finance.

PAPER 4-*Advanced Cost and Management Accounting*

Course Outcome:

1. Comprehend and familiarize the established techniques, methods and practices in advanced Cost and Management Accounting to the students.
2. Introduce the evolving dynamic Cost and Management Techniques developed to support the emerging business models.

SEMESTER IV

PAPER 1-*INDIRECT TAX LAWS AND PRACTICES*

Course Outcome:

1. Gain expert knowledge of the principles and laws relating to the Service Tax, Central Excise Duty, Customs duty and Central Sales Tax

PAPER 2- *INTERNATIONAL FINANCE*

Course Outcome:

1. Familiarise the students with the international financial markets and instruments.
2. Create awareness on the global financial markets and institutions
3. Convey an understanding on the management of funds by MNCs

PAPER 3-*MANAGEMENT OPTIMIZATION TECHNIQUES*

Course Outcome:

1. Impart knowledge on various facets of project management viz. project preparation, feasibility study as well as project scheduling and monitoring.
2. Convey basic principles of project optimization using various Operational Research tools.

PAPER 4-*FINANCIAL STATEMENTS- INTERPRETATION AND REPORTING*

Course Outcome:

1. Familiarize the students about the new developments in the reporting of financial statements.

2. Equip the students with the techniques to interpret the financial statements

Program outcomes

The students will develop an ability to apply knowledge acquired in problem solving

- The students will be ready for employment in functional areas like Accounting, Taxation, Banking, Insurance and Corporate Law
- Students will be able to pursue their career in teaching and research
- Students will exhibit inclination towards pursuing professional courses such as CA/ CS/ CFA etc.
- Students will be able to handle computer based software in areas of Accounting, Taxation, and Banking
- Ability to work in teams with enhanced communication and inter-personal skills
- Ability to start entrepreneurial activities
- An inclination towards lifelong learning and acquiring contemporary knowledge
- An informed, aware and active citizen

Program Specific Outcomes:

- After completion of the programme students will have an in-depth knowledge of Accounting, Finance, Taxation and Business laws
- The students will have a basic understanding in Business Mathematics, Economics, Statistics, Operations Research and Management
- The program prepares the students to build competencies for research activities
- The program aims to equip the students with professional skills, inter personal skills and entrepreneurial qualities
- To inculcate ethical values, team work, leadership and managerial skills

DEPARTMENT OF HISTORY

Methodology and Perspectives of Social Science

Course Outcome

CO - Familiarize the main concerns of Social Science disciplines

Cultural formation of the Pre-Modern World

CO – Aware about the conceptual and general issues regarding culture and civilization of the ancient period

Evolution of Early Indian Society and Culture

CO – familiarize with the heritage of India

Medieval India Socio-Cultural Processes

CO – Equip with an idea on the Social – Cultural and administrative features during the medieval period

History of the Modern World (Part 1)

CO – Familiarize about the changes in the history of modern world

Major Trends in Historical Thoughts and Writings

CO- Enable to understand the history of historical writings

Colonialism and Resistance Movements in India

CO – Analyze the circumstances that led to the establishment of colonialism in India and analyze the resistance movements against the British

History of Modern World (Part 2)

CO – Gets an idea about the First and Second World Wars and evaluate the achievements and failures of the international organizations

History of Pre-Modern Kerala

CO- Gets an idea on early and medieval Kerala History, Society, Polity and Economy

Making of Indian Nation

CO- Aware about the various stages in the Indian National movements

Making of Modern Kerala

CO – Familiarize about European advances, Socio-Political agitations, social reform movements and the formation the State of Kerala

Major Trends in Indian Historical Thought and Writings

CO – To understand the origin and development of historical writings in India

Contemporary India

CO- Provide with a graphic account of the circumstances that led to the formation of Indian Union

The Twentieth Century Revolutions

CO – Introduce the four Major Revolutions of the 20th century (Russian, Chinese, Cuban and Vietnamese)

Introduction to Archaeology (Open Course)

CO - Introduces the basic awareness of the development of Archaeology, Exploration, and Museums etc.

Project Work

CO – to understand any social Problem relevant to the study of History

Program Outcomes

(a) An understanding of the past and in depth of knowledge concerned with specific historical periods

(b) Giving an aid to the students for knowing an understanding about the cultures and traditions of the societies

(c) show students' familiarities with major events, personalities and issues related to the period being taught and studied

Program Specific Outcomes

Understanding the Students an elementary awareness about the chronological sequence of world events and its social and cultural interaction with the humans through ages.

HY 1141 Core I Methodology and perspectives of social sciences

- Intends to familiarize the students with broad counters of Social Sciences and its methodology
 - To familiarize the main concerns of social science disciplines
 - To know the importance of interdisciplinary study
- 6 theory classes of one hour per week over a semester

HY 1131.1 Complementary I-History of Modern India

- Provide the students with a graphic account of the circumstances that led to the nationalism and various movements
 - Give outline of Freedom movement of India
 - Salient features of Indian Constitution
 - To know the Social reformers and Social movements
- 3 theory classes of one hour per week over a semester

HY 1131.2 Complementary II-History of Modern World

- Give significance of unification movements in Europe,
 - To explain Latin American revolutions
 - To give an understanding of regional associations
- 3 theory classes of one hour per week over a semester

HY1241 Core II-Cultural Formations of Pre Modern World

- Enables the students to engage with conceptual and general issues regarding culture
 - Explains civilization of the ancient period, inculcate an awareness among the students about the cultural heritage of mankind
 - Gives a picture of socio cultural and political developments in the ancient world
- 6 theory classes of one hour per week over a semester

HY1231.1 Complementary III-History of Modern India

- Gives an introduction to the students about the basics of modern India
 - Explains the history of freedom movement of India
 - Instructs salient features of Indian constitution
- 3 theory classes of one hour per week over a semester

HY1231.2 Complementary IV- History of the Modern world (1901-1920)

Explains the following main areas:

- confrontation among European powers
- Colonialism and its impact
- First world war and its impact

3 theory classes of one hour per week over a semester

HY1321 Foundation course – Informatics

Explains the basic features of Informatics

- Update and impart basic skills in informatics relevant to the emerging knowledge society
- Equip the students effectively to utilize the digital knowledge for their course
- Develop the skills to enable students to use digital knowledge resources I learning

4 theory classes of one hour per week over a semester

HY1341 Core III -Evolution of Early Indian Society and Culture

- Analyze the salient features of prehistoric and proto historic culture in India
- Trace the evolution of India Culture with
- Gives special reference to the society and the polity of ancient period

HY1331.1 Complementary V – History of Modern India (1921-1947)

- Gives an introduction to modern India
- Explains different stages of nationalism
- Describes the features of Gandhian Era
- Explains how India got freedom.

HY1331.2 Complementary VI- History of the Modern World (1921-1945)

- Highlights the importance of Twentieth century revolution and its impact on world nations
- Second world war
- UNO

3 theory classes of one hour per week over a semester

HY1441 Core IV –Medieval India: Socio-Cultural Processes

- Equip the students an idea on the Social Cultural and Administrative features during the medieval period
- Make the students aware of the linkage effect of this period in subsequent centuries
- Socio cultural development in North India

5 theory classes of one hour per week over a semester

HY1442 Core V- History of the modern World part 1

- familiarize the students about the changes in the history of the modern world
- to create an understanding among students about liberal ideas and freedom struggle
- political changes and its consequences

4 theory classes of one hour per week over a semester

HY1431.1 Complementary VII- History of Modern India (after 1948)

- provide the students with a graphic account of the circumstances that led to the formation of Indian union
- achievements of contemporary India

- Economic development of India
- 3 theory classes of one hour per week over a semester

HY1431.2 Complementary VIII- History of Modern World (after 1946)

- post world war developments including cold war
 - significance of UNO
 - highlight the regional groupings including SAARC, ASEAN etc
- 3 theory classes of one hour per week over a semester

HY1541 Core VI Major Trends in historical thoughts and writings

- enable the students to understand the history of historical writings
 - Know new theories and concepts in history.
 - give new trends in historical writings
- 4 theory classes of one hour per week over a semester

HY1542 Core VII Colonialism and Resistance movements in India

- Review the circumstances that led to the establishment of colonialism in India
 - The resistance movement against the British
 - Popular resistance movements in India
- 4 theory classes of one hour per week over a semester

HY1543 Core VIII History of Modern World – Part II

- traces the significance of the unification movements in Europe
 - idea about the world wars, international organizations
 - Disarmament and its importance
- 3 theory classes of one hour per week over a semester

HY1544 Core IX History of Pre Modern Kerala-

- to know about early developments in Kerala
 - highlights social changes
 - political developments in Kerala
- 4 theory classes of one hour per week over a semester

HY1545 Core X Making of Indian Nation

- know growth of Nationalism
 - Gandhian era
 - An introduction Indian constitution etc
 - Green revolution in India
- 3 theory classes of one hour per week over a semester

HY1551.1 Open Course Empowerment of Women with Special Reference to India

- enable the students changing role and status of women in historical perspective, feminism etc
- to know the position of women through the ages
- women empowerment through political and social achievements

HY1641 Core XI Making of Modern Kerala

- explore the formation of Kerala from colonial period
- deal with socio-economic - cultural and political development of Kerala
- to know the legacy of social reformers

5 theory classes of one hour per week over a semester

HY1642 Core XII Major Trends in Indian historical Thought and writings

- enable the student to understand the origin and development of historical writings in India
- Create awareness among the Students about the Influence of Ideas and Theories.
- To know the recent developments in Historical writings

5 theory classes of one hour per week over a semester

HY1643 Core XIII Contemporary India

- provide the students with a graphic account of the circumstances that led to the formation of Indian union,
- achievements of contemporary India
- to highlight India's foreign policy

5 theory classes of one hour per week over a semester

HY1644 Core XIV the twentieth century revolutions

- Introduce four major revolutions of the 20th century with its legacy.
- A brief introduction to Chinese Revolution
- Russian revolution and its impact

4 theory classes of one hour per week over a semester

HY1645 Core XIV Project work

- helps to know the basics of thesis writing
- intend to increase the research attitude of the students
- give importance Social History

HY1661.3 Elective Contemporary world

- bring out the significant developments in international relations
- know India's foreign policy
- to know Non Alignment Movement and India's role in it

3 theory classes of one hour per week over a semester

Department of Economics.

Methodology and perspectives of social sciences intends to familiarises the common methodology of social sciences with which the student can understand and explain a social phenomenon with clarity and precision. It also gives the students an insight into the origin and

development of economic ideas and their interrelations.

EC02 Microeconomics – I enables the students to analyse how individual decision-makers, both consumers and producers, behave in a variety of economic environments.

EC03 Informatics provides basic informatics skills and attitudes relevant to the emerging knowledge society and also equip the students to effectively utilize the digital knowledge resources for their chosen courses of study.

EC04 Microeconomics – II provides the students an understanding of the various market structures and also the normative aspects of microeconomics and also the analysis of real world characterized by uncertainty and asymmetric information.

EC05 Basic Tools for Economics – I facilitates the students to understand economic concepts with the aid of mathematical tools and enable them to quantify the variables.

EC.06 Macroeconomics - I makes the students understand the theoretical framework and the working of an economy as a whole and also about the basic macroeconomic concepts and policy alternatives used in controlling the economy.

EC.07 Money and Modern Banking gives an idea to the students about the evolution and role of money in the economy and also provides an insight into the innovative role of banks in the changing economic set up.

EC.08 Macroeconomics – II helps the students to understand the theoretical development of the macroeconomic issues of inflation, unemployment and business fluctuations.

EC.09 Economics of Growth and Development enable the students understand the basic concepts of Development and Growth ,provides the theoretical framework for growth and development discourses under different schools of economic thought and a better insight and knowledge on issues and challenges on economic development.

EC.10 Indian Economy provides the students an understanding of the various issues of the Indian Economy, enabling them to comprehend and critically appraise current issues and problems of Indian economy.

EC.11 Public Economics Intends to provide basic information to students on the scope of Public Economics, significance of government and its functions, governmental finance and its economic impacts, and budgeting with special reference to India.

EC.12 Human Resource Management (HRM) enables the students to understand the significance of Human Resource in constituting economic growth.

EC.12 Kerala Economy makes the students understand the structural changes, sectoral aspects and features of the Kerala Economy and also the emerging trends and issues of Kerala Economy.

EC.13 Financial Economics familiarises the students with the basic concepts in financial economics, role of finance in the operation of an economy, the operation of the Indian Financial System and the activities in the financial markets.

EC.14 Basic Tools for Economics equip the students with statistical tools and techniques and enable them to apply these tools in economics.

EC.15 International Economics enables the students to understand the basic concepts and theories of international trade and also an understanding of the emerging trends, issues and policies in the field of international Economic system.

EC.16 Industrial Economics provides the students an understanding of the aspects of industrial structure and location, theories related to Industrial economics and the role of policy in the context of competition, industrial policies and regulation.

M.A Economics - Course Outcome

EC001 Microeconomics - I equips the students to analyse how individual decision-makers, both consumers and producers, behave in a variety of economic environments.

EC.002 Economics of Growth and Development makes the students understand the theoretical dynamics and practical strategies of growth and development.

EC.003 Indian Economic Policy-I helps the students to analyse the various issues of the Indian economy with a policy perspective.

EC.004 Quantitative Methods – I enables the students to apply quantitative techniques in finding solutions to economic problems.

EC.005 Microeconomics - II provides the students an understanding of the normative aspects of microeconomics and also the analysis of real world characterized by uncertainty and asymmetric information.

EC.006 Economics of Social sector and Environment gives the students an understanding and application of the key economic concepts in the context of sectors like education, environment and healthcare.

EC.007 Indian Economic Policy Kerala's economy provides an understanding of the sectoral development that has taken place in Indian economy as well as in Kerala economy with a view to look into the national and regional issues with a policy perspective.

EC.008 Research Methodology and Econometrics provides basic econometric methodology which enables them to apply real economic data by means of empirical models.

EC.009 Macroeconomics -I makes the students understand the structural underpinnings of theoretical development of macroeconomic thoughts and their application.

EC.010 International economics -I provides a framework for consistent reasoning about international flow of goods, factors of production, and financial assets, trade policy and monetary in the open economy.

EC.011 Public Economics makes the students understand the theoretical and empirical dimensions of public goods and public choice, fiscal instruments and fiscal federalism with special reference to India.

EC.012 Macroeconomics – II helps the students to understand the latest development of macroeconomics in dealing with issues like inflation, unemployment and business fluctuations.

EC.013 International economics – II familiarise the students with the theories of international finance flows, determination of interest and exchange rates in interconnected economies, macroeconomic policies available to the government and the nature of the financial crisis.

EC.014 Finance and capital markets economics provides the students an understanding of financial institutions, financial markets, financial instruments and financial services.

EC.015 Agricultural Economics equip the students with the knowledge and skills required to analyse the agricultural economic issues for efficient use of scarce resources in the agricultural sector and its development, consistent with the interest of all stakeholders.

EC.016 Industrial Economics provides the students to use theoretical models to understand industries and regulatory decision making, basic issues in the industrial development of India and international experience of industrial progress.

DEPARTMENT OF ENGLISH

Courses Offered

LANGUAGE COURSES FOR SEMESTER I TO IV (B.A/B.SC)

First Semester

1. EN1111.1 Listening, Speaking and Reading

2. EN1121 Writing on Contemporary issues(FOUNDATION COURSE1)

Second Semester

3. EN1211.1 Environmental studies

4. EN1212.1 Modern English Grammar and Usage

Third Semester

5. EN1311.1 Writing and Presentation Skills

Fourth Semester

6. EN1411.1 Readings in Literature

Language courses

First Semester EN1111.1 Listening, Speaking and Reading (B.A/ B.Sc/B.Com)

CO1. Develop in learners the ability to understand English in a wide range of contexts

CO2. Enhances general standard of spoken English with the help of phonetic training

CO3. Preparing the learners to face situations with confidence and to seek employment in the modern globalized world

EN1121 Writing on Contemporary issues (FOUNDATION COURSE1) (B.A/ B.Sc)

CO1. Enable students to develop an overall empathetic attitude towards Contemporary issues of modern world

CO2. Encourage the students to read literary pieces critically.

CO3. Sensitize the students to the major issues in society and the world.

Second Semester

EN1212.1 Modern English Grammar and Usage (B.A/ B.Sc/B.Com)

CO1. Helps the students improve their verbal communication skills.

CO2. Equip students with the necessary skill and knowledge to produce grammatically and idiomatically correct language help them minimize mother tongue influence.

EN1211.1 Environmental studies (B.A/ B.Sc)

CO1. Sensitize students towards the threats faced by environment

CO2. To enable and ensure possible means & methods for environmental protection through student community.

Third Semester(B.A/ B.Sc/B.Com)

EN1311.1 Writing and Presentation Skills

CO1. Students are trained in academic writing and other soft skills which will be helpful for them in shaping a successful career.

CO2. Help them master writing techniques to meet academic and professional needs.

CO3. Improves their reference skills, take notes, refer and document data and materials and to prepare and present seminar papers and project reports effectively.

Fourth Semester(B.A/ B.Sc/B.Com)

EN1411.1 Readings in Literature

CO1. They are able to understand and appreciate literary discourse.

CO2 Students are sensitized to the aesthetic, cultural and social aspects of literature.

CO3 They get acquainted with the best pieces of literary writing and critically analyze literature as a cultural and interactive phenomenon.

DEPARTMENT OF HINDI

AIM/OBJECTIVE OF THE COURSE

Common Course – Hindi (for B.A/B.Sc)

Prose and OneAct Plays :- To sensitize the student to the aesthetic and cultural aspects of literary appreciation and analysis. To introduce modern Hindi prose to the students and to understand the cultural, social and moral values of modern Hindi Prose

Fiction, Short Story & Novel:- To guide the students to the world of Hindi Fiction & to develop the capacity of creative process and communication skills.

Poetry & Grammar :- To sensitize the student to the aesthetic and cultural aspects of literary appreciation and to introduce poetry and Grammar.

Drama, Translation & Correspondence:- To appreciate and analyze the dramatic elements in literature. To understand the distinct features of Hindi drama, the qualities of a translator and to familiarize official correspondence in Hindi.

Common course Bcom

Prose, Commercial Hindi and Letter Writing:- To understand and appreciate Hindi Prose, To enrich the knowledge of commercial letter writing and the form and style of other letters.

Poetry, Translation, Technical Terminology & Communication:- To sensitize the student to the aesthetic and cultural aspects of literary appreciation and to introduce Hindi poetry. For communicative skills in Hindi and English through the Translation. To familiarize the Technical terms and terms used in offices. To enrich the development of communicative skills.

DEPARTMENT OF MATHEMATICS

BSc Mathematics

Courses offered:

SemI Code: MM1141, Methods of Mathematics

Sem-II Code: MM1221 ,Foundations of Mathematics

Sem III Code: Mm1341, Methods of Algebra and Calculus –I

Sem IV Code: MM1441: Methods of Algebra and Calculus -II

Sem V Code : MM1541:- Real Analysis

Code : MM1542:- Complex Analysis
Code : MM1543:- Differential equations and their applications.
Code: MM1544 :- Numerical Methods
Code: MM1545 :- Computer Programming-I
Code: MM1551. Operations Research (open course)
Sem VI
Code : MM 1641:- Real Analysis-II
Code: MM1642:- Linear Algebra
Code : MM1643:- Vector Analysis
Code: MM1644:- Graph Theory
Code: MM1645:- Computer Programming –II Practical
Code: MM1651:- (Elective) Fuzzy Mathematics.
Code : MM1646 :- Project

Course Outcome (2010-2014)

SemI Code: MM1141, Methods of Mathematics

CO1: Explain Theory of Numbers and its application to cryptography.

CO2: Understand the basis of Functions and their graphs, concept of limits, continuity and differentials.

CO3: Impart knowledge of Conic sections and sketching of conics.

Sem-II Code: MM1221 ,Foundations of Mathematics

CO I: -Explain Foundations of Algebra .

CO2:-Provide knowledge in Foundations of Calculus and Analytic geometry and Polar coordinates in coordinate geometry.

Sem III Code: Mm1341, Methods of Algebra and Calculus –I

CO1: Create awareness in Basic concepts of Abstract Algebra.

CO2: Develop a deeper understanding of Vectors in three dimensional space.

CO3:Familiar with Calculus of vector valued functions.

Sem IV Code: MM1441: Methods of Algebra and Calculus -II

CO1:Provide knowledge of Polynomials and division theorem.

CO2:Familiar with Calculus of functions of two or more variables, Surface area and volume of solids.

CO3:- Provide knowledge of Triple integral and using it to compute volume.

Sem V Code : MM1541:- Real Analysis

CO1:-Familiar with Applications of completeness property.

CO2:Familiar with Basic idea of mathematical analysis.

Code : MM1542:- Complex Analysis

CO1:- Explain Properties of differentiable complex functions of open sets.

CO2:-Realise Harmonic functions .

CO3:-Familiar with Concepts of conformal mapping.

Code : MM1543:- Differential equations and their applications.

CO1:Explain Applications of Differential equations to physics, chemistry and biology.

CO2: Familiar with Differential equations with constant coefficients and their solutions.

CO3: Familiar with Second order equations with variable coefficients and their solutions.

CO4: Understand the basis of Laplace transform.

Code: MM1544 :- Numerical Methods

CO1: Describe Methods to find roots.

CO2: : Describe Solutions of linear equations.

CO3: Understand the basis of Interpolation

Code: MM1545 :- Computer Programming-I

CO1: Able to identify Algorithms and data

CO2:- Realise BASIC , UNIX command, and concepts

CO3:-Develop deeper understanding in C language , basics, syntax and examples.

Code: MM1551. Operations Research (open course)

CO1: Familiar with Linear programming transportation problems and project management

CO2: Explain Queuing models

Sem VI

Code : MM 1641:- Real Analysis-II

CO1:- Develop a deeper understanding of Real - valued functions, properties of continuity ,differentiability and Riemann integral.

CO2:- Establish the links between anti-differentiation and Riemann integrals.

Code: MM1642:- Linear Algebra

CO1:- Provide knowledge in Algebra of matrices and some applications of matrices to conic sections and systems of linear equations .

CO2:- Familiar with Invertible matrix and linear mappings.

CO3:- Describe Matrix connection.

Code : MM1643:- Vector Analysis

CO1:- Understand the basis of Vector fields, graphical representation, line integrals.

CO2:-Explain Green's Theorem and its applications .

CO3:-Provide knowledge in Surface integral , and its applications.

Code: MM1644:- Graph Theory

CO1:-Explain History of graph theory.

CO2:- Create awareness in history of graph theory.

CO3:- Realise Basic concepts of graphs.

CO4:- Describe Applications.

Code: MM1645:- Computer Programming –II Practical

CO1:- Impart knowledge in Latex Programming

CO2:- Familiar with Python

Code: MM1651:- (Elective) Fuzzy Mathematics.

CO1:-Describe Basic concepts of fuzzy sets.

CO2:-Describe Operations of fuzzy sets and fuzzy arithmetic

CO3:-Provide knowledge in Fuzzy relations and fuzzy logic Statistics

Complementary to Mathematics

Courses offered:

Sem I:- ST 1131.1 Statistical Methods.

Sem II:- ST 1231.1 Probability Theory.

Sem III:- ST 1331.1 Distribution theory and Limit theorems.

Sem IV:- ST 1431.1 Statistical Inference.

ST 1431.2 Statistical practical

Sem I:- ST 1131.1 Statistical Methods.

Co1:- Familiar with Data collection, classification, tabulation, diagrammatic representation.

Co 2:-Explain Descriptive statistics.

Co 3:- Familiar with Correlation and regression.

Sem II:- ST 1231.1 Probability Theory.

Co 1:- Create awareness in Concepts of probability.

Co 2:- Familiar with Different theorems in probability.

Co 3:-Recognise the importance of Random variable and probability distribution.

Co 4:- Realise Bivariate distributions.

Sem III:- ST 1331.1 Distribution theory and Limit theorems.

Co 1:- Develop deeper understanding in Standard distributions like binomial, poisson, normal etc.

Co 2:- Familiar with Tchebycheff's inequality, Weak law of large numbers, Central limit theorem.

Co 3:-Recognise the importance of Sampling distributions.

Sem IV:- ST 1431.1 Statistical Inference.

Co 1:- Explain Estimation theory.

Co 2:- Smart knowledge in Testing of hypothesis.

Co 3:- Understand the basis of Analysis of variance.

ST 1431.2 Statistical practical

Co 1:-Familiar with Problems solving and data analysis using Excel

PROGRAMME SPECIFIC OUTCOME

PSO1:-The degree programme will provide both mathematical knowledge and communication skills.

PSO2:-Applied Mathematics can lead to many career opportunities.

PSO3:-Mathematics is a building block for everything in our daily lives including mobile devices, architecture, money, in sports etc.

PROGRAMME SPECIFIC OUTCOME

PSO1 :-The Masters degree program will provide a academic recognition.

PSO2:-Many careers that require masters degree are typically found in sectors such as research and academic Professionals .Masters degree offers benefit from higher pay and increased job responsibilities.

PSO3:-Mathematics is a building block for everything in our daily lives including mobile devices, architecture, money, in sports etc.

PSO4:- Will expand their knowledge of fields related to their current areas of professional specialization.

SANSKRIT

BA/BSc/B.Com-SANSKRIT (ADDITIONAL LANGUAGE)

The Additional Language course, Sanskrit to BA, BSc and BCom, mainly intends to make the students aware of the poetry, prose, drama and grammar of Sanskrit language. It also helps them to improve their communication skills as well.

This course also concentrates in the structure of the language by which the students can improve their skills in the practical aspects also like letter writing, paragraph writing and even the use of internet as the modern medium of communication. For this purpose, Translation and communication in Sanskrit is also added.

Aim of the course -To develop the student's ability to know Sanskrit Language and Literature in general.

ADDITIONAL LANGUAGE FOR BA/BSc DEGREE EXAM

SEMESTER -1

Drama and Prose SK 1111.1

1. Bala Ramayana-Bala Kanda and Ayodhyakanda & Aranyakanda
2. Svapnavasavadatta of bhasa-Act1

SEMESTER-2

Kavya and Prakarana in Sanskrit SK 1211.1

1. KumaraSambhava of kalidasa-Canto-1
2. Mrichchhakatika of sudraka

SEMESTER-3

Kavya Nadaka,Alakara and Vritta SK 1311.1

1. Abhinjanasakunthalam of kalidasa-Act-1
2. Alankaras,Vritha

Semester-4

Influence of Sanskrit on Indian Culture SK 1411.1

1. History of Sanskrit Literature
2. Kerala Arts Forms, Social Reformers of Kerala

MALAYALAM DEGREE PROGRAMME

COMPLEMENTARY-SANSKRIT

The Complementary course for Malayalam BA Sanskrit is mainly intended to make the students aware about the Sanskrit language and literature in general. Moreover, it enables the students to know Sanskrit with various other disciplines like Science, Maths and Aeronautics etc. It creates awareness about the Linguistic peculiarities of Sanskrit Language.

THE OUTLINES OF THE COURSE ARE:

1. Literary importance of Sanskrit language and literature
2. Structural peculiarities of the language
3. Relation of Sanskrit language with various other disciplines
4. Relevance of Sanskrit in modern period
5. Develop the communicative skills of the students in Sanskrit

SEMESTER – 1.SK 1131.2.POETRY AND GRAMMAR

1. NALOPAKHYANAM
2. SUBHASHITHAM
3. GRAMMAR

SEMESTER – 2.SK 1231.2.POETRY AND GRAMMAR

1. SREEKRISHNAVILASAM
2. BHAGAVAD GITA CHAPTER - 2

SEMESTER -3.SK 1331.2.DRAMA AND GRAMMAR

1. MADHYAMA VYAYOGA OF BHASA
2. SENTENCE MAKING IN SANSKRIT
3. GRAMMAR

SEMESTER-4.SK 1431.2.LYRIC, POEMS, FABLES AND TRANSLATION

1. PANCHATANTRA(Two Stories)

2. REGHUVAMSA – KANTO 2

PG COURSE OUTCOME MALAYALAM -COMPLEMENTARY SANSKRIT

The complementary course for Malayalam PG Sanskrit enables the students to know Sanskrit language and Literature in continuation to the UG level. This course also enables them in various Sanskrit teaching methods with special reference to Sanskrit Prose, Poetry and Grammar. It also makes them aware about the various modern methods in learning Sanskrit Language and Literature. This syllabus of Malayalam PG Complementary, Sanskrit is structured accordingly including almost all branches of Sanskrit Language and Literature, with special reference to the structure and grammatical applications of Sanskrit Language.

SEMESTER – 3.POETRY, DRAMA AND GRAMMAR

Paper 1 -CLASSICAL SANSKRIT LITERATURE AND GRAMMAR

SEMESTER – 4.SANSKRIT, COMPOSITIONS AND TRANSLATION

Paper 2.FABLES, DEFINITIONS OF POETIC TYPES IN SANSKRIT

DEPARTMENT OF POLITICAL SCIENCE

(complementary course)

Semester-1

PS (1131) Principles of Political Science (Credits-2)

CO1. The course intends to familiarise the students with the fundamental principles of Political Science.

CO2. Familiarise the students the major principles of Political science and its major concepts.

Semester II (complementary course)

PS (1231) Indian Government and Politics (Credits-3)

CO1. The course intends to make students aware of basic principles of Indian Constitution and politics

CO2. To make students familiarise the structure and functions of Indian political system.

CO3. To make aware about the different institutions in India adhered to democracy.

Semester III (complementary course)

PS (1331) Public Administration (Credits-3)

CO1. The course is intended to create an understanding of the basic elements of Public Administration

CO2. The course equips students with the theoretical understanding about Public Administration.

Semester IV (complementary course)

PS (1431) International Politics (Credits-3)

CO1. The course seeks to equip the students with the basic concepts, theories, ideologies, and approaches in the study of International Politics

CO2. Create awareness about major issues in global politics.

DEPARTMENT OF PHYSICAL EDUCATION

HEALTH & FITNESS EDUCATION - OPEN COURSE

Course Outcome

1. Students will be able to explain and identify the theoretical and scientific principles that can be used to address sport performance and health & fitness assessment.
2. Learners will understand the basic principles of health, fitness and wellness to develop an informed, personal approach to physical, mental and social health.
3. Understand the principles of health and fitness and will incorporate fitness activities into a healthy and active lifestyle in their personal life.
4. Students will value knowledge of psychological and sociological concepts, principles, and strategies that apply to physical activity and sport.
5. Students will acquire knowledge and skills to safely engage in physical activity.
6. Understand the components of physical fitness in relation to exercise physiology and apply the knowledge to movement activity.
7. Acquire knowledge regarding health and nutrition
8. Provides hands-on experience on first aid measures and manage common injuries.
9. To create awareness regarding hypo-kinetic diseases.
10. Utilize physical activity as a tool to manage stress.
11. Understand and utilize various training methods.
12. Create a safe, progressive, methodical and efficient activity based plan to enhance health and fitness levels of individuals.
13. Develop an appreciation of physical activity as a lifetime pursuit and a means to better health.
14. Aspirants to become health and fitness professionals will get a platform to proceed with their plan.

Course outcome - Physics and Computer Application.

PC1121: MECHANICS ,THERMODYNAMICS & PROPERTIES OF MATTER.

Introducing basics of Dynamics of Rigid Bodies.

Introduction to the concept of Thermodynamics, Elasticity and Fluid Mechanics

PC1241: ENVIRONMENTAL STUDIES.

Introducing basic concepts in the field of environmental studies.
Imparting basic understanding on Renewable and Non-renewable resources.
To develop empirical knowledge on ecosystem biodiversity and its conservation.

PC1341-ELECTRODYNAMICS.

Electrostatic Field, Electrostatic fields in matter, Magnetostatics Electromagnetic waves and Electromagnetic Induction are important areas in Electrodynamics. Fundamental knowledge in electro dynamics is inevitable on pragmatic studies in theoretical Physics.

PC 1441 -CLASSICAL MECHANICS & THEORY OF RELATIVITY.

Oscillations, Motion in central force field, Lagrangian Dynamics and Special theory of relativity are pivotal areas in classical mechanics and theory of relativity. Fundamental concept developments in these areas naturally develop theoretical dimensions among students.

PC1442- OPTICS.

Interference of light, Diffraction, Polarisation, Dispersion, Fiber Optics and laser are the multiple strands in the area of optics. Proper concept development in these areas should be encouraged for the enhancement of scientific temper and to study about the state of the art technologies in the area of communication and optics.

PC 1541 - ELECTRONICS.

Diode Circuits, Transistor Large signal (power) amplifiers, Modulation and Digital electronics are the evolutionary steps in the area of Electronics. A proper study on the theories and inventions in the field of electronics can help the students to nurture practical knowledge in modern computer technology artificial intelligence, Information technology etc.

PC1542- ATOMIC AND NUCLEAR PHYSICS.

Vector Atom Model, Atomic Spectra, Molecular spectra and nucleus are key areas in Atomic and Nuclear physics. Basic understanding and concept development are unavoidable for updating knowledge in Nuclear physics.

PC1641- SOLID STATE PHYSICS.

Crystal Structures and interatomic forces, Thermal properties of Solids and Superconductivity are important areas in solid state physics. A theoretical and applicational knowledge development in the area is very significant in the study of physics as a whole.

PC1642- STATISTICAL PHYSICS AND QUANTUM MECHANICS.

Statistical Physics, The Emergence of Quantum Mechanics, The Wave Function are relevant and interdisciplinary areas in theoretical physics .

PC1661.1. ASTRONOMY AND ASTROPHYSICS.

Astronomy, Objects in the Sky, Solar System, Earth in Space etc. inextricably intertwined with astronomy and astrophysics which are relevant areas in cosmology.

PC 1661.2 GENERAL METEOROLOGY.

The study of weather and climate in the climatic changing world are significant particularly in dealing with ozone depletion, Global warming , polar ice melting , extinction of flora and fauna etc.

PC1661.3. SPACE SCIENCE.

The evolution of Stars ,The active Sun, The Earth's Atmosphere and Magnetosphere are important areas in space science.A comprehensive knowledge in this area is needed to develop scientific thinking and to remove many superstitious beliefs related to space and celestial bodies.

PC1661.5 NANOSCIENCE AND TECHNOLOGY.

Properties of nanomaterials and scaling laws Synthesis and characterisation of nanomaterials are notable areas in nanotechnology. Fundamental knowledge in Nanotechnology enhances our concepts on the industrial application of nanotechnology in the modern world.

PC1661.6. COMPUTER HARDWARE & NETWORKING.

Be aware of the evolution of the peripheral devices and implementation in computer networks and understand the network and transmission technologies.

PRACTICALS

PC1242- MECHANICS, PROPERTIES OF MATTER, HEAT AND ACOUSTICS

PC1443- HEAT, ELECTRICITY AND MAGNETISM (Minimum 16 experiments to be done)

PC 1643 OPTICS AND BASIC ELECTRONICS

PC1644—ELECTRONICS AND COMPUTER SCIENCE (Minimum 15 experiments to be done)

VOCATIONAL COURSES

PC 1171 INTRODUCTION TO IT

To introduce the basic terminology in the field of IT

To impart functional knowledge about PC hardware, operations and concepts

To impart functional knowledge in the use of GUI Operating System

To impart functional knowledge in a standard office package (word processor, spread sheet and presentation software and popular utilities

To impart functional knowledge about networks and internet

PC1221 INTRODUCTION TO PROGRAMMING

To expose students to algorithmic thinking and algorithmic representations.

To introduce students to basic data types and control structures in C.

To introduce students to structured programming concepts.

To introduce students to standard library functions in C language.

PC1271 PROGRAMMING LAB – I

After the completion of this course, the student should be able to: Create, Save, Copy, Delete, Organise various types of files and manage the desktop in general

Use a standard word processing package Exploiting popular features

PC 1371 OPERATING SYSTEMS

To introduce students to: Fundamental concepts of systems software Functions of operating systems as a resource manager Strategies for constrained resource allocation Strategies for process scheduling Memory and I/O Management techniques Salient features of popular operating systems.

PC1372 DATA STRUCTURES

By the end of the course, students should be:

Able to write well-structured programs in C

Be familiar with data structures like array, structures, lists, stacks, queues, trees and graphs

Able to implement the above data structures in C/C++

Able to appreciate various searching and sorting strategies

PC1471 SOFTWARE ENGINEERING

At the end of the course, the students should be able to

Appreciate the importance of having a process for software development.

Understand the various activities undertaken for a software development project following the

Function oriented Design & Object oriented design

Understand the issues in code design and development

PC1472 OBJECT ORIENTED PROGRAMMING

On the completion of this course, the student will be able to

Understand the concepts of classes and object

Define classes for a given situation and instantiate objects for specific problem solving.

PC1473 PROGRAMMING LAB – II

This course will provide hands-on practice in the following topics, under a variety of programming situations with a focus on writing, debugging and analyzing object oriented programs: basic data types and control structures in C++. managing classes and objects in a variety of situations solving moderately complex problems involving the above and requiring selection of appropriate structures and algorithms.

PC1571 DATABASE MANAGEMENT SYSTEMS

Be aware of basic concepts of databases and database management systems

Be aware of the concepts of relational databases.

Know to normalize relational databases.

Skilled in using relational algebra and relational calculus Develop skills to write database.

PC 1551.1 INTERNET TECHNOLOGY

At the end of this course, the students will be able to

Discuss various components of internet

Explain different devices used for networking Explain the working principle of the Internet.

PC 1551.2 LINUX ENVIRONMENT

Introduction to Operating Systems

Introduction to linux.

PC1551.3 BUSINESS INFORMATICS

By the end of this course, the student should be able to:

Have an awareness about the role of IT in business

Have knowledge of basic concepts of e-commerce.

PC1671 INTRODUCTION TO INFORMATION SECURITY

On completion of this course student shall:

Be aware of principles and protocols of internetworks understand the basic issues in information security understand the concept of ciphers and cryptography. To impart an idea on various ciphers understand the concept of digital signatures and e-mail security policies to impart an idea on malicious softwares and remedies

PC1672 COMPUTER NETWORKS

On completion of this course student shall:

Be aware of the evolution of development of networks understand the basic transmission technologies and characteristics understand the use of layer architecture for networking systems understand the main design issues of transport protocols and the mechanism to control traffic flow and congestion.

PC1673 MAJOR PROJECT & VIVA

To provide an opportunity to apply the knowledge gained through various courses in solving a real life problem To provide an opportunity to practice different phases of software/system

development life cycle To introduce the student to a professional environment and/or style typical of a global IT industry.