



PONDICHERRY UNIVERSITY

(A Central University established by an Act of Parliament No. 53 of 1985)

COURSES OF STUDY 2011-12

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DEANS OF SCHOOLS

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School of Education: Dr. M. S. LALITHAMMA

School of Physical, Chemical & Applied Sciences: Dr. H. SURYA PRAKASH RAO

Ramanujan School of Mathematical Sciences: Dr. A.M.S. RAMASAMY

School of Humanities: Dr. R. VENGUATTARAMANE

School of Management: Dr. M. RAMADASS

School of Performing Arts: Dr. K. A. GUNASEKARAN

School of Life Sciences: Dr. P. P. MATHUR

Subramania Bharathi School of Tamil Language & Literature: Dr. R. NALANGILLI

School of Media & Communication (i/c): Dr. M. S. PANDIAN

School of Medical Sciences (i/c): Dr. S. MAHADEVAN

School of Engineering & Technology (i/c): Dr. V. PRITHIVIRAJ

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SUBRAMANIA BHARATHI SCHOOL OF TAMIL LANGUAGE AND LITERATURE

The Department of Tamil was started in 1986. It has been promoted as Subramania Bharathi School of Tamil Language and Literature in 2003. The School is functioning with the following academic and research activities for the betterment of Tamil Literary world. Dr. Durai Seenisami was appointed as Emeritus Professor for two years. Dr. D. Gnanasundaram is appointed on Kamban Chair to do research on Kambaramayanam.

The School has produced more than 95 Ph.D. At present 30 candidates are doing Ph.D. in the School. More than 254 scholars received M.Phil. degree until 2007. Thirty five students are currently engaged in M.Phil. programme. Many students have cleared the National Level UGC/SLET examinations.

This School offers facilities for intensive study and research in different areas of Tamil Literature such as Sangam Literature, Epic Literature, Devotional Literature, Modern Literature, Comparative Literature, Tamil Grammar and Folklore. The thrust area of the School is Literary Theory and Grammar.

PROGRAMMES OF STUDY

M.A. Tamil
M.Phil. Tamil - General (Full-time)
M.Phil. Tamil - Modern Literature (Full-time)
M.Phil. Tamil - Religious Literature (Full-time)
Ph.D. Tamil (Full-time)

M.A. TAMIL

Semester	Hard Core Courses	Credits
I	Prabanthams	3
	Modern Literature	3
	Tolkappiyam – Ezhuthu	3
	Didactic Literature	3
II	Comparative Literature	3
	Devotional Literature	3
	Tolkappiyam – Sol	3
	Epic Literature (Silappathikaram & Manimehalai)	3
III	Sangam Literature	3
	Siddha Literature	3
	Tamil Folk Literature	3
	Grammar VIII – Tol. Porul (1-5)	3
IV	Literary Criticism	3
	Grammar IX (Tol. Porul 6-9)	3
	Epic (Kambaramayanam & Periyapuranam)	3
	History of Indian Literature	3

Semester	Soft Core Courses	Credits
I	Folk Games	3
	Linguistics	3
	Sociology and Literature	3
	Yoga	3
II	Manuscriptology	3
	Bharathiar	3
	Anthropology & Tamil Literature	3
	Myths in Literature	3
III	Women Literature	3
	Anthology	3
	Women Writers & Their Fictions	3
IV	Spoken Tamil (For Non Tamil Students)	3
	Communicative (For Tamil Students)	3

M.Phil. TAMIL

Semester	Hard Core Courses	Credits
I	Research in Approaches	3
	Commentaries & Discoursed Methodology	3
II	History of Tamil Research	3
	Dissertation	15
	Viva Voce	3

M.Phil. Modern Literature

Semester	Hard Core Courses	Credits
I	Diaspora Literature in Tamil	3
	History of Tamil Little Magazine	3

M.Phil. Religious Literature

Semester	Hard Core Courses	Credits
I	Research Methodology	3
	Saiva Literature & Religious Concept	3
	Vaishnava Literature & Religious Concept	3
	Jainisht, Buddhisht Literatures & their Religious Concepts	

M.Phil. TAMIL

Semester	M.Phil. Courses - Common	Credits
I	Folklore and Theories	
	Dalit Literature in Tamil	3
	Theories in Folklore	3
	Literature & Marxism	3
	Other Disciplines in Tamil	3
	Temples & Worships	3
	On Islam	3
	On Christianity	3

SCHOOL OF MANAGEMENT

School of Management is one of the popular Schools of Excellence in the campus primarily focusing on the business related courses since the very inception of this University.

The Department of Management Studies offers MBA & Ph.D. programmes, the Department of Commerce offers M.Com. (Business Finance), M.Phil., and Ph.D. programmes. The Department of Economics offers M.A. (Applied Economics), M.Phil. and Ph.D. programmes, the Department of Tourism Studies offers a MBA programme specializing in Tourism, the Department of Banking Technology offers a specialized MBA programme in Banking Technology and Ph.D. programme and the Department of International Business offers MBA with specialization in International Business and Ph.D. Programme.

The School of Management offers the above said programmes with a total placement focus. While the regular MBA students are found getting good placements in

leading MNCs and large Public Limited Companies involved in manufacturing, service industry as well as in high profile Software Industry, the MBA (Tourism) students are finding total placement in travel and tourism industries as well as in hospitality business. M.Com. (Business Finance) programme offered by the Department of Commerce has attracted the attention of companies which are involved in Finance and Investment, Fund Management, Stock Broking, Banking and Non-banking activities. M.A. Economics students are found in great demand in those organizations involved in policy making such as National Institutes devoted for Economic development, RBI, Government department of Economics & Statistics, etc. MBA Banking Technology degree programme started drawing attention of top leading banks and software companies concentrating on Banking software. The students of the MBA programme of the Department of International Business are finding placement in leading industries in India, including MNCs.

DEPARTMENT OF MANAGEMENT STUDIES

MBA

PROGRAMMES OF STUDY

M.B.A. University Main Campus & Karaikal PG Centre
Ph.D. in Management
 (Full-time & Part-time (Internal & External))

Semester	Name of the Course (Hard Core COURSES)	Credits
I	Management Processes	3
	Organizational Behaviour	3
	Managerial Economics	3
	Accounting for Managers	3
	Statistics & Research Methodology	3
	Business Environment	3
	Communication Skills Workshop	2
	System Skills Workshop	2
	Comprehensive Viva-Voce	2

II	Project management	3
	Financial Management	3
	Operations Research	3
	Business Law	3
	Marketing Management	3
	Operations Management	3
	Human Resources Management	3
	Management Information System	3
	Comprehensive Viva-Voce	2
III	Strategic Management	3
	Business Ethics & Corporate Governance	3
	Quality Management	3
	Management Control Systems	3
	Functional Electives (4)	12
	Summer Projects (8 weeks)	4
	Comprehensive Viva-Voce	2
IV	Public Systems Management	3
	Functional Electives (4)	12
	Project work (10 weeks)	5
	Comprehensive Viva-Voce	2

list of Electives

MARKETING	FINANCE
TITLE OF THE PAPER	TITLE OF THE PAPER
Brand Management	Bank Financial Management
Consumer Behaviour	Banking & Indian Financial System
Customer Relationship Management	Business Accounting & Advanced Financial Management
Industrial Marketing	Corporate Finance
Integrated Marketing Communication	Corporate Tax Management
International Marketing	Environmental Accounting & Costing
Internet Marketing	Export Management
Marketing for Non-Profit Organizations	Financial Engineering
Marketing of Financial Services	Financial Markets & Services
Marketing Research	Financial Services Management
Product Development and Management	Infrastructure Finance
Retail Management	International Finance
Sales & Distribution Management	Risk Management and Insurance
Service Marketing	Security Analysis & Portfolio Management
	Strategic Cost Management
	Strategies for Financial Services

HUMAN RESOURCE MANAGEMENT	OPERATIONS
TITLE OF THE PAPER	TITLE OF THE PAPER
Compensation Management Cross Culture Management Global Hr Practices Hris (Hr Information System) Hrm In Knowledge Based Organization Industrial Relations Management Labour Legislation And Administration Management Of Change And Development Quality Performance Management Strategic Human Resource Development Technology For Personal Productivity Management Training And Development	Advanced Materials Management Advanced Production Management Computer Simulation Fundamentals Of Six Sigma Innovation And Product Development Service Operations Management Supply Chain Management Total Quality Management

SYSTEMS	GENERAL
TITLE OF THE PAPER	TITLE OF THE PAPER
Business Intelligence And Data Mining Database Management Systems Decision Support Systems E-Commerce Object-Oriented Programming With C++ Software Engineering Management Software Project Management Systems Analysis And Design Visual Basic For Business Applications	CREATIVITY AND INNOVATION MANAGEMENT CRISIS MANAGEMENT ENTREPRENURSHIP DEVELOPMENT

MBA (Insurance Management)

Semester	Hard Core Courses	Credits	Electives (Any Two Papers)	Credits
I	Principles and Practice of Life insurance	3		
	Principles and Practice of General insurance	3		
	Risk Management and Insurance	3		
	Management and Organizational Behavior	3		
	Managerial Economic Forecasting	3		
	Accounting for Insurance	3		
	Statistics for Insurance	3		
	Computers for Managers	2		
	Comprehensive Viva-voce	2		
II	Insurance Law and Regulation	3		
	Bank and Risk management	3		
	Marketing Management	3		
	Financial Management	3		
	Human Resources Management	3		
	Business Research Methods	3		
	Business Communication	3		
	Personality and Career Development	2		
	Comprehensive Viva-voce	2		
III	Marine and Rural Insurance	2	Entrepreneurship and Service Management	3
	Fire and Motor Insurance	2	Security analysis and Portfolio Management	3
	Marketing of Insurance Services	2	Actuarial Mathematics and Services	3
	Elective - I	2	Innovation and knowledge Management	3
	ELECTIVE - II	2	E-commerce	3
	Elective - III	2	Business Interruption Insurance	3
	Interpersonal skills and Team management	2		
	Comprehensive Viva-voce	2		
	Summer Project and Viva-voce	5		
IV	Health & Miscellaneous Insurance	3	Engineering & Liability Insurance	3
	Strategic Management	3	Reinsurance	3
	International Business Management	3	Enterprise Risk Management	3
	Elective – IV	3	Database Management Systems	3
	Elective – V	3	Business Intelligence Systems	3
	Comprehensive Viva-voce	2	Insurance Salesmanship	3
	Major Project and Viva-voce	6		

DEPARTMENT OF COMMERCE

SCHOOL OF MANAGEMENT

The Department of commerce is one of the pioneering departments of Pondicherry University which came into existence in the year 1986. Differentiating itself from the traditional M.Com Course the department to start with offered a much sought for specialized Post-Graduate course in Commerce in form of M.Com(Business Finance). With the focus on Finance, the department aims at imparting indepth knowledge and professional skills required for handling the Finance Functions of business entities and corporate enterprises. The students of this course with their acquired knowledge and skills find themselves well equipped for the activities involving Investment Management, Portfolio Management, Treasury Management, Security Market Operation, Forex Dealing, Accounting Fund Management, Project Execution and Management, Multinational Financial Management, Derivatives Management, Taxation

Management, Bank Management etc. In its Silver Jubilee year i.e. 2011 the department started another specialized M.Com course in the name of M.Com (Accounting and Taxation). This course aimed at satisfying the need of human resource of corporate with sound accounting and taxation knowledge to supplement the professional accountants and taxation experts. The Department also offers M.Phil. and Ph.D. Programme in the field of Finance, Banking, Marketing and Personnel Management.

The Department is supported by UGC under SAP (DRS) to achieve academic excellence with the thrust on one of the most contemporary areas in finance i.e “Derivatives and Risk Management”. The Award of SAP is a proof of the capability and credentials of the learned faculty of this department.

M.Com. Business Finance

PROGRAMMES OF STUDY

M.Com. Business Finance
University Main Campus & Karaikal PG Centre
M.Com. Accounting & Taxation
M.Phil. Commerce (Full-Time)
Ph.D. Commerce (Full Time and Part-Time)

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Management Concepts & Organization Behaviour	4	Marketing Management	3
	Advanced Financial Accounting	4	Business Environment	3
	Statistical Analysis	4	Accounting & Financial Analysis (For Non – Commerce Students)	3
	Financial Management	4		
	Managerial Economics	4		
	Direct Taxes Law and Practice	4		
II	Financial Institutions & Markets	4	Working Capital Management	3
	Accounting for Managerial Decisions	4	Corporate Legal Frame work	3
	Investment Management	3	Funds Mgt in Commercial Banks	3
	Security Market Operations	3	Operations Research	3
	Computer Applications In Business	4	Econometrics For Finance	3
			Export Finance	3
			Stock Market Investment (For Non-Commerce Students)	3

III	Project Management	4	Commodity Derivatives Markets & Applications	3
	Portfolio Management	3	Entrepreneurial Development And Small Business Management	3
	Corporate Tax Planning & Management	4	Enterprise Resource Planning	3
	International Finance	3	Financial Service Marketing	3
	Summer Project Report and Viva	4	Forex Management	3
	Computer Aided Multivariate Data Analysis For Decision Making	4		
	Advanced Cost Accounting	4		
IV	Financial Statement Analysis	4	Indirect Taxes Management	3
	Strategic Financial Management	4	Management Information Systems	3
	Multinational Financial Management	4	Strategic Management	3
	Equity Derivatives And Risk Management	4	E-Commerce	3
	Comprehensive Viva	2		

M.Com (Accounting & Taxation)

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Accounting Theory	4	Managerial Economics	3
	Corporate Accounting	4	Strategic Management	3
	Direct Tax Laws	4	Personal Finance	3
	Public Finance	3		
	Statistical Techniques For Business	4		
II	Financial Management	4	Management Information System	3
	Advanced Financial Accounting	4	Personal Investment & Tax Planning	3
	Indirect Tax Laws	3	International Finance	3
	Corporate Legal Frame Work	3		
	Computer Based Accounting -I	4		
III	Emerging Accounting Issues	3	Auditing & Assurance Standards	3
	Advanced Cost Accounting	3	Investment Management	3
	International Taxation	3	Computer Based Accounting - II	3
	Corporate Governance & Business Ethics	3		
	International Accounting Including IASC & IFRS	4		
	Project Work	4		

IV	Corporate Financial Statement Analysis & Reporting	4	Corporate Tax Planning Andmanagement	3
	Advanced Management Accounting	3	Project Management	3
	Direct & Indirect Tax Administration	3	Cost And Management Audit	3
	Direct & Indirect Tax Administration	3		3
	Internship	3		
	Comprehensive Viva-Voce	3		

M.Phil. Commerce

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology	6	Personnel Management Optional Paper	6
	Advanced Functional Management	6	Financial Management Optional Paper	6
			Marketing Management Optional Paper	6
			Bank Management Optional Paper	6
			Corporate Financeoptional Paper	6
			Human Resource Managemen - Optional Paper	6
II	Dissertation	15		
	Viva-Voce	3		

DEPARTMENT OF ECONOMICS

SCHOOL OF MANAGEMENT

The Department of Economics, established on 15-12-1986 is one of the oldest Departments of Pondicherry University. During the twenty four year existence, the Department has carved out a niche in the Economics Education Map of India. The Department is discharging three functions namely Teaching, Research and Extension. So far, it has produced a large number of Post Graduates, 250 M.Phil's and 40 Ph.D.'s who are placed in some of the top class Institutions in the Country.

Today it is emerging as Centre of Training and the National Organizations are looking forward to the Department for Training of their Officers and Research Scholars, especially, in the area of Econometrics.

PROGRAMMES OF STUDY

M.A. (Applied Economics)
M.Sc. (Economics) Five Year Integrated Programme
M.Phil. (Full-Time)
Ph.D. (Full-Time, Part-Time (Internal & External))

M.Sc. (Economics) Five Year Integrated Programme

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Towards Understanding Economics Statistical Methods I Mathematics for Economists I Functional English I	4 4 4 4	One optional paper from other Departments	3
II	Microeconomics I Statistical Methods II Mathematics for Economists II Functional English II	4 4 4 4	One optional paper from other Departments	3
III	Microeconomics II Macroeconomics I Language I (other than English)	4 4 4	Economics of Social Sector and Environmental Issues One optional paper from other Departments	3 3
IV	Monetary Economics Macroeconomics II Environmental Economics Language II (other than English)	4 4 4 4	One optional paper from other Departments	3
V	International Economics I Public Finance I Elements of Econometrics Indian Economy I	4 4 4 4	Development Economics	3
VI	International Economics II Public Finance II Indian Economy II History of Economic Thought	4 4 4 4	Indian Financial Institutions and Markets	3

VII	Microeconomic Analysis I	4		
	Macroeconomic Analysis I	4		
	Mathematical Economics	4		
	Econometric Theory	4		
	Economics of Growth & Development	4		
VIII	Microeconomic Analysis II	4	Public Economics	3
	Macroeconomic Analysis II	4		
	Statistical Methods in Economics	4		
	Applied Econometrics	4		
IX	International Trade and Finance	4	Contribution of Nobel Laureates I	3
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	Research Methodology	4		
	Indian Economy: Issues and Policies I	4		
X	Indian Economy: Issues and Policies II	4	Contribution of Nobel Laureates II	3
	Economics of Education	4		
	Financial Economics	4		
	Project/Viva	4+2		

M.A. Applied Economics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Micro Economics - I	4	Demography	3
	Macro Economics - I	4	Economics of Education	3
	Mathematical Economics	4		
	Statistical Methods	4		
	Economic Growth & Development	4		
II	Micro Economics - II	4	Economics of Microfinance	3
	Macro Economics -II	4	Financial Economics	3
	Econometrics Methods	4	Industrial Economics	3
	Public Economics	4		
	International Trade	4		
III	International Finance	4	Economics of Money and Banking	3
	Indian Public Finance	4	Optimization Techniques	3
	Econometric Methods – II	4	Islamic Economics	3
	Environmental Economics	4		
IV	Research Methodology	4	Applied Econometrics	3
	Indian Economy: Issues and Policy	4	Health Economics	3
	Project / Viva-Voce	4+2	Financial Econometrics	3

MPhil in Economics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology in Economics	6		
	Econometrics: Theory and Applications	6		
II	Dissertation	15	Area Paper	6
	Viva Voce	5		

DEPARTMENT OF TOURISM STUDIES

SCHOOL OF MANAGEMENT

The two-year full time Master's Degree Program in Tourism Administration (MTA) was started in the year 1991 with the seed financial support from the Ministry of Tourism and Civil Aviation, Government of India with the objective of creating professionally competent manpower to meet the managerial requirements of tourism and allied industries. Started of as a Centre for Tourism Studies, the centre was elevated to the status of a department during 2005-2006 with full fledged faculty and state of the art infrastructure facilities. The post-graduate program was rechristened as MBA (Tourism). The department offers at present a two year full- time MBA (Tourism) program, Post-Graduate Diploma in Event management (Evening Program) and Doctoral program leading to the award of Ph.D. degree. Further, the

Department has the honor of being supported by the UGC Special Assistance Program (SAP) at DRS Level –I from the academic year 2009-10.

Apart from the regular curriculum, students are encouraged to participate in the extra curricular and co-curricular activities. To pursue its mission further, the Department develops and supports a spirit of enquiry and innovation that help the students meet the diverse human resource requirements of the industry. The Department has an impressive track record of student placements over the years. With the active support of alumni, the Department has been striving tirelessly to emerge as a centre of excellence in tourism management education, consultancy and research.

PROGRAMMES OF STUDY

MBA (Tourism)

Ph.D. (Tourism)

MBA Tourism

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Management Process & Organizational Behavior	3	Foreign Language* –French/Japanese/German/Spanish/Chinese <i>* Depending on the availability of resource persons.</i>	3
	Economics for Tourism	3		
	Tourism – Principles, Policies & Practices	3		
	Global Tourism Geography	3		
	Tourism Products of India	3		
	Recreation Management	3		
	Sustainable Tourism	3		
	Comprehensive Viva – Voce	2		

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
II	Human Resources Management	3	Research Methods	3
	Accounting and Finance for Tourism	3		
	Destination Planning & and Development	3		
	Travel Agency & Tour Operations	3		
	Hospitality Management	3		
	Indian Culture & Heritage	3		
	Comprehensive Viva – Voce	3		
	Short Eco-tour	2		
III	Tourism Marketing	3	Tourism Law	3
	International Management	3		
	Airlines and Cargo Management	3		
	Ecotourism	3		
	Communication Skills & Public Relations	3		
	Business Strategy & Entrepreneurship	2		
	Comprehensive Viva – Voce	2		
	Summer Project (Project Report & Viva-Voce)	6		
IV	Sales & Distribution Management	3	E-Tourism	3
	Travel Media & Journalism	3		
	Customer Relationship & Services Management	3		
	Event Management	3		
	Comprehensive Viva –Voce	2		
	Project Work Viva-Voce	6		
	Long Tour	3		

DEPARTMENT OF BANKING TECHNOLOGY

SCHOOL OF MANAGEMENT

The Department of Banking Technology came into existence to offer a specialized MBA programme in Banking Technology from the academic year 2005 -06. The UGC has sanctioned this programme under its Innovative/Interdisciplinary scheme of 10th plan funding to be offered jointly by School of Management and Ramanujan School of Mathematical Sciences.

The courses offered under this MBA: Banking Technology is a blend of General Management, Banking & Finance along with IT subjects required to manage Technology and develop software solutions. Four streams of electives with eight specialization papers in Systems, Finance, HR and Marketing are offered during third semester. A mix of IT and Management enables the students suitable for Managerial

positions in software companies and Data centres of large Private / Foreign Banks.

Ph.D. in Banking Technology

The Department of Banking Technology has initiated a Ph.D. Programme in an inter-disciplinary area of Technology Management, focusing on IT Research in the field of Finance & Banking. This Programme is open to both Engineering Post - Graduates as well as to MBA Graduates.

PROGRAMMES OF STUDY

MBA : Banking Technology

Ph.D.: Banking Technology

MBA Banking Technology

Semester	Hard Core Courses	Credits
	NON-CREDIT BRIDGE COURSES:	
	Basics of Business	
	Basics of Accounting	
	Basics of Computer Science	
	Basics of Programming Languages	
I	Principles of management and Organization Behaviour	3
	Accounting and Financial Analysis	3
	Quantitative Techniques for Managers	3
	Managerial Economics and Indian Business Environment	3
	Indian banking and Financial System	3
	Financial Information Systems	3
	Computer Network for Bankers	3
	Object Oriented Modeling & Design	3
	Lab I : Banking Practices Internship	2
	Lab II : Financial Information System lab	2
	Winter Project	2
	Comprehensive Viva	2

II	Management of Banking & Financial Institutions			3
	Strategic Financial Management			3
	Marketing Strategy Management			3
	Merchant Banking & Financial Services			3
	Investment & Portfolio management			3
	Information Security for Banks			3
	Data Warehousing and Data Mining			3
	Banking Technology Management			3
	Lab III : Oracle : Business Intelligence Lab			2
	Lab IV : CMIE : Corporate Finance Lab			2
	Comprehensive Viva			2
III	Global Financial markets & International Banking	3	Elective Paper I	3
	Treasury & Derivatives Management	3	Elective Paper II	3
	Information System Audit	3	Elective Paper III	3
	IT Infrastructure Management for Banks	3	Elective Paper IV	3
	Lab V : SAP : Banking Technology lab	2		
	Lab VI : Stock and Forex Trading Lab	2		
	Summer Project & Viva	4		
	Comprehensive Viva	2		
IV	Project Work & Viva	8		
	Comprehensive Viva – Voce	2		

list of Electives

Electives	Credits	Electives	Credits
Software Project Management	3	Branding & Consumer Behaviour For Banks	3
Service Oriented Architecture	3	Services Marketing for Banks & Financial Institutions	3
IT Laws and Cyber Crimes	3	Retail Marketing & E-tailing	3
Enterprise Resource Planning (ERP)	3	Bank Customer Relationship Mgt.	3
E Commerce & Internet Trading	3	Advertising & Sales promotion For Banks	3
Financial Enterprise Application Integration	3	Marketing Research-Tools & Techniques	3
Software Architecture for Financial Software	3	Cyber Marketing Strategies	3
Smart Banking Technologies	3	Software Marketing Management	3
Insurance & Risk Management	3	HRM in Knowledge Based Organisations	3
International Financial Management	3	Industrial Relations & Labour Welfare in Banks	3
Credit Risk Management in Banks	3	Organisational Development & Change	3
Bank Mergers & Acquisitions	3	Human Resources Development & Manpower Planning	3
Forex & Currency Derivatives	3	HR Information Systems for Banks	3
EXIM Financing & Documentation	3	Human Resources Accounting for IT Companies	3
Corporate Taxation Management	3	Employee Legislation: Cases & Practices	3
Financial Statement Analysis using SPSS	3	Global HR Practices & Cross Cultural Management	3

DEPARTMENT OF INTERNATIONAL BUSINESS

SCHOOL OF MANAGEMENT

The process of globalization has enabled India to emerge as economic super power thus attracting investments from giant global business players of multi-nations. At the same time, a sizable number of Indian MNCs are also gearing up their international business operations across the world. It is in this emerging and transforming scenario, Pondicherry University has established, during the academic year 2006-07, the Department of International Business (DIB) under the School of Management to offer a specialized two-year full

time post-graduate degree in MBA-International Business for the students to have a thorough understanding of those aspects of business which are trans-boundary in nature.

PROGRAMMES OF STUDY

MBA (International Business)
Ph.D. (International Business)

MBA International Business

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Management Processes	3	Foreign Language	
	Organizational Behavior	3	Information Technology & E-Business	
	Business Communication & Negotiation Skills	3	Management Systems	
	Macro Economics for Business	3		
	Accounting and Finance	4		
	Quantitative Techniques for Business Decisions	3		
	Global Business Environment	2		
	Comprehensive Viva-Voce	2		
II	International Marketing	3	Cross Cultural Management	2
	International Human Resource Management	3	International Banking	2
	International Financial Management	3		
	Research Methods for International Business	3		
	Global Production and Operations Mgt.	3		
	International Economics	3		
	International Business Laws	3		
	Comprehensive Viva-Voce	2		
	SUMMER PROJECT – 8 Weeks	5		

III	International Strategic Management	3	Internship on Export-Import Procedures	2
	Global Logistics & Supply Chain Mgt.	3		
	Overseas Project Management & Entrepreneurship	3		
	Global Insurance and Risk Management	3		
	International Trade Procedures & Documentation	3		
	Elective - I (Marketing/ Finance/ HR/ Systems)	3		
	Elective - II (Marketing/ Finance/ HR/ Systems)	3		
	Elective - III (Marketing/ Finance/ HR/ Systems)	3		
	Comprehensive Viva-Voce	2		
IV	Elective - IV (Marketing/ Finance/ HR/ Systems)	3	Global Business Ethics & Corporate Governance	2
	Elective - V (Marketing/ Finance/ HR/ Systems)	3		
	Elective - VI (Marketing/ Finance/ HR/ Systems)	3		
	Comprehensive Viva-Voce	2		
	PROJECT WORK (8 Weeks)	6		

SPECIALIZATION STREAMS

MARKETING AREA	Credit
Global Buyer Behaviour	3
International Sales Promotion and Brand Mgt	3
Services Marketing	3
Retail Marketing	3
Rural Marketing	3
International Marketing Research	3
Environmental Marketing	3
Customer Relationship Management	3
Industrial Marketing	3
Sales and Distribution Management	3
International Industrial Buyer Behavior	3
Marketing of Hi-Technology Products and Innovations	3
New Product Development	3
Operations Research	3

FINANCE AREA	Credit
Global Financial Markets and Instruments	3
Global Mergers and Acquisitions	3
International Investment & Portfolio Management	3
Financial Services and Derivatives Management	3
Global Asset Backed Securities	3
Financial Statement Analysis	3
Investment Banking	3
Corporate Tax Planning and Management	3
International Accounting	3
Financial Engineering	3
Forex Management	3
Corporate Finance	3
Derivatives Management	3

HUMAN RESOURCE AREA	Credit
HR for Knowledge Based Organizations	3
Global Leadership and Skills Development	3
Technology for HR value Creation and Management	3
Global HRD & Organisational Development & Change	3
Industrial Relations and Labour Legislations	3
Advanced Behavioural Science	3
Performance Management Systems	3
Organisation Development	3
Training and Development	3
HRD Score Card 2500	3
Human Resource Accounting	3

SYSTEMS AREA	Credit
Enterprise Resource Planning	3
Cyber Crimes and IT laws	3
Data Mining and Data Warehousing	3
Software Engineering Management	3

RAMANUJAN SCHOOL OF MATHEMATICAL SCIENCES

DEPARTMENT OF MATHEMATICS

The Department was established in 1986 and it aims to train people who are oriented towards research and teaching in advanced areas of Mathematics. The Department is supported by the University Grants Commissions's Special Assistance Programme (SAP) for Departmental Research Support, the Department of Science and Technology (DST), Government of India's FIST programme for the development of infrastructure and National Board for Higher Mathematics (NBHM), Department of Atomic Energy, Government of India's grant for Library Books.

PROGRAMMES OF STUDY

M.Sc. Mathematics
M.Sc. (Five year Integrated Course)
M.Phil. Mathematics (Full-time)
Ph.D. Mathematics
 (Full-time, Part-time (Internal & External))

M. Sc. Mathematics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Advanced Algebra	4	Analytical Dynamics	4
	Real Analysis – I	4	Fuzzy Sets and its Applications	4
	Discrete Mathematics	4	Number Theory	4
	Topology	4	Operations Research	4
II	Linear Algebra	4	Algorithms Using C++	4
	Lebesgue Measure Theory	4	Graph Theory with Applications	4
	Complex Analysis	4	Graph Theory with Algorithms	4
	Ordinary Differential Equations	4	Algebraic Number Theory	4
	Real Analysis – II	4	Advanced Algebraic Number Theory	4
III	Fluid Mechanics	4	Theory of Fuzzy Sets	4
	Differential Geometry	4	Algebraic Coding Theory	4
	Functional Analysis	4	Cryptography	4
IV			Automata Theory	4
			Advanced Topics in Topology and Analysis	4
			Approximation Theory	4
			Difference Equations	4
			Partial Differential Equations	4
			Lie Groups of Transformations and Differential Equations	4

IV			Numerical Analysis for Ordinary Differential Equations	4
			Advanced Fluid Mechanics	4
			Integral Equations	4
			Advanced Mathematical Analysis	4
			Representation Theory of Compact Groups	4
			Elements of Harmonic Analysis	4
			Linear Lie Groups	4
			Graph Theory	4
			Advanced Functional Analysis	4
			Advanced Topics in Discrete Mathematics	4
			Laboratory Practical in Mathematics	4
			Topic in Topology and Analysis	4
			Functional Analysis- II	4
			Operator Theory	4
			Non-Commutative Rings and Representations	4
			Advanced Complex Analysis	4
			Algorithms Using Java	4
			Functional Analysis-III	4
			Mathematical Practical	4
			Mathematica Practical	4
			Computational Algebra	4
			Numerical Analysis	4
			Integral Transforms	4

MATHEMATICS COURSES OFFERED BY THE DEPARTMENT OF MATHEMATICS TO THE 5 YEAR INTEGRATED M.SC. PROGRAM OF THE RAMANUJAN SCHOOL OF MATHEMATICAL SCIENCES

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Differential Calculus	3	Foundations in Geometry	3
II	Integral Calculus	3	Theory of Equations and Numerical Methods	3
II	Analytical Geometry of Three Dimensions and Trigonometry	3		
III	Multivariable Calculus	3		
III	Elements of Discrete Mathematics	3		
IV	Introduction to Real Analysis	3		
IV	Abstract Algebra	3		
V	Elements of Differential Equations	3		
V	A First Course in Linear Algebra	3		
VI	Fundamentals of Complex Analysis	3		
VI	Elements of Mechanics	3		

4th and 5th year Syllabi same as that of M.Sc. Mathematics I & II Year respectively

MATHEMATICS COURSES OFFERED BY THE DEPARTMENT OF MATHEMATICS TO THE 5 YEAR INTEGRATED M.Sc. PROGRAM OF THE SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Differential Calculus	3		
II	Integral Calculus	3		
II			Analytical Geometry of Three Dimensions and Trigonometry	3
III			Multivariable Calculus	3
V			A First Course in Linear Algebra	3
V			Elements of Differential Equations	3
VI			Fundamentals of Complex Analysis	3

FIVE YEAR M.Sc., INTEGRATED (RSMS)
BRANCH: COMPUTER SCIENCE

Semester	Hard Core Courses	Credits
I	Introduction to Computer and Programming in C Practical I - Programming in C - Lab	3 3
II	Data and File Structures Practical II - DS Lab (Using C)	3 3
III	Introduction to OOP and Programming in C++ Practical III - C++ Lab	3 3
IV	Principles of Operating Systems Practical IV - Operating Systems Lab	3 3
V	Database Systems Practical V - DBMS Lab	3 3
VI	Java Programming Practical VI - Java Lab Mini Project	3 3 3

M.Phil. Mathematics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Hydrodynamic Stability	4	Theory of Graphs	4
	Algebra	4	Algebraic Theory of Numbers	4
	Topics in Graph Theory	4	Integrable Systems	4
II	Dissertation	15	Lie Groups of Transformations and Differential Equations	4
	Viva-Voce	3	Homological Algebra	4
			Representation and Characters of Finite Groups	4
			Topics in Analysis	4
			Fuzzy Clustering and its Applications	4
			Algorithmic Graph Theory	4
			Product Graphs	4
			Computational Method for the PDE	4
			Theory of Partitions	4

DEPARTMENT OF STATISTICS

RAMANUJAN SCHOOL OF MATHEMATICAL SCIENCES

The Department of Statistics was established during October 2006. Currently, the department offers M.Sc. (Statistics), M.Sc. Five Year Integrated (Statistics), Ph.D (Statistics) programs and Post Graduate Diploma in Statistical and Research Methods (Add-on Course). The department aims to train students in the development and applications of Statistical techniques for analyzing data arising from various scientific investigation problems. The department also provides practical exposure in handling modern statistical softwares like SPSS 19.0, SYSTAT 13.0, R - language for analyzing such data.

In the present scenario, it is rather impossible, even to think of any field which does not employ modern statistical tools to arrive at a scientific conclusion. Therefore, statisticians are always indispensable in any research investigation process.

The department has highly qualified faculty members who have received National awards and have published research articles in reputed National and International Journals.

PROGRAMMES OF STUDY

M.Sc. - Statistics

M.Sc. - Five year Integrated Statistics

Ph.D. Programme in Statistics

(Full-time, Part-time, Internal and External)

M. Sc. Statistics

Semester	Name of the Course	Credits	Name of the Course	Credits
I	Mathematical Methods for Statistics	4		
	Probability Theory – I	4		
	Sampling Theory	4		
	Distribution Theory	4		
	Statistical Laboratory - I	3		
II	Theory of Estimation	4	Statistical Data Mining Methods	3
	Statistical Quality Control and Operations Research	4	Econometrics	3
	Stochastic Processes	4	Demographic Techniques	3
	Statistical Laboratory - II	3	Bayesian Inference	3
III	Multivariate Statistical Analysis	4	Reliability Theory	3
	Testing of Statistical Hypotheses	4	Biostatistics	3
	Linear Models and Regression Analysis	4	Actuarial Statistics	3
	Statistical Laboratory – III	3	Total Quality Management	3
IV	Design and Analysis of Experiments	4	Survival Analysis	3
	Statistical Laboratory – IV	3	Advanced Operations Research	3
	Project and Viva-Voce	4	Programming in C++	3
			Time Series Analysis	3
			Statistical Genetics	3

M.Sc. Statistics - Five Year Integrated*

Semester	Hard Core Courses	Credits
I	Basic Statistics	3
II	Basic Probability Theory	3
III	Probability Distributions	3
	Sampling Theory	3
IV	Basic Estimation Theory	3
	Practical – I	2
V	Elements of Testing Statistical Hypotheses	3
	Statistical Quality Control and Operations Research	3
	Practical – II	2
VI	Principles of Experimental Design	3
	Applied Statistics	3
	Practical – III	3

‘’ The syllabus for VII, VIII, IX and X semesters of M.Sc. Five Year Integrated Statistics program will be the same as Two Year M.Sc. Statistics program.*

SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

DEPARTMENT OF PHYSICS

The Department of Physics came into existence in June 1987. The department offers postgraduate programmes and conducts research in frontier areas of Physics. The Department has been recognized for special funding by DST under the fund for Improvement of Science and Technology Infrastructure (FIST-Level II) and UGC-SAP DRS-I Programmes. The faculty members have obtained major research grants exceeding Rs. 7.0 crore from different funding agencies such as DST, AICTE, UGC, IFCPAR, DRDO, DAE, INSA and CSIR, Government of India. The research activities have resulted in publication of more than 425 research papers in peer-reviewed journals. The members of the faculty have been accorded with several national, international awards, fellowships and are members in the National Committees, referees of many national and international journals. A large number of visitors come to interact with faculty/students and for collaborative research work with faculty members.

At present, our faculty members are doing collaborative research work with leading scientists in India and Abroad and are doing International projects with Germany and Brazil Scientific agencies. The Department currently offers a five-year integrated M.Sc., a two-year M.Sc. with three specializations viz., Lasers, Condensed Matter Physics and Electronics.

PROGRAMMES OF STUDY

M.Sc. Physics (2 years), with three specializations
Condensed matter physics, Electronics, Laser physics
M.Sc. Physics (5 year Integrated)
M.Phil. Physics
Ph.D. Physics (Full-time)

M. Sc. Physics - 5 year Integrated

M.Sc. Five year-integrated semester I to X. M.Sc. Semester VII to X

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Physics laboratory – I	2	Practical Course in Physical Education	3
	Mechanics	3		
	General Chemistry Laboratory I	2		
	General Chemistry I	3		
	Functional English	3		
	Differential Calculus	3		
	Earth and Environment	3		
II	Physics Laboratory II	2		
	Thermal Physics and Kinetic Theory	3		
	General Chemistry Laboratory II	2		
	General Chemistry II	3		
	Functional English	3		

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
II	Integral Calculus	3		
	Paleontology	3	General Biology I	3
III	Physics Laboratory – III	2	Inorganic Chemistry I	3
	Physics of Wave and Continuous Media	3	Physical Chemistry I	3
	Electricity and Magnetism	3	Chemistry Laboratory III	2
	Crystallography and Mineralogy	3	General Biology II	3
	Multivariable Calculus	3	Structural Geology and Tectonics	3
			A Language Course	3
			Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
IV	Physics Laboratory – IV	2	Organic Chemistry I	3
	Modern Physics – I	3	A Language Course	3
	Electric Circuits Theory	3	Computer Science Course	3
	Linear Algebra	3	Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Course from School of Social Science (Philosophy)	3
			Chemistry Lab IV	2
			Course in Conversational English / Communication Skills	3
V	Physics Laboratory – V	2	Organic Chemistry II	3
	Classical Optics	3	Physical Chemistry II	3
	Electronic Devices and Circuits	3	A Language Course	3
	Modern Physics – II	3	Computer Science Course	3
	Elements of Differential Equation	3	Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Geochemistry	3
			Course from Center for Electronic Media	3
VI	Physics Laboratory – VI	2	Inorganic Chemistry III	3
	Computational Physics	3	Organic Chemistry III	3
	Basics of Materials Science	3	Analytical Chemistry	3
	Modern Optics	3	A Language Course	3
	Fundamentals of Complex Analysis	3	Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
VI			Course from School of Social Science (Philosophy)	3
			Geohydrology and Engineering Geology	3
			Geomorphology and Remote Sensing	3
VII	Physics Laboratory	2	Numerical Methods and MATLAB	3
	Mathematical Methods in Physics	4	UNIX, Fortran 90 and C++	3
	Classical Mechanics	4	Differential Equations and Transform Techniques	3
	Electronic Devices, Circuits and Microprocessors	4	Advanced Inorganic Chemistry I	3
			Advanced Organic Chemistry I	3
			Symmetry and Group Theory in Chemistry	3
			Quantum Chemistry I	3
			Basic Geochemistry	3
			A Language Course	3
			Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Course from School of Social Science (Philosophy)	3
VIII	Physics Laboratory	2	Measurement systems and Data Acquisition	3
	Quantum Mechanics – I	4	Microprocessors and Applications	3
	Classical Electrodynamics	4	Basic of Astronomy and Astrophysics	3
	Solid State Physics	4	Advanced Inorganic Chemistry II	3
	Statistical Physics	4	Spectroscopic Identification of Organic Compounds	3
			Statistical Thermodynamics and Reaction Dynamics	3
			A Language Course	3
			Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Course from School of Social Science (Philosophy)	3

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
IX	Advanced Physics laboratory	3	Liquid and Polymer Physics	3
	Quantum Mechanics – II	4	Advanced Electronic Devices and Circuits	3
	Atomic and Molecular Physics	4	Laser Theory	3
			Nonlinear Optics and Materials	3
			Experimental Design	3
			Ion beams in nanotechnology	3
			Spectroscopy : Theory and Applications	3
			A Language Course	3
			Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Course from School of Social Science (Philosophy)	3
X	Project Work	4	Laser Systems	3
	Nuclear Physics	4	Physics of Amorphous Materials	3
			Phy. of Crystalline Materials	3
			Signal Processing and Communication	3
			Power Electronics and Microcontrollers	3
			Visual Programming (Pre-requisite : PHYS – 436)	3
			Nano-materials and Photo – Catalysis	3
			Ligand field Theory	3
			Electro – Analytical Techniques	3
			Advanced magnetic Resonance and Solid State Chemistry	3
			A Language Course	3
			Computer Science Course	3
			Mathematics Course	3
			Statistics Course	3
			Course from School of Management	3
			Course from School of Social Science (Philosophy)	3

M. Phil. Physics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology	4	Laser Spectroscopy and its Applications	4
	Advanced Condensed Matter Physics	4	Magnetism and Magnetic Materials	4
	M.Phil. Project Dissertation	15	Fiber Optics Communication	4
	Viva Voce	3	Advanced Computational Physics	
			Magnetic Nano – Particle	
			Quantum Optics and Quantum Information Processing	4
			Solid State Spectroscopy	4
			Ion Beams in Nanotechnology	4
			Nonlinear Science: Solutions and Chaos	4
			Semiconductor: Laser Physics	4
			Acoustic, Dielectric Techniques and its Applications to Solutions	4
			Biophysics	4
			Solid State Ionics	4
			Advanced Solid State Physics	4
			Paleomagnetism	4
			Basic Plasma Physics and Applications	4
			Quantum Mechanics in Non-Commutative Phase Space	4
			Quantum Computation	4
			Science and Technology of Solid State Ionics	4
			Advanced in Non-Linear Optics	4
			Atomic Many Body Physics	4
			Nano – Materials and Photo – Catalysis	3
			Ligand Filed theory	3
			Elector – Analytical Techniques	3
			Advanced Magnetic Resonance and Solid State Chemistry	3

DEPARTMENT OF CHEMISTRY

SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

The Department of Chemistry, started in 1987, is well equipped to support high quality teaching and international standard research activities. The Department has highly qualified faculty members to conduct research in forefront areas of Chemistry. Research work of faculty members is supported by the premier national funding agencies such as DST, CSIR, UGC and AICTE. Interdisciplinary and collaborative research is a feature of the Department. There are about 45

Ph.D. and 25 M.Phil. Scholars engaged in research activities. The Department is supported by the Department of Science & Technology, Govt. of India through FIST program and by the University Grants Commission's SAP (DRS) programs to achieve academic potentials.

PROGRAMMES OF STUDY

M.Sc. Chemistry (5 year Integrated)

M.Sc. Chemical Sciences (2 years)

M.Phil. Chemistry (Full Time)

Ph.D. Chemistry (Full Time, Part Time (Internal))

M.Sc. Chemical Sciences

M.Sc. Five year-integrated semester I to X. M.Sc. Semester VII to X

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	General Chemistry Laboratory I	2	Practical Course in Physical Education	3
	General Chemistry I	3		
	Physics Laboratory I	2		
	Mechanics	3		
	Functional English	3		
	Differential Calculus	3		
	Earth and Environment	3		
II	General Chemistry Laboratory II	2	Paleontology	3
	General Chemistry II	3		
	Physics Laboratory II	2		
	Thermal Physics and Kinetic Theory	3		
	Integral Calculus	3		
	Functional English II	3		
	Biology I	3		
III	Chemistry Laboratory III	2	Electricity and Magnetism	3
	Inorganic Chemistry I	3	Physics of wave and continuous Media	3
	Crystallography and mineralogy	3	A language course (other than English)	3
	Biology II	3		
	Linear Algebra	3		
IV	Chemistry Laboratory IV	2	A language course (other than English)	3
	Organic Chemistry I	3	A course from Department of Computer Science	3
	Physical Chemistry I	3	A course from School of Social Sciences	3
	Modern Physics I	3	Electric Circuits Theory	3

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
V	Chemistry Laboratory V	3	A course on Economics/ Commerce/History	3
	Inorganic Chemistry II	3	Modern Physics – II	3
	Organic Chemistry II	3	Classic Optics	3
	Physical Chemistry II	3	Electronic Devices and Circuits	3
	Elements of Differential Equations	3		
VI	Chemistry Laboratory VI	3	Computational Physics	3
	Inorganic Chemistry III	3	A course from School of Management	3
	Organic Chemistry III	3	Modern Optics	3
	Analytical Chemistry	3	Basics of Material Science	3
VII	Chemistry Laboratory VII	3	A course offered by other Departments	3
	Advanced Inorganic Chemistry I	3	Classical Mechanics	4
	Advanced Organic Chemistry I	3	Statistical Physics	4
	Symmetry and Group Theory in Chemistry	3	Mathematical methods in Physics	4
	Quantum Chemistry I	3	Electronic Devices, Circuits and Microprocessors	4
VIII	Chemistry Laboratory VIII	3	A course offered by other Departments	3
	Advanced Inorganic Chemistry II	3	Quantum Mechanics – I	4
	Spectroscopic Identification of Organic compounds	3	Classical Electrodynamics	4
	Statistical Thermodynamics and Reaction dynamics	3	Solid State Physics	4
	Quantum Chemistry II	3		
IX	Advanced Laboratory Techniques	3	Advanced Organic Chemistry III	3
	Advanced Inorganic Chemistry III	4	A course offered by other Departments	3
	Advanced Organic Chemistry II	4	Quantum mechanics – II	4
	Spectroscopy: Theory and Applications	4	Atomic and Molecular Physics	4
X	Project Work	4	Inorganic Photochemistry	4
	Comprehensive Evaluation/Viva	3	Ligand Field Theory	4
			Supra-molecular Chemistry	4
			Natural Products Chemistry	4
			Asymmetric Synthesis	4
			Magnetic Resonance Spectroscopy and Solid State Chemistry	4
			Magnetic Resonance	3
			Electro Analytical Techniques	4
			Nano-materials and Photo-catalysis	4
			Computational Quantum Chemistry	3
			Nuclear Physics	4

M.Phil. Chemistry

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Chemical Bonding And Reactivity	6	Physical Methods in Inorganic Chemistry	6
			Advanced Topics in Organic Chemistry	6
			Theoretical and Computational Chemistry	6
			Advances in Nanomaterials and Photo catalysis	6
			Advanced Magnetic Resonance and Solid State Chemistry	4
			Laser Spectroscopy and its applications	4
			Magnetism and Magnetic Materials	4
			Magnetic nano-Particles	4
			Solid State Spectroscopy	4
			Biophysics	
II & III	Dissertation	15		
	Viva - Voce	3		

DEPARTMENT OF EARTH SCIENCES

SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

The Department of Earth Sciences at Pondicherry University was started in September 1994. The Department is being supported by UGC-Special Assistance Programme at DRS level and by DST-FIST programme. The Department strives to achieve academic excellence and to produce geoscientists with world class training.

PROGRAMMES OF STUDY

M.Sc. Applied Geology (2 years)
M.Sc. Applied Geology (5 years Integrated)
M.Tech. Exploration Geosciences (2 Years)
Ph.D. Earth Sciences (Full-time, Part-time (Internal & External))

M.Sc. Applied Geology - 5 Years

Semester	Hard Core Courses	Credits
I	Mathematics I	3
	Physics I	3
	Chemistry I	3
	Earth & Environment	3
	Physics Lab I	2
	Chemistry Lab I	2
	Semester Total	16

Semester	Hard Core Courses	Credits
II	Mathematics II	3
	Physics II	3
	Chemistry II	3
	Paleontology	3
	Physics Lab II	2
	Chemistry Lab II	2
	Semester Total	16
III	Crystallography and Mineralogy	3
	Structural Geology and Tectonics	3
	Geology Lab I – Structural Geology & Mineralogy	2
	Semester Total	8
IV	Igneous and Metamorphic Petrology	3
	Sedimentology	2
	Geology Lab II Igneous & Met. Petrology and Sedimentology	2
	Semester Total	7
V	Mineral and Fossil Fuel Resources	3
	Stratigraphy and Indian Geology	3
	Geochemistry	3
	Geology Lab III – Ore petrography & Geochemistry	2
	Semester Total	11
VI	Geohydrology and Engineering Geology	3
	Geomorphology and Remote Sensing	3
	Field Training I – Geological Field work and Mapping	3
	Geology Lab IV – Remote Sensing and Geohydrology	2
	Semester Total	10

Note :

The Course structure and syllabus for 7th, 8th, 9th and 10th Semester of Integrated M.Sc., Course in Applied Geology are same as those of 1st, 2nd, 3rd and 4th Semester of 2 year M.Sc., Course in Applied Geology Respectively.

M.Sc. Applied Geology - 2 Years

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Advanced Mineralogy	4	Basic Geochemistry	3
	Structural Geology	3	Numerical Methods & Computer Programming	3
	Applied Paleontology	3	Computer Applications in Earth Science	3
	Advanced Geology Lab I	4		
II	Igneous & Metamorphic Petrology	4	Isotope Geology	3
	Stratigraphy	2	Global Tectonics	2
	Geomorphology	2		
	Intro. To Remote Sensing & GIS	3		
	Advanced Geology Lab II	4		
	Advanced Field Training I	3		
III	Geology of Mineral Deposits	4	Marine Geology & Oceanography	2
	Sedimentology	2	Quaternary Geology	2
	Geohydrology	2	Coal & Petroleum Geology	2
	Solid Earth Geophysics	2	Mineral Economics	2
	Advanced Geology Lab III		Professional Training	3
IV	Geoexploration	4	Environmental Geology	2
	Engineering Geology	2	Mining Geology	2
	Project	4	Well Logging	2
	Advanced Geology Lab IV	2	Adv. Remote Sensing & GIS	3
	Advanced Field Training II	3		

M.Tech. Exploration Geosciences

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Mineral Exploration	4	Statistical Methods in Geology	3
	Exploration Geophysics	4	Advanced Structural Analysis	3
	Remote Sensing & GIS Applications in Exploration Geoscience	4	Basin Analysis and Micropaleontology	3
II	Petroleum Exploration	4	Modern Analytical Methods in Geoscience	3
	Groundwater Exploration	4	Principles and Applications of Isotope Geology	3
	Geoexploration Lab	4	Mapping Methods, GPS and Cartography	3
III	Professional Training	6		
	Mini Project	8		
	Seminar	8		
IV	Dissertation	15		
	Viva Voce	3		

DEPARTMENT OF APPLIED PSYCHOLOGY

SCHOOL OF PHYSICAL, CHEMICAL AND APPLIED SCIENCES

PROGRAMMES OF STUDY

M.Sc. Applied Psychology

M.Sc. Applied Psychology
Ph.D. (Full-time & Part-time)

Semester	Hard Core Courses	Credits
I	Schools and Systems of Psychology	3
	Advanced General Psychology – I	3
	Advanced Social Psychology – I	3
	Developmental Psychology – I	3
	Psychological Statistics – I	3
	Psychopathology – I	3
II	Experimental Psychology	3
	Advanced General Psychology – II	3
	Advanced Social Psychology – II	3
	Developmental Psychology – II	3
	Psychological Statistics – II	3
	Psychopathology – II	3
III	INDUSTRIAL PSYCHOLOGY SPECIALIZATION	
	Organizational Behaviour	3
	Human Resource Development – I	3
	Human Resource Development – II	3
	Research Methodology	3
	Consumer Behaviour and Marketing	3
	Psychological Assessment in an Industrial Setting - Practical (Module -I)	3
	CLINICAL PSYCHOLOGY SPECIALIZATION	
	Research Methodology	3
	Psychodiagnostics	3
	Health Psychology	3
	Rehabilitation Psychology	
	Cognitive Psychology	3
	Clinical Assessment - Practical (Module - II)	3
IV	INDUSTRIAL PSYCHOLOGY SPECIALIZATION	
	Work Place Counseling	3
	Labour Legislation & Global HR Practices	3
	Internship and Dissertation	12
	CLINICAL PSYCHOLOGY SPECIALIZATION	
	Internship and Dissertation	3
	Neuropsychology	3
	Therapeutic Psychology	12

SCHOOL OF LIFE SCIENCES

DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Biochemistry & Molecular Biology was started as the Department of Biological Sciences under School of Life Sciences in 1987 and had been offering M.Sc., M.Phil., and Ph.D. degrees in Life Sciences. In 2004, the Department was renamed as Department of Biochemistry & Molecular Biology and have been offered M.Sc. and Ph.D. courses in Biochemistry and Molecular Biology (BMB).

The areas of research focus includes Reproductive biology, Microbial Biochemistry, Protein Biochemistry & Metabolism,

Phytoregulation, Developmental Biology, Systematic Anatomy, Biopesticides, Immunology, Cancer biology, Liver toxicity etc.

PROGRAMMES OF STUDY

M.Sc. Biochemistry & Molecular Biology

M.Sc. Microbiology - Self-financed (offered jointly with the Dept. of Food Science & Technology).

Ph.D. Biochemistry & Molecular Biology (Full Time)

M.Sc. Biochemistry & Molecular Biology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Biomolecules	3	Biostatistics & Scientific Writing	3
	Human Physiology	3		
	Cell Biology	3		
	Analytical Biochemistry	3		
	Biomolecules Lab	1		
	Human Physiology Lab	1		
	Cell Biology Lab	1		
	LAB - Analytical Biochemistry & Biophysics	1		
II	Metabolism & Regulation	3	Bioinformatics Bioinformatics Lab	3 1
	Enzymology	3		
	Molecular Biology	3		
	Molecular Immunology	3		
	Plant Physiology	3		
	Endocrinology	3		
	LAB - Metabolism & Regulation	1		
	LAB - Enzymology	1		
	LAB - Molecular Biology	1		
	LAB - Molecular Immunology	1		
	LAB - Plant Physiology	1		
III	Molecular basis of Cellular disorders	3		
	Molecular Immunology	3		
	Genetic Engineering	3		

III	Cancer Biology	3		
	Plant Biotechnology	3		
	LAB - Molecular Immunology	1		
	LAB - Plant Physiology	1		
	LAB - Genetic Engineering	1		
IV	Proteomics	3	Neurobiology	3
	Molecular Endocrinology	3	Development Biology	3
	Plant Biotechnology		Project	4

M.Sc. Micro Biology

Semester	Hard Core Courses	Credits
I	General Microbiology	3
	Bacteriology	3
	Microbial Physiology	3
	Instrumentation and Techniques in Microbiology	3
	Biostatistics	3
	LAB - General Microbiology	1
	LAB - Bacteriology	1
	LAB - Microbial Physiology	1
	LAB - Instrumentation and Techniques in Microbiology	1
II	Microbial Biochemistry	3
	Virology	3
	Mycology	3
	Molecular Biology	3
	Microbial Genetics	3
	Immunology	3
	LAB - Microbial Biochemistry	1
	LAB - Mycology & Virology	1
	LAB - Molecular Biology & Microbial Biochemistry	1
III	Genetic Engineering	3
	Food Microbiology	3
	Fermentation Technology & Down-Stream Processing	3
	Agricultural Microbiology	3
	Medical Microbiology	3
	Genetic Engineering Lab	1
	Food Microbiology Lab	1
	Fermentation Technology & Down-Stream Processing Lab	1
IV	Industrial Microbiology	3
	Environmental Microbiology	3
	Project/ Dissertation	6

DEPARTMENT BIOTECHNOLOGY

SCHOOL OF LIFE SCIENCES

Since its inception in the year 1992 the Department of Biotechnology has been offering M.Sc. and Ph.D. programmes in Biotechnology. The students admitted to M.Sc. Biotechnology programme are those selected in the combined entrance examination conducted by Jawaharlal Nehru University, New Delhi on an all India basis. The Department of Biotechnology, Govt. of India has given an additional grant to strengthen the M.Sc. Biotechnology

teaching programme. To augment the infrastructure facility and to develop a vibrant research group, the members of the faculty have attracted extramural funding from both national (UGC, DBT, DST, CSIR, AICTE and BRNS) and international (Rockefeller Foundation and Danish Government) funding agencies. The publications coming out from the Department attest to the exemplary research work carried out in the Department.

PROGRAMMES OF STUDY

M.Sc. Biotechnology
Ph.D. Biotechnology (Full-time)

M.Sc. Biotechnology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Cell Biology	3	Cell Biology Lab	1
	Immunology	3	Immunology Lab	1
	Microbiology	3	Microbiology Lab	1
	Techniques in Biotechnology	3	Techniques in Biotechnology Lab	1
	Biochemistry	3	Biochemistry Lab	1
II	Molecular Genetics	3	Molecular Genetics Lab	1
	Molecular Plant-Microbe Interaction	3	Molecular Plant – Microbe Interaction Lab	1
	Applied Microbiology	3	Applied Microbiology Lab	1
	Immunotechnology	3	Immunotechnology Lab	1
	Molecular Plant Breeding	3	Molecular Plant Breeding Lab	1
III	Recombinant DNA Technology	3	Recombinant DNA Technology Lab	1
	Plant Biotechnology	3	Plant Biotechnology Lab	1
	Bioprocess Technology	3	Marine Biotechnology Lab	1
	Marine Biotechnology	3	Microbial Biotechnology Lab	1
	Pharmacokinetics	3		
	Microbial Biotechnology	3		
	Seminar	1		
	Project	2		
IV	Radiation Biology	3	Radiation Biology Lab	1
	Animal Biotechnology	3	Animal Biotechnology Lab	1
	Medical Biotechnology	3	Medical Biotechnology Lab	1
	Proteomics and Genomics	3	Proteomics and Genomics	1
	Project	4		

DEPARTMENT OF ECOLOGY AND ENVIRONMENTAL SCIENCES

SCHOOL OF LIFE SCIENCES

The major objective of this Department has been to provide interdisciplinary high quality education to students in order to deepen their understanding of contemporary ecological and environmental problems. The faculty have received international and national research awards and medals. Some have also been elected to the fellowship of National Academics and Professional Societies and are on the editorial

boards of national & international journals.

PROGRAMMES OF STUDY

M.Sc. Ecology and Environmental Sciences

Ph.D. Ecology and Environmental Sciences (Full time)

M.Sc. Ecology & Environment Sciences

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Introduction to Ecology & Environmental Science	3	Agriculture and Weed Ecology	3
	Bio – Statistics	3	Bio - Physics	3
	Biodiversity	3	Landscape Ecology and Planning	3
	Aquatic Ecosystems	3	Eco Tourism	3
	Behavioural Ecology	3	Forest Botany	3
			Marine Ecology	3
II	Population and Community Ecology	3	Integrated Coastal Zone Management	3
	Terrestrial Ecosystem	3	Plant Animal Interaction	3
	Environmental Pollution	3	Business Strategy & Environment	3
	Environmental Impact Assessment	3	Ornithology	3
	Environmental Epidemiology		Eco-Remediation	
			Basic Horticulture	3
			Marine Biodiversity and Conservation	
			Biological invasions	
			Instrumentation Techniques in Biology	
			Ecology of Medicinal Plants	
			Environmental Informatics and spatial modeling	
			Environmental Seri Biotechnology	
			Advanced Water Treatment Technologies	

III	Conservation Biology	3	Forest Ecology	3
	Industrial Ecology	3	Natural Resources Management	3
	Environmental Management	3	Agro ecosystems and Agro Forestry Practices	3
	Remote Sensing and GIS	3	Contemporary Environmental Issues	3
	Global Environmental Changes	3	Environmental Biotechnology	3
			Environmental Law, Policies and Justice	3
			Ocean Biogeochemistry	
			Environmental Surveillance	
IV	Field Methods for Conservation Studies	3		
	Applied Ecology & Environmental Sciences	3		
	Forest Structure and Functional Ecology	3		
	Belowground Faunal Biodiversity	3		
	Human Ecology & Environmental Management	3		
	Applied Weed Ecology	3		
	Marine Eco Biology	3		
	Environmental Planning & Management	3		
	Research methods in plant ecology	3		
	Advanced Geomatic techniques	3		
	Research methods in Sericulture	3		
	Environmental photocatalysis	3		
	Dissertation	5		

DEPARTMENT OF OCEAN STUDIES AND MARINE BIOLOGY

SCHOOL OF LIFE SCIENCES

BROOKSHABAD CAMPUS, PORT BLAIR, ANDAMANS

The Department of Ocean Studies and Marine Biology was initially started as a Centre of Ocean and Island Studies in the year 2000, and later it was upgraded to a Department in 2004 with a major funding from UGC. This Department has its own campus, located at Port Blair, the picturesque capital of the Andaman and Nicobar Islands. The Department has sophisticated laboratory facilities equipped with latest equipment for field investigations in ocean related sciences. These facilities are to impart education and training to the students of Marine Biology and Coastal Disaster Management

and for carrying out R&D activities in and around islands and other parts of India.

The program is primarily designed to create trained manpower in Marine Biology and Disaster Management. The Department marine systems and its application for sustainable management, creating a database on the oceanographic parameters including, physical, chemical, biological and geological aspects. In addition, it is also providing inputs to formulate an effective disaster management plan for coastal areas.

PROGRAMMES OF STUDY

M.Sc. Marine Biology

Ph.D. Marine Biology

M.Sc. Marine Biology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Physical Oceanography	4	Benthic Ecology	
	Chemical Oceanography	4	Marine Environmental Impact Assessment	
	Biological Oceanography	4	Marine Ornamental Fishes	
	Invertebrates	4	Methods in Marine Zooplankton Ecology	
	Practical – I Covering all the papers in the semester	4	Marine Biodiversity and Conservation	
			Bacteriological Assessment of Seafood and Water Quality	
			Remote Sensing and GIS	
II	Vertebrates	4	Biostatistics and Computer Applications in Biosciences	
	Marine Biotechnology	4	Molecular Taxonomy of Fishes	
	Cell Biology	4	Ecotoxicology	
	Marine Microbiology	4	Bioactive Marine Natural Products	
	Practical - II Covering all the papers in the semester	4	Marine Organisms - Collection and Preservation	
			Meiobenthology	
			Coral and Mangrove Ecosystems	
III	Physiology and Biochemistry	4		
	Marine Ecology	4		
	Fish and Fisheries	4		
	Practical - III Covering all the papers in the semester and Field Trip Report	4		

IV	Marine Pollution	4		
	Coastal Aquaculture	4		
	Ocean Policies and Management	4		
	Soft Core I	2		
	Soft Core II	2		

DEPARTMENT OF COASTAL DISASTER MANAGEMENT

SCHOOL OF LIFE SCIENCES

BROOKSHABAD CAMPUS, PORT BLAIR, ANDAMANS

PROGRAMMES OF STUDY

M.Sc. Coastal Disaster Management
Ph.D. Coastal Disaster Management

M.Sc. Coastal Disaster Management

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Oceanography	4	Marine Geology	3
	Composition & Classification of the Solid Earth and Atmosphere	4	Meteorological Hazards	3
	Coastal Geomorphology	4		
	Crustal deformity structures & Geodynamics	4		
	Field work and Lab I (covering courses 411, 412)	3		
	Field work and Lab II (covering courses 413, 414)	3		
II	Natural & Manmade Hazards	4	Capability models of disaster risk assessment	3
	Application of Geophysical techniques for Microzonation & Natural Hazard Identification	4	Public, Biological & Agricultural Hazard	3
	Remote Sensing	4	Urban/Rural planning & hazard mapping	3
	Geographical Information System	3		
	Field work and Lab III (covering courses 421, 422)	3		
	Field work and Lab IV (covering courses 423, 424)	3		
III	Disaster Management	4	Coastal & hydrological hazards	3
	Design & protection structures	4	Industrial hazards mitigation	3
	Environmental Impact Assessment	4	Earthquake seismology & Internal structure of the Earth	3
	Disaster prediction & regional forecasting	3		
	Field work and Lab V (covering courses 511, 512)	3		
	Field work and Lab VI (covering courses 513, 514)	3		
IV	Project work	4		

DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

SCHOOL OF LIFE SCIENCES

The Department of Food Science and Technology was established in 2007. The major objectives of the department are to provide inter disciplinary high quality education in food science, food process techniques, product development and food quality control. The department is offering M.Sc. and Ph.D programme in Food Science and Nutrition and Food Science and Technology. A large, nationally and internationally recognized faculty with a broad range of expertise in different

facets of Food Science; an excellent selection of courses in Basic and Applied Sciences and modern; well equipped research laboratories and pilot plant facilities combined to make the Post graduate programme in Food Science and Nutrition and Food Science and Technology among the very best in the world.

PROGRAMMES OF STUDY

M. Sc. Food Science and Nutrition
M. Sc. Food Science and Technology
Ph.D. Food Science and Nutrition
Ph.D. Food Science and Technology

M.Sc. Food Science & Technology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Food Chemistry	3	Research Methodology and Biostatistics	3
	Food Chemistry Lab	1		
	Food Microbiology	3		
	Food Microbiology Lab	1		
	Food Process Engineering	3		
	Food Processing and Preservation Technology	3		
	Food Processing and Preservation Technology Lab	1		
	Nutraceuticals and Functional Foods	3		
	Techniques in Food Analysis lab	2		
II	Food Plant Equipment	3	Baking and Confectionery Technology Baking and Confectionery Technology Lab	3 1
	Food product Development and Quality Evaluation	3		
	Food product Development and Quality Evaluation Lab	1		
	Enzymes in Food Processing	3		
	Enzyme Technology and Downstream Processing Lab	1		
	Fermentation Technology	3		
	Pollution in Food Industries	3		

III	Food Biotechnology	3	Food Safety and Quality Control Lab	3
	Food Packaging	3		
	Technology of Animal Products*	3	Food Plant Organization and Management #	3
	Technology of Animal Products Lab	1		
	Technology of Fruits and Vegetables	3	Food Laws and Regulations#	3
	Technology of Fruits and Vegetables Lab	1		
	Technology of Cereals, Legumes and Oil Seeds*	3		
	Technology of Cereals, Legumes and Oil Seeds Lab*	1		
	Technology of Spices and Plantation products*	3		
	Technology of Spices and Plantation products Lab*	1		
	Food Safety and Quality Control	3		
	Minor Project and Seminar	2		
IV	Project work	6		

* Only two papers along with the lab per semester; # Only one paper per semester

M.Sc. Food Science & Nutrition

Semester	Name of the Course	Credits	Name of the Course	Credits
I	Food Chemistry	3	Human Physiology	2
	Food Chemistry Lab	1	Food Economics and Food Security	2
	Food Microbiology	3		
	Food Microbiology Lab	1		
	Food processing and Preservation Technology	3		
	Food Processing and Preservation Technology Lab	1		
	Nutraceuticals and Functional Foods	3		
II	Advanced Nutrition I	3	Research Methodology and Biostatistics	2
	Food Product Development and Quality evaluation	3	Food Toxicology	2
	Food Product Development and Quality evaluation lab	1	Advance Food Science	2
	Public Health Nutrition	3	Advance Food Science Lab	1
	Clinical and Therapeutic Nutrition I	3		
	Food Additives	3		
	Food Biotechnology		Food Safety and Quality Control lab	1
	Food Packaging	3		
	Food Safety and Quality Control	3		
	Nutritional Biochemistry	3		
	Nutritional Biochemistry lab	1		
	Advanced Nutrition II	3		
	Clinical and Therapeutic Nutrition II	3		
	Minor project and Seminar	2		
IV	Project work	6		

CENTRE FOR BIOINFORMATICS

SCHOOL OF LIFE SCIENCES

The Centre for Bioinformatics in Pondicherry University was started as Sub Distributed Information Centre of the Department of Biotechnology, Govt. of India (DBT) in 1991. The mandate of the Centre is to train manpower and conduct research in various areas of Bioinformatics.

The Centre has got approval for starting Network M.Sc., Computational Biology teaching programme fully funded

by DBT in collaboration with Madurai Kamaraj University, Madurai and Anna University, Chennai. This programme will be first of its kind in the country. In the past few years, the Centre has taken up research activities in the areas of sequence analysis, molecular modeling, database development etc.,

M.Sc. Bioinformatics

PROGRAMMES OF STUDY

M.Sc. Bioinformatics
M.Sc. Computational Biology
Ph.D. Bioinformatics

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Cell and Molecular Biology	3	Physics	2
	Bioinformatics Databases	3	Chemistry	2
	C and Data Structure	3	Mathematics	2
	LAB - Cell and Molecular Biology	1	Biology	2
	LAB - Biological Databases	1	Basics of Computer	2
	LAB - Programming in C/ C++	1	Introduction to Bioinformatics	3
			LAB – Basics of Computer & Operating Systems	1
			LAB - Bioinformatics Databases and Tools	1
II	Genomics and Proteomics	3	Probability and Statistics	2
	Bioinformatics: Sequence Analysis	3	Fundamentals of Algorithms	2
	Programming in Java	3	Microscopic Techniques for Image Processing	2
	Database Management System	3		
	LAB - Programming in Java	1		
	LAB - Programming in DBMS	1		
	LAB - Biosequence Analysis	1		
III	Structural Biology	3	Biological Spectroscopy	2
	Molecular Modeling and Drug Design	3		
	Programming in Perl	3		
	Systems Biology	3		
	Data Communications and Networks	2		
	LAB - Structural Biology	1		
	LAB - Molecular Modeling and Drug Design	1		
	LAB - Programming in Perl	1		
IV	Bioethics, Biodiversity and Intellectual Property Rights	3	Analytical Techniques	2
	Project	8	R Language and Bioconductor	3

M.Sc. Computational Biology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Probability and Statistics	3	Biology	2
	Communication Skills in Science & Technology	3	Mathematics	2
	Programming Language – Introduction to C and PERL	3		
	Cell & Molecular Biology	3		
	Biochemistry	3		
	Analytical Methods in Biotechnology	3		
	LAB – Analytical Techniques in Biotechnology	1		
	LAB – Programming Language – Introduction to C and PERL	1		
II	Algorithms in Computational Biology	3	Biodiversity and IPR	2
	Database Management Systems	3	Biomedical Informatics	2
	Structural Biology	3		
	Sequence Analysis	3		
	Molecular Evolution	3		
	LAB – Database Management Systems	1		
	LAB – Sequence Analysis	1		
III	Data Mining and Machine Learning	3	Systems Biology	2
	Advanced Programming Language	3		
	Genomics and Proteomics	3		
	Immunology & Pharmacology	3		
	Molecular Modeling and Molecular Dynamics	3		
	LAB – Molecular Modeling and Molecular Dynamics	1		
	LAB – Advanced Programming Language	1		
IV	Project Work	12		

SCHOOL OF HUMANITIES

DEPARTMENT OF ENGLISH

The Department of English, one of the oldest Departments of the University, was established on 1st December, 1986. It has established itself as a stronghold of Comparative Literature, teaching Comparative Literary Theory and fostering Comparative Literary Studies between Indian languages and English. In recent years, Cultural and Translation Studies too have come to be a thrust area, inspiring inter-disciplinary and intra-disciplinary insights among faculty and students

alike. An ecologically sensitive critical thinking and teaching has also emerged and the Department is one of the earliest in the country to proffer multicultural studies in this area—and with the founding and establishment of the Association for the Study of Literature and Environment-ASLE India (the Indian counterpart of the International forum of that name) in 2006, this has fostered a renewed direction to academics and scholars alike.

M.A. English

PROGRAMMES OF STUDY

M.A. English and Comparative Literature

M.Phil. English (Full-time)

Ph.D. English (Full-time & Part-time (Internal & External))

Semester	Name of the Course	Credits	Name of the Course	Credits
I	Poetry from Chaucer to Milton	3	Visual Culture and Communication	3
	Elizabethan Drama	3	Contemporary Indian Writing	3
	Augustan & Eighteenth Century Literature	3	Advanced Academic Writing	3
	Romantic & Victorian Poetry	3	Professional Communication	3
	Theory of Comparative Literature	3	Gender and Communication	3
II	19th Century British Fiction	3	Green Voices : Literature and Environment	3
	Literary Theory I	3	Functional Communicative Writing Skills	3
	Introduction to Linguistics	3	Current English Usage	3
	20th Century British Poetry	3	Canadian Fiction	3
	Modern Rhetoric and Research Methodology	3		
III	American Poetry	3	Feminist Studies	3
	Modern Drama	3	Functional Communicative Writing Skills	
	Teaching English as a Second Language	3		
	Media Studies	3		
	Project Work	3		
IV	Modern British Fiction	3		
	American Fiction	3		
	Translation : Theory and Practice	3		
	Postcolonial Literature	3		
	Literary Theory II	3		

M.Phil. English

Semester	Name of the Course	Credits
I	Literary theory and Criticism	4
	Post-modern Fiction	4
	Post Colonial Studies	4
	Contemporary Poetry	4
II	Dissertation	15
	Viva-Voce	3

DEPARTMENT OF FRENCH

SCHOOL OF HUMANITIES

The Department of French was established in 1987. The following programmes are conducted: M.A. (French-Translation and Interpretation), M.Phil. and Ph.D. Faculty members are trained in French Language and Literature. They have undergone specialized training at various universities in France. The two year Master's degree in French-translation

and interpretation prepares students for successful jobs like translators, teachers, lecturers and executives. Students are given wide options to select electives from various Departments of the University so as to increase their job opportunities and to become fully equipped to face the challenges of life.

PROGRAMMES OF STUDY

M.A. French (Translation and Interpretation)
M.Phil. French (Full-time)
Ph.D. French (Full-time & Part-time (Internal & External))

M.A. French

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Remedial Course in French - I	3	History of France	3
	Linguistic Approach to Translation	3	Life in France & Francophone countries : Elements of History, Geography, Culture and Civilization Part -I	3
	Business Translation	3	Techniques of Written Expression	3
	French Literature Moyen Age to 18th Century	3	Savoir – Vivre in France	3
	Contemporary France	3	Arts in France	3
II	Remedial Course in French - II	3	Transformational Grammar	3
	Introduction to Linguistics in French	3	French through Creative Writing	3
	Translation of Economic Texts	3	Life in France & Francophone countries : Elements of History, Geography, Culture and Civilization Part -II	3
	French Literature 19th Century	3	History of Translation	3
	Contemporary French Grammar	3	French for Hotel Management and Tourism	3
	Didactics of French as a Foreign Language	3	Terminology of Economics to the Indian Scene	3

III	Remedial Course in French - III	3	Elements of French Canadian Civilization	3
	Journalistic Translation	3	History of Culture and Civilization in France	3
	Scientific and Technical Translation	3	Use of TICE in FLE	3
	Translation and Theory of meaning	3	Literary Translation	3
	French Literature 20th Century	3	Lexicology / Semantics	3
IV	Remedial Course in French - IV	3	French Canadian Drama	3
	Initiation to Interpretation	3	Terminology of Tourism , Art & Architecture of India	3
	Introduction to Francophone Literature	3	Consecutive Interpretation	3
	Feminine Voices in Francophone Literature		Simultaneous Interpretation	3
	Project Work	4	The Quebecer Novel	3

list of Electives

Semester	Name of the Course	Credits
I	Basic French - I	3
II	Basic French - II	3

M.Phil. French

Semester	Hard Core Courses	Credits
I	Research Methodology	3
	Literary Theory	3
	Francophone Novels	3
	The use of French	3
II	Contemporary French Literature	3
	Machine Translation	3
	Dissertation	15
	Viva – Voce	3

DEPARTMENT OF HINDI

SCHOOL OF HUMANITIES

The Department of Hindi offers facilities for intensive study and research in different areas of Hindi Language and Literature, Functional Hindi and Translation, with special attention to Comparative Literature.

M.A. Hindi

PROGRAMMES OF STUDY

M.A. Hindi
M.Phil. Hindi (Full-Time)
Ph.D. Hindi (Full-Time & Part-Time {Internal & External})

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Aadhunik Hindi Kavya-I	3	Hindi Short Stories – A Survey	3
	Bhasha Vijnan	3	An Outline of Hindi Bhakti Literature	3
	Aadhunik Gadya Sahitya-I	3	Origin and Development of Hindi Drama	3
	Hindi Sahitya ka Itihas-I	3	Major Trends in Modern Hindi Poetry	
II	Aadhunik Hindi Kavya-II		Hindi Novel and the Tradition of Realism	
	Hindi Basha	3	Buddhist Themes in Modern Hindi Literature	3
	Aadhunik Gadya Sahitya-II	3	Relevance of Premchand to the Present Day Scenario	3
	Hindi Sahitya ka Itihas-II		Jayashankar Prasad – His Mind and Art	
III	Prachin evam Madhyakalin Kavya-I	3	Conversational Hindi	3
	Prayojanmulak Hindi-I	3	Visual Media and Hindi	3
	Kavya Sastra evam Sahityalochan-I	3	Regionalism in Hindi Novels	3
	Bhartiya Sahitya-I	3	Regionalism in Hindi Novels	3
IV	Prachin evam Madhyakalin Kavya-II	3	Nationalism in Hindi Poetry	3
	Prayojanmulak Hindi-II	3	South Indian Literature	3
	Kavya Sastra evam Sahityalochan-II	3		
	Bhartiya Sahitya-II	3		

list of Electives

Semester	Name of the Course	Credits
	Vishista Yug Pravrutti Ka Adhyayan	
1	Chhayavad	3
2	Patrakarita Prasikshan	3
3	Rajabhasha Prasikshan	3
4	Shravya Drushya Media Lekhan	3
	Rachanakaron Ka Vishesh Adhyayan	
5	Jayasankar Prasad	3
6	Special Study of Bharathendu Harichandra	3
7	Special Study of Hazari Prasad Dwivedi	3
	Vishista Vidha Ka Adhyayan	
8	Natak Aur Rangamanch	3
9	Hindi Upnyas	3
	Bhasha Vaijnanik Varg	
10	Bhasha Sikshan	3
11	Shaili Vijnan	3

M.Phil. Hindi

Semester	Hard Core Courses	Credits
I	Parivesh, Vishwadrushti Aur Hindi Sahitya –I(Aadi Kaal Se Reeti Kaal Tak)	4
	Anusandhan Ka Swaroop Aur Pravidhi	4
II	Shodh Alekh	4
	Laghu Shodh Prabandh	4
	Viva –Voce	3
	Electives	
	Bhasha Chintan Aur Shaili Vijnan	3
	Sanchar Madhyam Aur Anuvad	3

Ph.D. Hindi

Semester	Hard Core Courses
Paper I	Anusandhan Ki Pravidhi Aur Prakriya
Paper II	Hindi Sahitya Kee Vaicharik Prushtabhoomi
Paper III	Shodh Vishay – Rooprekha Aur Prushtabhoomi

DEPARTMENT OF SANSKRIT

SCHOOL OF HUMANITIES

The Department of Sanskrit, started functioning from 7th August 1988. It aims to train students who are oriented towards teaching and research. The thrust areas of teaching and research are Vedanta, Nyaya, Sankhya, Yoga, Grammar, Literature, Literary Criticism and Aesthetics. Besides, weekend Seminars, Sanskrit general studies are arranged to

enhance the knowledge of students. The Department also publishes an annual National Journal of Sanskrit Studies called VISVABHARATI.

PROGRAMMES OF STUDY

M.A. Sanskrit
M.Phil. Sanskrit
Ph.D. Sanskrit

M.A. Sanskrit

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Poetry –I	3	Sanskrit Literary Trends	3
	Prose- I	3	Basic Concepts of Indian Logic	3
	Drama- I	3	Introduction to Upanishads and Bhagavad Gita - I	3
	Grammar-I	3	History of Sanskrit Literature	3
	Upanishads	3	Stress management and Yoga	3
II	Poetry-III	3	Basic Concepts of Indian Logic	3
	Poetics-I	3	Introduction to Upanishads and Bhagavat Gita – II	3
	Grammar-II	3	Introduction to Sanskrit Literary criticism and Aesthetics	3
	Darsana-II	3	History of Sanskrit Literature	3
	Darsana -VII	3	Nyaya and Advaita	3
		3	Introduction of Sanskrit – I	3
III	Poetics-IV	3	Introduction to Sanskrit Literary Criticism and Aesthetics	3
	Poetics-V	3	Basic Concepts of Indian Logic	3
	Lexicography	3	History of Sanskrit Literature	3
	Darsana -III			
	Darsana-IV	3	Introduction of Sanskrit – I	3
	Grammar-III	3		
IV	Poetics III	3	Stress management and Yoga	3
	Grammar IV	3	Basic Concepts of Indian Logic	3
	Vedic Literature & Suktas	3	History of Sanskrit Literature	3
	PROJECT	4	Introduction of Sanskrit – II	3

M.Phil. Sanskrit

Semester	Hard Core Courses	Credits
I	Research Methodology and Manuscript logy	4
	Sahityasastram	4
	Nyayasastram	4
	Vedantasastram	4
II	Dissertation	15
	Viva – Voce	3

DEPARTMENT OF PHILOSOPHY

SCHOOL OF HUMANITIES

The Department of Philosophy started functioning from the academic year 1989-90 and is offering Ph.D., M.Phil. and M.A. programmes. The thrust areas of teaching and research are Metaphysics (Eastern & Western), Epistemology (Eastern & Western) and Social Philosophy (Eastern & Western).

PROGRAMMES OF STUDY

M.A. Philosophy

M.Phil. Philosophy: Full-time

Ph.D. Philosophy: Full-time & Part-time
(Internal & External)

M.A. Philosophy

Semester	Hard Core Courses	Credits
I	Classical Indian Philosophy	3
	Problems in Metaphysics	3
	Problems in Epistemology	3
	Normative and Meta-ethics	3
	Project (Individual Work)	3
	Eco-philosophy	3
	Contemporary Approaches to Indian Philosophy	3
II	Study of an Indian Classic	3
	Indian Philosophy of Values	3
	Philosophical Perspectives of Wittgenstein	3
	Moral Life and Ethical Standards	3
	Project (Individual Work)	3
	Foundations of Indian Philosophy	3
	Understanding Culture	3
	Applied Ethics	3
III	Contemporary Indian Philosophy	3
	Recent Western Philosophy	3
	Modern Logic	3
	Eastern & Western Thought	3
	Project (Individual Work)	3
	Philosophy of History	3
	Philosophy of Religion	3
IV	The Philosophy of Sri Aurobindo	3
	Two Metaphysicians: Heidegger & Strawson	3
	Introduction to Critical Theory	3
	Indian Political Thought	3
	Project (Individual Work)	3
	The Psychology of Human Development	3
	Philosophical Foundation of Contemporary Social Movements	3

	Philosophical Approach to Gandhian Thought	3
	Philosophy of Science	3
	Philosophy of Ambedkar	3
	Vaishnavism	3
	Philosophy of Technology	3
	Philosophy of Language	3
	Technology and Social Justice	3

M.Phil. Philosophy

Hard Core Courses		Credits
	Research Methodology	4
	Techniques of Philosophical Analysis	4
	Problems in Epistemology (Matilal's perception) in Metaphysics	4
	Background Paper	15
	Dissertation	3
	Viva Voce	

Ph.D. Philosophy

Hard Core Courses	
	Research Methodology
	Background Paper

DEPARTMENT OF PHYSICAL EDUCATION AND SPORTS

SCHOOL OF HUMANITIES

The Department of Physical Education and Sports was established in August 1987.

PROGRAMMES OF STUDY

M.P.Ed. Master of Physical Education & Sports
M.Phil. Physical Education & Sports (Full-time)
Ph.D. Physical Education & Sports
 (Full-time & Part-time (Internal & External))

M.P.Ed.

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Sports Management	4	Track & Field Events-I (Theory)	3
	Measurement and Evaluation in Physical Education	4		
	Research Methods in Physical Education	4		
	Track & Field Events I	4		
II	Statistics in Physical Education	4	Track & Field Events II (Theory)	3
	Sports Psychology	4		
	Physiology of Exercise	4		
	Track & Field Events - II (Practical)	4		
III	Principles and Methods of Sports Training & Coaching	4	Basketball (Practical)	3
	Applied Kinesiology	4	Cricket (Practical)	3
	Basketball (Theory) *	4	Football (Practical)	3
	Cricket (Theory) *	4	Hockey (Practical)	3
	Football (Theory) *	4	Volleyball (Practical)	3
	Hockey (Theory) *	4		
	Volleyball (Theory) *	4		
IV	Sports Bio-Mechanics	4	Health, Fitness and Wellness	3
	Sports Medicine	4		
	Thesis / Exercise and Diseases Management	4		
	Basketball #	4		
	Cricket #	4		
	Football #	4		
	Hockey #	4		
	Volleyball #	4		

* Specialization Game –Theory Select any One Game (Any three Games will be offered)

Specialization Game (practical) Select One game only

SCHOOL OF PERFORMING ARTS

DEPARTMENT OF PERFORMING ARTS

SCHOOL OF PERFORMING ARTS

Department of Performing Arts started functioning from the academic year 1988-1989 and it offers M.P.A., M.Phil, P.G.D.T.A (Add on Course) and Ph.D., in Drama and Theatre Arts.

PROGRAMMES OF STUDY

M.P.A. Drama and Theatre Arts
M.Phil. Drama and Theatre Arts (Full- Time)
Ph.D. Drama and Theatre Arts

M.P.A. Drama and Theatre Arts

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Dramatic Literature – Classical Indian	3	Ethos of Indian Folk Theatre	3
	Classical Indian Theatre	3	Traditional Indian Theatre	3
	Theatre Architecture - Oriental	3	Fundamentals of Music	3
	Fundamentals of Visual Designs	3	Art Appreciation	3
	The Art of Acting	3		
	Theatrical Exercises	3		
	Play Production (Classical Indian Theatre)	4		
II	Dramatic Literature - Western	3	Film Appreciation	3
	Theories of Western Theatre	3	Folk Performing Arts of India	3
	Theatre Architecture - Occidental	3	Play Reading	3
	Theories of Acting	3		
	Lighting Design	3		
	Scenic Design	3		
	Mime & Movement	3		
III	Dramatic Literature- Indian	3	Fundamentals of Screenplay Writing	3
	Stage Management	3	Television Production - Non Fiction	3
	Make-up Design	3	Acting for Stage	3
	Costume Design	3		
	Specialisation - Direction			
	Direction Theories - Planning & Physicalisation	3		
	Film Theories	3		

IV	Specialisation - Acting			
	Advanced Theories of Acting	3		
	Movement ,Voice and Speech	3		
	Specialisation – Childrens Theatre			
	Child Psychology	3		
	Theatre in Education	3		
	New Trends in Theatre	3	Short Film Making	3
	Master’s Thesis	5	Theatre Music	3
	Play Writing	3	Acting for Camera	3
	Specialisation - Direction			
	Famous Directors and their Styles	3		
	Directing a Play	4		
	Specialisation - Acting			
	Styles and Approaches of Acting	3		
	Acting in Productions	4		
	Specialisation – Childrens Theatre			
	Story telling	3		
	Children’s Theatre – Play Production	4		

M.Phil. Drama and Theatre Arts

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology	3	Performance Theory	3
	History of World Theatre	3	Theatre and Media	3
	Classical Plays	3	Theatre Anthropology	3
II	Theatre Aesthetics	3	Community Theatre	3
	Dissertation	15		
	Viva – Voce	3		

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

DEPARTMENT OF ANTHROPOLOGY

The Department of Anthropology provides facilities for intensive training and research in the areas of Social Cultural Anthropology, Medical Anthropology and Visual Anthropology. The Department aims to train candidates who are oriented towards advanced research and training related to scheduled castes, scheduled tribes and rural studies.

PROGRAMMES OF STUDY

M.A. Anthropology
M.Phil. Anthropology
Ph.D. Anthropology

M.A. Anthropology

Semester	Hard Core Courses	Credits
I	Social – Cultural Anthropology	4
	Tribal Ethnography	4
	Research Methods	4
	Indian Society and Culture	4
II	Physical and Prehistoric Anthropology	4
	Peasant and Village Communities	4
	Fundamentals of Culture	4
	Indian Constitution and Tribal Development	4
III	Ecological Anthropology	4
	Theories of Culture	4
	Applied Social-Cultural Anthropology	4
	*Elective (Choose any one elective)	4
IV	Structural Anthropology	4
	Field Study and Project Work	6
	Comprehensive Viva-Voce	2

*List of Electives:

1. Medical Anthropology
2. Nutritional Anthropology
3. Human Genetics
4. Visual and Communication Anthropology
5. Forensic Anthropology
6. Economic Anthropology
7. Computer Applications in Anthropological Research
8. Archeological Anthropology

M.Phil. Anthropology

Semester	Hard Core Courses	Credits
I Paper I	Tools and Techniques of Anthropological Research	6
Paper II	Demographic Anthropology Anthropology of Management Archeological Anthropology Economic Anthropology Medical Anthropology Forensic Anthropology Urban and Industrial Anthropology Linguistic Anthropology Religion and Society Applied Anthropology	
Paper III	Background paper related to the dissertation work (to be prescribed and conducted by the Guide)	6
II	Dissertation / Field Study and Project work	15
	Viva – Voce	3

DEPARTMENT OF SOCIOLOGY

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The Department of Sociology was established in January 1993. The Department has focused on understanding the complexities of modern social life through the application of advanced sociological theories and methods within an interdisciplinary framework. The students are encouraged to acquire critical reading and data analysis skills through rigorous training.

The research areas undertaken by students and faculty members cover wide range of issues of public concern like the effects of economic development on society and culture, problems of weaker sections, gender and society, disaster management, environmental issues, social movements, etc.

PROGRAMMES OF STUDY

M.A. Sociology
M.Phil. Sociology
Ph.D. Sociology

M.A. Sociology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Fundamentals of Sociology	4	Social Problems	3
	Research Methodology	4	Social Movements in India	3
	Indian Society	4		
II	Classical Sociological Traditions	4	Gender and Society	3
	Social Statistics and Computer Application	4	Globalization and Society	3
	Industrial Sociology	4		
	Sociology of Development	4		
III	Contemporary Sociological Theories	4	Organizational Behaviour	3
	Agrarian social Structure in India	4	Sociology of Aging	3
	Social Stratification	4	Religion and Society in India	3
	Social Demography	4	Indian Sociological Perspectives	3
IV	Environmental Sociology	4	Social Capital	3
	Economic Sociology	4	Sociology of Disaster Management	3
	Project Work (4 Credits) & Viva (1 Credit)	5		

M.Phil. Sociology

Semester	Hard Core Courses	Credits
I	Modern Sociological Theories	6
	Modern Research Methods	6
	Background Paper	6
II	Dissertation	15
	Viva – Voce	3

DEPARTMENT OF SOCIAL WORK

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The Pondicherry University has been expanding continuously in terms of new educational programmes and established the Department of Social Work in October, 2007. The Department is offering Master of Social Work (MSW), M.Phil (Social Work) and Ph.D. (Social work) programmes with the

aim of developing competent Social Work professionals who combine a strong theoretical foundation with a unique and sound practical experience. Students from different parts of our country are admitted in MSW, M.Phil and Ph.D. programmes.

PROGRAMMES OF STUDY

Master of Social Work (MSW)
M.Phil. (Social Work)
Ph.D. (Social Work)

Master of Social Work (MSW)

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Introduction to Social Work	4	Psychology and Personality Development	3
	Indian Social Structure and Social Problems	4		
	Social Case Work and Counseling	4		
	Social Group Work	4		
	Field Work & Rural Camp	4		
II	Community Organization and Social Action	4	Disaster Management	3
	Social Work Research and Statistics	4		
	Social Welfare Administration	4		
	Field Work	4		
III	Specialization – I (Human Resource Management)	4	Human Rights and Social Legislation	3
	Labour Welfare and Labour Legislation	4		
	Industrial Relations	4		
	Human Resource Management	4		
	Specialization – II (Medical & Psychiatric Social Work)			
	Hospital Admn.	4		
	Medical Social Work	4		
	Mental Health	4		
	Specialization – III (Community Development)			
	Rural Community Development	4		
	Urban Community Development	4		
	Social Work with Marginalised and Women	4		
	Field work & Study Tour (Common for all Students)	4		

IV	Specialization – I (Human Resource Management)		Social Work with Person with Disabilities	3
	Organizational Behaviour	4		
	Human Resource Development	4		
	Specialization – II (Medical & Psychiatric Social Work)			
	Psychiatric Social work Practice	4		
	Counseling – Theory and Practice	4		
	Specialization – III (Community Development)			
	PRA in Rural Urban Intervention	4		
	Environment and Social Work Intervention	4		
	Field Work (Common for all Students)	4		
	Project Work (Common for all Students)	4		
	Block Placement (Common for all Students)	4		

M.Phil. Social Work

Semester	Hard Core Courses	Credits
I	Contemporary Social Work	6
	Research Methodology	6
	BACKGROUND PAPER (Among the following, one paper has to be chosen according to the field of specialization of the research scholar)	
	Social Work in Industry	6
	Mental Health	6
	Rural and Urban Community Development	6
II	Dissertation Work (Common for all Students)	12
	Viva Voce (Common for all Students)	6

DEPARTMENT OF HISTORY

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The Department of History was established in December 1987 with following main objectives:

- To provide facilities for study and research in social, economic and cultural history of India
- To highlight the intellectual tradition and cultural heritage of India
- To explore the history of countries other than India
- To undertake the study of historiography and the philosophy of history.
- To provide knowledge of the theory and practice of historical writing

PROGRAMMES OF STUDY

M.A. History
M.Phil. History
Ph.D. History

M.A. History

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Historiography and Historical Methods	4	Indian Sculpture and Iconography	3
	Pre and Proto History of India	4	Introduction To Rock Art	3
	Ancient Societies	4	Science and Technology in Pre Colonial India	3
	Archaeology : Principles and Methods	4	State in Ancient India	3
II			Temple in Medieval South India	3
			French Colonialism in India	3
	Early Indian Society and Economy	4	Introduction to Numismatics	3
	Society and Economy of Medieval India (1000-1707)	4	Indian Architecture	3
	Early Medieval South India (550 – 1300)	4	Introduction to Museology	3
	History of China and Japan (1839 – 1949)		Social And Agrarian Movements in modern India	3
			Modern West	
			Women in Modern India	

III	Society and Economy of Colonial India	4	Introduction to Indian Epigraphy	3
	Agrarian History of Colonial India	4	Science, Technology And Medicine In Colonial India	3
	History of Modern India (1707–1857)	4	Diplomatic History of Europe Medieval Societies Economic History of India (1757 – 1857) History of Social Fiction in Colonial India History of USA (Twentieth Century)	
IV	History of Modern India 1858-1964	4	Economic History Of India (1858 – 1947)	3
	Twentieth Century World	4	Marine Archaeology	3
	Vijayanagara: City and Empire	4	Gandhian Thought	3
	Business History of India (1700 – 1947)	4	History of Indian Diaspora	3
	Project Work	4	Intellectual History of USA in the 19th Century	3

** Actual Courses offered will be informed at the beginning of the Semester*

M.Phil. History

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Historiography with Special Reference to India	4	Economy, environment and Peasant resistance in Colonial India	3
	Historical Methods and the Practice of History	4	History of Labour Movement in Modern India	3
	Introduction to Archaeology	4	Global History	3
	Early Historic Archaeology of South India	4	History of French in India	3
	History of Indian Ocean region upto 16th Century	4		
	Indian Epigraphy and Numismatics	4		
II	Background Paper	4	Viva – Voce	3
	Dissertation	15		

** Actual Courses offered will be informed at the beginning of the Semester*

DEPARTMENT OF POLITICS AND INTERNATIONAL STUDIES

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The salient features of the Department include:

- Exchange programmes with prestigious foreign and Indian universities.
- Promoting teaching and research in the areas of International Relations and Area Studies in general and South and South-East Asian studies in particular.
- Policy input to the makers of India's foreign and security

policies as well as the theoretical understanding of International Relations.

PROGRAMMES OF STUDY

M.A. Politics and International Relations
M.Phil. Politics and International Studies
Ph.D. International Studies

M.A. Politics and International Relations

Semester	Hard Core Courses	Credits
I	Political Theory	4
	International Relations	4
	Research Methods in International Relations	4
II	Modern Diplomacy	4
	Politics in India	4
	India's Foreign Policy	4
III	Comparative Politics	4
	Political Thought	4
	International Organizations	4
IV	International Political Economy	4
	International Law	4
	Dissertation	

Semester	Soft Core Courses	Credits
1	Theory and Practice of Diplomacy	3
2	Human Rights and International Relations	3
3	European Integration - Institutions, Policies and Programmes	3
4	Global Peace, Security and Development	3
5	Public Policy Analysis	3
6	South Asia in International Politics	3

7	Conflict Resolution, Knowledge System and Visions of Peace	3
8	War and Peace in West Asia	3
9	Modern Africa	3
10	International Peace and Security	3
11	Foreign Policy of USA	3
12	Foreign Policy of Canada	3
13	Foreign Policy of France	3
14	Terrorism	3
15	Politics, Environment and Development	3
16	China in International Politics	3
17	Basics of Economic Globalization	3
18	Gender and Politics	3
19	The Politics of Social Movements	3
20	Foreign Policy of Major Powers	3
21	Global Politics: Concepts, Theories and Issues	3
22	Indian Administration	3
23	International Economic Issues	3
24	Public Administration	3
25	State Politics in India	3
26	World Trade Organization, International Trade and Global Politics	3
27	Advanced Political Theory	3
28	Issues in Non-Conventional Security	3

M.Phil. Politics and International Studies

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology	5	Statistical Methods for Social Science Research	3
	International Relations	5		
II	Background Paper	4		
	Dissertation	15		
	Viva – Voce	3		

MADANJEET SINGH INSTITUTE OF SOUTH ASIA REGIONAL COOPERATION (MISARC) & CENTRE FOR SOUTH ASIAN STUDIES

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The Southern Asia Studies Programme was sanctioned by the UGC under its Area Studies Programme in Pondicherry University in the year 2005. The University launched Post Graduate Programme (M.A) in South Asian Studies for the first time in the country during the XI plan. An International Journal of South Asian Studies was also launched during this period. Since 2008, the South Asia Foundation (SAF) has been supporting 16 Madanjeet Singh Group Scholarships to students (two from each SAARC country) to study this course. The teaching of and research in this field got another major boost with the signing of an MoU between Pondicherry University and the SAF on June 20, 2009 for establishment of the Madanjeet Singh Institute of South Asia Regional Cooperation (MISARC). The Institute began functional with the appointment of its first Director with the concurrence of the SAF. Recently the UNESCO has agreed to sponsor the Institute and thus now it has become truly an international Institute, known as UMISARC.

The Institute is currently offering the Post Graduate Programme in South Asian Studies, which is uniquely designed to provide cutting edge knowledge of South Asian history, society, culture, economy, governance and politics, etc., from an interdisciplinary perspective. Students are expected not only to develop broad knowledge base to critically understand contentious issues concerning South Asia, but also offer a holistic perspective to address them and contribute towards promoting peace and cooperation in the region. Together with the publication of the Journal, the Institute offers a broad research platform for refined academic debates with regular guest lectures by eminent scholars and diverse academic activities. The Institute also offers Ph.D programme from last academic year, 2010-11. From the current academic year a new Ph.D. programme in Southern Asia Studies has been introduced. Academically, Southern Asia is a wider term that not only includes SAARC countries but, also, China, Myanmar, ASEAN countries as well as countries of the South West Pacific region.

PROGRAMMES OF STUDY

M. A. South Asian Studies
Ph.D. South Asian Studies
Ph.D. Southern Asia Studies

M.A. South Asian Studies

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Introduction to Political Ideas Theories of International Relations Colonialism and Neocolonialism in South Asia		Understanding India Peace and Conflict Resolution in South Asia Developmental Challenges in South Asia	
II	Contemporary International Relations Introduction to Society, Culture and Economy of South Asia Research Methodology		Energy Security in South Asia Understanding Pakistan and Afghanistan Environmental Issues in South Asia	
III	Government and Politics in South Asia Contemporary Issues in South Asia South Asia in World Affairs		Understanding Nepal, Bhutan and Bangladesh Maritime Security in South Asia Civil Society and Human Rights in South Asia	
IV	Regional Cooperation in South Asia Foreign Policies of South Asian Countries Dissertation		Understanding Sri Lanka and Maldives Major Domestic Challenges in South Asia South Asia and International Institutions	

CENTRE FOR WOMEN'S STUDIES

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

Established in July 1999, the Centre offers M.Phil., and Ph.D. in Women's Studies. The overall approach to Women's Studies in this Centre is multidisciplinary. The prime aim of the Centre is the creation of a critical awareness and sensitivity towards women's issues in every field. Both male and female students are admitted. A holistic approach to gender studies is envisaged. It encourages women's academic

development and empowerment, the major objective being women's empowerment, the marking out and the definition of a female space.

PROGRAMMES OF STUDY

M. Phil. Women's Studies (Full-time)
Ph.D. Women's Studies
 (Full-time & Part-time (Internal & External))

M.Phil. Women's Studies

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Research Methodology in Women's Studies	6	Women and Society	6
	Background paper	6	Gender, Mass Media and Popular Culture	3
II	Dissertation	12	Introduction to Women's Studies	3
	Viva-Voce	6	Introduction to Feminism and Feminist Theory	3

CENTRE FOR STUDY OF SOCIAL EXCLUSION AND INCLUSIVE POLICIES

SCHOOL OF SOCIAL SCIENCES AND INTERNATIONAL STUDIES

The Centre for Study of Social Exclusion and Inclusive Policy is an interdisciplinary one providing facilities for intensive training and research in the area of social exclusion and inclusive policy. The centre orients students for advanced research on the processes of social exclusion and possibilities of inclusive policy for the Scheduled Castes, Scheduled Tribes, Other Backward Classes, Women, Linguistic and Religious Minorities, groups stigmatized for health reasons and other marginalized groups. The coursework and research

in this interdisciplinary centre incorporates both theory and methodology of anthropology, sociology, social work and economics.

PROGRAMMES OF STUDY

M.Phil. Social Exclusion & Inclusive Policies
Ph.D. Social Exclusion & Inclusive Policies
 (Full-time & Part-time [Internal & External])

M.Phil. Social Exclusion & Inclusive Policies

Semester	Hard Core Courses	Credits
I	Research Methodology	6
	Social Exclusion – Theories and Concepts	6
	Background paper (The concerned guide can design the syllabus for the paper according to the specialization)	6
II	Dissertation	12
	Viva - Voce	6

SCHOOL OF EDUCATION

The School of Education was established in 2007. With its competent faculty, the School offers various courses. The Masters in Education provides opportunities for the capacity building of future teacher educators. The Department lays emphasis on Educational Technology, Teacher Education, Economics of Education, Educational planning and administration, Value Education Environmental Education

and Guidance and Counselling. The Ph.D. programme is offered in areas of Education and allied disciplines promoting Educational research from interdisciplinary perspective. The faculty members have wide teaching and research experience, published many research papers and books. They have also been referees in national and international journals and are members in the National Committees.

Master of Education

PROGRAMMES OF STUDY

M.Ed. Master of Education
Ph.D. Education

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Foundation of Education	4	Guidance and Counseling Special Education	3
	Advanced Educational Psychology	4		
	Research Methodology	4		
	Methods of Data Analysis	3		
	Internship, Field based Experience and Practicum	3		
II	Educational and Instructional Technology	4	Value Education Environmental Education	3
	Multi – Media Technology of Education	4		
	Advanced Methods of Teaching	4		
	Economic of Education	4		
	Educational Policies and Planning	4		
	Educational Administration and Management	4		
	Principles and Systems of Teacher Education	4		
	Trends in Teacher Education	4		
	Teacher Education Organizations and Their Functions	4		
	Dissertation and Viva-Voce	6		

SCHOOL OF MEDIA AND COMMUNICATION

CENTRE FOR ELECTRONIC MEDIA

The Centre for Electronic Media was established in 2007. Its prime objective is to offer Post Graduate Programmes in Electronic Media and Mass Communication to empower them to join the highly stimulating and rewarding world of TV, RADIO, PRINT, WEB and Mobile Communications, both in India and abroad. In addition, the Centre aims to produce

general and educational video / audio documentaries for Telecast through Gyan Darshan and other channels and through its own Community Radio Station, Pudukkottai Vaani FM 107.8 MHz.

PROGRAMMES OF STUDY

M.Sc. Electronic Media

Ph.D. Electronic Media

M.Sc. Electronic Media

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Visual Media & Communication	3	Light & Colour	2
	Digital Media & Instrumentation	3		
	Script Writing for Electronic Media	3		
	Photography	2		
	Graphics, Designing	2		
	Editing Digital Audio	2		
	Project – 1	2		
II	Videography	3	Web Technologies Advertising Media & Case Studies	2
	Computer Animation (2D & 3D)	3		
	Media Research	3		
	Editing Digital Video	2		
	Videography	2		
	Computer Animation (2D & 3D)	2		
	Project - 2	2		
III	Production Planning and Management	3	Radio & TV News Casting Television Studies	
	Television Production	3		
	Radio Production	3		
	Anchoring and Newscasting	2		
	E-content Development	2		
	Project – 3	2		
IV	Media Law and Social Responsibility	3		
	Media Convergence and Management	3		
	Production / Dissertation + VIVA	12		

DEPARTMENT OF MASS COMMUNICATION

SCHOOL OF MEDIA & COMMUNICATION

PROGRAMMES OF STUDY

M.A. Mass Communication

M.A. Mass Communication
Ph.D. Mass Communication

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Introduction to Communication Theories & Processes	3	Public Speaking & Presentation Skills	2
	Principles of Journalism	3		
	Reporting, Writing and Editing for Print Media	3		
	Photojournalism	3		
	Practical - Computer Skills & Software for Print Media	2		
	Practical - Lab Journal Production (3 in 3 months)	3		
II	Reporting, Writing and Editing for Electronic Media	3	Advertising	3
	Communication Research Methods	3	Web Journalism	2
	Radio Production	3		
	Television Production	3		
	Public Relations & Corporate Communication	3		
III	Multi Media Technologies, Culture & Society	2	Introduction to Film Studies	3
	Development Communication	3	Visualization & Storyboarding	2
	International Communication	3	Cognitive Theories & Instructional Designing	3
	Educational Communication	3	Internship 4 weeks	3
IV	Media Laws, Ethics & Social Responsibility	3	Contemporary Media Issues	3
	Media Convergence & Management	3	Documentary for Social Change	3
	Practical - Specialization Media Project	3		
	Dissertation & Viva voce	4		
	Media Production	4		

DEPARTMENT OF LIBRARY & INFORMATION SCIENCES

SCHOOL OF MEDIA & COMMUNICATION

The Department of Library and Information Science was started during the academic year 2007-08. The Department offers a professional Master's Degree programme (MLIS) and a Ph.D. Degree Programme in Library and Information Science. MLIS course duration is of two years and comprises four semesters. Candidates who have passed any Bachelors Degree examination from a recognized university under 10+2+3 system and who have secured at least 50% of marks in aggregate in Part III (main subjects) are eligible to apply for seeking admission to this course. In case of candidates

belonging to SC/ST category, relaxation in the percentage of marks shall be as per the University Guidelines issued from time to time.

PROGRAMMES OF STUDY

M.L.I.S.

(Master of Library & Information Science)

Ph.D. (Library & Information Science)

M.L.I.S. Master of Library & Information Science

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Foundations of Information Science	4		
	Information Resources	4		
	Knowledge Organization	4		
	Introduction to Information Technology	4		
II	Management of Information Centres	4		
	Information Systems & Services	4		
	Information Processing 1: Classification Practice (DDC Ed.22)	5		
	Communication Skills & Public Relations (PR)	3		
	Information Processing 2: Cataloguing Practice (AACR – 2)	4		
III	Internship (Summer Vacation)	3		
	Information Storage & Retrieval	4		
	Research Methods	4		
	Information Technology (Practice)	4		
	Marketing of Information Products and Services	3		
IV	Knowledge Management	3	Optionals : (Any Two) a) Web Technology, b) E-Publishing, c) Informatics, d) Industrial Information System, e) Technical Writing	3+3=6
	Digital Libraries	4		
	Projects	5		

SCHOOL OF ENGINEERING & TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE

The Department aims at imparting quality education in Computer Science & Engineering and Information Technology through various post-graduate programmes. It also offers an

atmosphere conducive for research scholars for pursuing research in various advanced areas of Computer Science, Engineering and Information Technology.

PROGRAMMES OF STUDY

M.Sc. Computer Science
M.C.A. – University Main Campus & Karaikal PG Centre
M.Tech. Computer Science & Engineering
M.Tech. Network & Internet Engineering
Ph.D. Computer Science & Engineering
 (Full-time, Part-time (Internal & External))

M.Sc. Computer Science

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Design of algorithms	3	Elective – I	3
	Computer Architecture and Organization	3		
	Visual Programming	3		
	Database Systems	3		
	Practical I – Visual Programming Lab	2		
	Practical II – Algorithms Lab	2		
II	Automata Theory & Formal languages	3	Elective II	3
	Data Communication Networks	3		
	Software Engineering Concepts	3		
	Object Oriented System Design	3		
	Web Technology	3		
	Practical III – Networks Lab	2		
	Practical IV – Case Tools Lab (OOAD)	2		
III	Principles of Compiler Design	3	Elective III	3
	Computer Graphics	3	Elective IV	3
	Cryptography and Network Security	3		
	Practical V – Compiler Design Lab	2		
	Practical VI – Client / Server Lab	2		
IV	Project Seminar	4		
	Project Work	4		
	Project Report & Viva – Voce	4		

Electives			
Unix & Shell Programming	3	Fundamentals of Agent Technology	3
Principles of Programming Languages	3	Software Testing and Quality Assurance	3
Middleware Technologies	3	Data Mining and Warehousing	3
Multimedia Systems & Applications	3	Natural Language Processing	3
E – Commerce	3	Microprocessor Architecture	3
Neural Networks	3	Decision Support System	3
Net Framework and C#	3	Soft Computing	3
Distributed Database Systems	3	Principles of Distributed Systems	3
Artificial Intelligence	3		

M.C.A. Master of Computer Application

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Mathematical Foundation of Computer Science	3		
	Computer Organization and Assembly language Programming	4		
	Data Structures	3		
	Problem Solving and Programming	3		
	Information Technology	3		
	Computer Lab I (DS using C)	2		
	Computer Lab II (Assembly Language Programming)	2		
II	Fundamentals of Algorithms	3	Elective I	3
	Object – Oriented Programming	3	Elective II	3
	Operating Systems	3		
	Computer Lab III (OOPS Lab)	2		
	Computer Lab IV (Operating Systems)	2		
III	Database Management Systems	3	Elective III	3
	Computer Networks	3	Elective IV	3
	Windows and Visual Programming	3		
	Computer lab V ((DBMS)	2		
	Computer Lab VI (Visual Programming)	2		
IV	Internet Programming and Web Technology	3	Elective V	3
	Automata Theory and Compiler Design	3	Elective VI	3
	Software Engineering	3		
	Computer Lab VII (Web Technology)	2		
	Computer Lab VIII (Case Tools)	2		

V	Computer Graphics	3	Elective VII Elective VIII Elective IX	3 3 3
	Management Concepts and Strategies	3		
	Computer Lab IX (Graphics Lab / Animation 3D 2D)	2		
	Mini Project	3		
VI	Project Seminar	4		
	Project Work	4		
	Project Report and Viva – Voce	4		

Electives

	Credits		Credits
Foreign Language – Japanese I	3	Client Server Systems	3
Foreign language – Japanese II	3	Crypt Analysis and Security Principles	3
Foreign Language – French I	3	ATM networks	3
Foreign Language – French II	3	Component Software	3
Communication Skills	3	Distributed Database Systems	3
Accounting and Financial Management	3	AI and Expert Systems	3
Business Process	3	Artificial Intelligence	3
Introduction to Programming	3	Fundamentals of Agent Technology	3
Introduction to PC and its utilities	3	Enterprise Resource Planning	3
System Software	3	Elements of Software project Management	3
Operation Research	3	Software Testing and Quality Assurance	3
TCP / IP	3	Object Oriented Analysis and Design	3
Architecture of Unix	3	Data Warehousing and Mining	3
Principles of Programming Languages	3	Introduction to Bioinformatics	3
Middleware Technology	3	Introduction to software Architecture	3
Image Processing	3	Advanced JAVA	3
Multimedia Systems and Applications	3	Natural language Processing	3
E – Commerce	3	Microprocessor Architecture	3
Neural Networks	3	Decision Support System	3
.NET Framework and C#	3	Soft Computing	3
		Principles of Distributed system	3

M.Tech. Network & Internet Engineering

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Mathematics for Network Engineering	3		
	Computer Network Protocols	4		
	Network Components & Design	3		
	Internet and Web Technologies	3		
	Database Technologies	3		
	Usability Engineering	3		
	Software lab – I (Network Protocols and Web Technologies Lab)	2		
II	High Speed Networks	3		
	Network Security	4		
	Semantic Web and Knowledge Management	3	Elective I	3
	Distributed Computing & Systems	3	Elective II	3
	Software Lab II (Network Security and Web Services Lab)	2		
III	Wireless Communication Networks	3	Elective III	3
	Network Management	4		
	Project Work – Phase I	8		
IV	Project Work	6		
	Project Report & Viva Voce	6		

Electives

Soft Core Courses	Credits
Storage Area Networks	3
Optical Networks	3
Cryptographic Techniques	3
E-Commerce Technologies	3
Search Engines & Optimizations	3
Network Infrastructure and Cyber Security	3
Advanced Network Design and Performance Tuning	3
Pervasive and Ubiquitous Computing	3
Information Storage Architecture	3
Sensor Networks	3
Embedded Systems	3
Cloud Computing	3
Real Time Systems	3

M.Tech. Computer Science & Engineering

Semester	Hard-core Courses	Credits	Soft Core Courses	Credits
I	Mathematical Foundations of Computer Science	4		
	Design and Analysis of Algorithms	3		
	Advanced Software Engineering	3		
	Advanced Computer Architecture	3	Software Lab I (Algorithms and Case Tools)	2
	Computer Network Protocols	3	Elective I	3
II	Modern Operating System Design	4	Design Patterns and Object Oriented Systems Design	3
	Advanced Database Systems	3	Elective II	3
	Network Security	3	Elective III	3
	Software Lab II (Operating Systems and Network Lab)	2		
III	Compiler Design	4	Elective IV	3
	Internet and Web Technologies	3		
	Project work – Phase I	8		
IV	Project Work	6		
	Project Report and Viva-Voce	6		

Electives

Agent Technology	Software Testing
Knowledge Engineering	Microprocessor Based System Design
Evolutionary Algorithms	Neural Networks
Software Architecture	Pattern Recognition
Bioinformatics	Multimedia Systems
Design Patterns	Mobile Computing
User Interface Designs	E-Commerce
Software Metrics	Distributed Systems
Software Reuse	Pervasive and Ubiquitous Computing
Real Time Systems	Information Storage Architecture
Dependable Systems	Sensor Networks
Network Security	Image Processing
	Bio-Metrics

DEPARTMENT OF ELECTRONICS ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

PROGRAMMES OF STUDY

M.Tech. Electronics Engineering

M.Tech. Electronics Engineering

Semester	Courses	Credits
I	Embedded systems & Electronic Design Laboratory	3
	Quantum Mechanics Its applications to Tech. & Adv Engg. Maths	4
	Semiconductor Devices & Technology	4
	Digital Signal Processing & Applications	4
	Electromagnetic Theory, Interference & Compatibility	4
	Elective - I	3
	Elective – II	3
	LIST OF ELECTIVES – I & II	
	MOS Device Modelling	
	Embedded systems	
	Micro-electromechanical systems design, MEMS	
II	Advanced Embedded Systems & Specialisation laboratory	3
	Analog & Digital Design Techniques	4
	Research Seminar	2
	Elective – III*	3
	Elective – IV*	3
	Elective – V*	3
	Elective – VI*	3
	Elective – VII*	3
	<i>*All Elective of Semester-II has to be chosen from the same Group i.e. Group A/B/C</i>	
	LIST OF ELECTIVES – III, IV, V, VI & VII	
	GROUP-A: VLSI TECHNOLOGY	
	VLSI Technology	3
	VLSI Systems & Architecture	3
	CAD Tools for VLSI Design	3
	CMOS VLSI Design	3
	CMOS VLSI Design	3
	Low Power VLSI Design	3
	Design Analog & Mixedmode VLSI Circuits	3
	Algorithm for VLSI	3
	VLSI Testing & Verification	3
	Advanced Analog & Digital Circuit Design	3

	GROUP B: COMMUNICATION ELECTRONICS	
	Passive Microwave Devices & Circuits	3
	Antenna Theory & Design	3
	Optical Communication & Networking	3
	Wireless communications	3
	Advanced Digital Communications	3
	Active RF & Microwave Circuits	3
	CMOS RF Circuit Design	3
	Modelling & Simulation of Networks	3
	Microwave Integrated Circuits	3
	CAD of RF & Microwave Circuits	3
	Fabrication & Measurement Techniques for RF & Microwaves	3
	RF MEMS	3
	Ubiquitous Computing	3
	OFDM for Wireless Communication	3
	Ultra Wideband Wireless Communication	3
	GROUP C: NANO ELECTRONICS	
	Silicon on Insulator MOS Devices & Multiple Gate Devices	3
	Molecular Electronics	3
	Reliability of Semiconductor Devices	3
	High Speed Semiconductor Devices	3
	Nano Electronics	3
	Compound Semiconductor Devices	3
	Semiconductor Power Devices	3
	Material Science	3
	Semiconductor Device Characterisation Techniques	3
III & IV	Phase I – Project, Mid- Project Report – Problem Definition, Literature Review, Preliminary results, if any & Viva voce	12
	Phase II - Project	12
	Comprehensive Project report with results and Viva Voce	

CENTRE FOR POLLUTION CONTROL & ENVIRONMENTAL ENGINEERING

SCHOOL OF ENGINEERING & TECHNOLOGY

Established in 1991, this centre has developed a vigorous culture of applied environmental research, teaching, and industrial consultancy. The centre has thus far published over 250 papers in high impact-factor international journals. The centre has also been providing expert advice to government departments, industry, and academia across the world. The Hirsch Index of the centre's publications during the last 10 years is 18, which is among the highest in the departments dealing with environmental engineering in India.

PROGRAMMES OF STUDY

M.Tech. Environmental Engineering & Management
M.Phil. Environmental Technology
Ph.D. Environmental Technology

M.Tech. Environmental Engineering & Management

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Environmental Sampling and Analysis	3	Biology and Microbiology for environmental Engineering	3
	Unit Operations and processes in water and Wastewater Treatment	4	Numerical Methods and Computer Programming	3
	Air and Noise Pollution and Control	4	Pollutant Transport Modeling	4
	Solid and Hazardous Waste Management	3	Elective I	3
			Elective II	3
II	Design and operation of water and wastewater treatment System	4	Environmental Impact Assessment, Environmental Audit, and LCA	4
	Environmental Biotechnology and Nanotechnology	3	Industrial Wastewater Management	4
	Environmental Analysis Lab	2	Transport of Water and Wastewater	4
			Elective I	3
			Elective II	3
			Elective III	3
III	State – of the – art review and Seminars	3		
	Specialization Course	5		
	Project Work : Preparatory and Consolidation Phase	8		
IV	Project Work : Advanced Phase	8		
	Thesis and Viva – Voce	8		

M.Phil. Environmental Technology

Semester	Hard Core Courses	Credits	Soft Core Courses	Credits
I	Water Pollution & its control	6	Environmental impact Assessment	6
	Air, Solid and Noise Pollution Control	6	Elective I	4
II	Viva – Voce	3	Elective II	3
	Project Work	15		

MADANJEET SCHOOL OF GREEN ENERGY TECHNOLOGIES

CENTRE FOR GREEN ENERGY TECHNOLOGY

The Centre for Green Energy Studies and Research is aimed at imparting advanced education in green chemistry, green energy harvesting and green technology and carry out research on green science and technology; to conduct studies in energy conservation and environmental protection by adopting villages and carry out pilot projects and sites; to bring out publications on energy science and technology and

conduct international core group discussions on emerging tools and products and to evolve policy guidelines for the government for its considerations.

PROGRAMMES OF STUDY

M.Tech. Green Energy Technology

M.Tech. Green Energy Technology

Semester	Hard-core Courses	Credits	Soft Core Courses	Credits
I	Energy, Environment and Sustainable Development	3	Fuel & combustion Technology	3
	Renewable Energy Resources & Systems	3	Thermal and Electrical Systems	3
	Modeling and Simulations	3	Energy Laboratory - I	3
	Bridge Courses			
	Fundamentals of Biochemistry Scientific Writing and Research Methodology			
II	Wind Energy & Small Hydropower Systems	3	Solar Thermal Energy Conversion	3
	Solar Photovoltaic Energy Conversion	3	Waste to Energy Conversion	3
	Processing of Green Energy Materials	3	Green Management	3
			Environmental Risk Management	3
			Energy Laboratory –II	3
III	Bio Energy and Conversion systems	3	Green Chemistry	3
	Solar Photovoltaic Systems & Technology	3	Green Nanotechnology	3
			Green Concepts in Buildings	3
			Carbon Sequestration at Landscape Level	3
			Green Energy and Economics	3

			Smart materials: Application of nanomaterial for batteries, solar and fuel cells	3
			Nanotechnology for Energy Systems	3
			Industrial Management & Entrepreneurship	3
			Mini-Project: Proposal Writing and Defence	3
			Energy Laboratory – III (Virtual Instrumentation and case study on Sustainable Energy Systems)	3
IV	Green Energy Technology Dissertation Viva-voce	15 3		

CENTRE FOR NANO SCIENCES & TECHNOLOGY

MADANJEET SCHOOL OF GREEN ENERGY TECHNOLOGIES

The Centre for Nano-Sciences and Technology will work in synergy with the Centre for Green Energy technology. This centre has approved faculty in the XI th plan and will function as an Independent centre.

In addition, the faculty from the following departments would be involved in the teaching programmes of these

courses:

Chemistry, Physics, Biochemistry, Molecular Biology, Biotechnology, Centre For Pollution Control And Technology, Bioinformatics and Food Technology.

PROGRAMMES OF STUDY

M.Tech. Nano Sciences and Technology

M.Tech. Nano Sciences and Technology

Semester	Hard Core Courses	Credits
I	Introduction to Nanotechnology	3
	Review of Quantum Mechanics and Electromagnetic theory	3
	Quantum Mechanics of Confined system and Quantum Chemistry	3
	Thermodynamics and Kinetics for Nanotechnology	3
	Synthesis and Characterization of Nanostructured Materials	3
	Nanostructure Fabrication and Metrology	3
	Synthesis and Processing Laboratory	3

II	Elements of Materials Science and Physical Properties of Nanostructured Materials	3
	Computational methods for Modeling, Design & Simulations	3
	Biology for Nanotechnology	3
	Surface and Interface Engineering in Nanotechnology	3
	Self Assembly of Nanostructures	3
	Nanoelectronics and Bioelectronics	3
	Fabrication and Characterization Laboratory	3
III	Advanced Nanobiotechnology	3
	Polymers and Nanocomposites	3
	Soft- Core Courses (Any four to be selected)	
	Nano-photonics and Biophotonics	3
	Nanostructured Materials for Clean Energy Systems	3
	MEMS/NEMS Devices and Applications	3
	Nanomagnetic materials and devices	3
	Soft Core Courses offered by the Centre of Green Energy Technology and/or the Dept. of Electronics Engineering at M.Tech level.	3
	Summer Training/Mini-project (Report & Seminar)	3
IV	Modeling and Simulation Laboratory	3
	Research Project (Report and Viva-Voce)	6

ADD ON COURSES

PG DIPLOMA COURSES

JOURNALISM & MASS COMMUNICATION			
Department: Electronic Media & Mass Communication			
Semester	Course Code	Name of the Course	Credits
I	DJMC 11	Fundamentals of Mass Communication	2
	DJMC 12	Graphic Production	2
	DJMC 13	Digital Photography	2
	DJMC 14	News Editing and Reporting	2
	DJMC 15	Viva-Voce - Technical Visit Report - I & Project I	2
II	DJMC 21	Advertising and Public Relations	2
	DJMC 22	Writing for TV and Film	2
	DJMC 23	Televisions News Production	2
	DJMC 24	Film Studies	2
	DJMC 25	Viva-Voce - Technical Visit Report - II & Project II	2

TV PRODUCTION			
Department: Electronic Media & Mass Communication			
Semester	Course Code	Name of the Course	Credits
I	DTVP 11	Introduction to Television Production	2
	DTVP 12	Experimental Video Production	2
	DTVP 13	Quiz/Children Entertainment	3
	DTVP 14	Magazine Programme	3
II	DTVP 21	Aesthetics of Television Production	2
	DTVP 22	TV News Production Simulated Live	2
	DTVP 23	Children/Youth/Magazine	3
	DTVP 24	Studio Production by Choice	3

WOMEN'S STUDIES			
Department: Centre for Women's Studies			
Semester	Course Code	Name of the Course	Credits
I	DWOS 11	Women's Studies: An Introduction	2
	DWOS 12	Legislation and Gender Justice	3
	DWOS 13	Feminist Theories	3
	DWOS 14	Gender and Mass Media	2
II	DWOS 21	Women and Society in India	3
	DWOS 22	Gender and Development	3
	DWOS 23	Women and Management	2
	DWOS 24	Women's Writing in India	2

LIBRARY AUTOMATION & NETWORKING

Department: Library and Information Science

Semester	Course Code	Name of the Course	Credits
I	DLAN 11	ICT Fundamentals	2
	DLAN 12	Foundations to Library Automation	2
	DLAN 13	Management of Library Automation	2
	DLAN 14	Information Systems Management	2
	DLAN 15	Practical – I	2
II	DLAN 21	Networking	2
	DLAN22	Internet Resources and Services	2
	DLAN 23	Content Development	2
	DLAN 24	Practical – II	2
	DLAN 25	Practical – III	2

BIOTECHNOLOGY

Department: Biotechnology

Semester	Course Code	Name of the Course	Credits
I	DBIT 11	Biological Chemistry	2
	DBIT 12	Microbial Biotechnology	2
	DBIT 13	Molecular Biology	2
	DBIT 14	Immunobiology	2
	DBIT 15	Biotechnology Laboratory I	2
II	DBIT 21	Recombinant DNA Technology	2
	DBIT 22	Fermentation Technology	2
	DBIT 23	Advanced Animal Biotechnology	2
	DBIT 24	Plant Genetic Engineering	2
	DBIT 25	Biotechnology Laboratory II	2

HEALTH FITNESS & LIFE STYLE MANAGEMENT

Department: Physical Education & Sports

Semester	Course Code	Name of the Course	Credits
I	DHFM 11	Basic Concept of Fitness	3
	DHFM 12	Fitness and Wellness Management	3
	DHFM 13	Fitness Equipment Management	2
	DHFM 14	Exercise Testing & Prescription (Practical)	2
II	DHFM 21	Concept and Values of Yoga	3
	DHFM 22	Health Promotion & Nutritional Care	3
	DHFM 23	Life Style Disorder Management	2
	DHFM 24	Aerobic Exercise, Floor Exercise, Yogasana (Practical)	2

RURAL DEVELOPMENT

Department: Sociology

Semester	Course Code	Name of the Course	Credits
I	DRUD 11	Rural Society, Polity and Institutions	3
	DRUD 12	Rural Resources, Production Systems and Livelihoods	3
	DRUD 13	Rural Research Methods	2
	DRUD 14	Approaches and Strategies of Rural Management	2
II	DRUD 21	Rural Development (Perspectives, Policies, Planning & Programmes)	3
	DRUD 22	Rural Marketing & Agri-Business Development	2
	DRUD 23	NGOs and Rural Development	2
	DRUD 24	Project Report	3

STATISTICAL & RESEARCH METHODS

Department: Statistics

Semester	Course Code	Name of the Course	Credits
I	DSRM 11	Research Methodology	2
	DSRM 12	Basic Statistics	2
	DSRM 13	Probability and Distribution	3
	DSRM 14	Applied Statistics-I	3
II	DSRM 21	Estimation and Hypothesis Testing	3
	DSRM 22	Applied Statistics-II	3
	DSRM 23	Statistical Quality Control & Operations Research	2
	DSRM 24	Practical	3

HUMAN RIGHTS

Department: Politics & International Relations

Semester	Course Code	Name of the Course	Credits
I	DHUR 11	Introduction to Human Rights	3
	DHUR 12	Human Rights & Indian Polity	3
	DHUR 13	International Organisations and Human Rights	2
	DHUR 14	Human Rights & Environment	2
II	DHUR 21	Human Rights & Criminal Justice System	3
	DHUR 22	Human Rights & Development	2
	DHUR 23	Group Rights	2
	DHUR 24	Project Work	3

INDUSTRIAL RELATIONS & LABOUR LAWS

Department: Social Work

Semester	Course Code	Name of the Course	Credits
I	DIRL 11	Human Resource Management	2
	DIRL 12	Organisational Behaviour	2
	DIRL 13	Labour Law-I	3
	DIRL 14	Industrial Relations	3
II	DIRL 21	Human Resource Development	2
	DIRL 22	Compensation Management	2
	DIRL 23	Labour Law-II	3
	DIRL 24	Strategic HRM	3

TEACHING SKILL

School of Education

Semester	Course Code	Name of the Course	Credits
I	DTES 11	Understanding teaching – learning process and core Teaching Skills	3
	DTES 12	Skills of integrating technology in classroom teaching	3
	DTES 13	Practical: Practicing Core Teaching Skills	2
	DTES 14	Practical: Integrating New Media in Teaching	2
II	DTES 21	Teaching techniques to facilitate learning	3
	DTES 22	Skills of Ensuring Teaching Effectiveness	3
	DTES 23	Practical: Practising techniques of teaching	2
	DTES 24	Practical: Assessment/evaluation in teaching	2

INDUSTRIAL PSYCHOLOGY

Department: Applied Psychology

Semester	Course Code	Name of the Course	Credits
I	DINP 11	Human Resource Management	3
	DINP 12	Organisation Behaviour	3
	DINP 13	Organisation Change & Development	2
	DINP 14	Human Relations in Organisations	2
II	DINP 21	Industrial Relations & Trade Union	3
	DINP 22	Work Place Counselling	3
	DINP 23	Personality Development in the Work Place	2
	DINP 24	Labour Legislation	2

COMPUTER APPLICATIONS

Department: Computer Science

Semester	Course Code	Name of the Course	Credits
I	DCA 11	Data Structure using C++	3
	DCA 12	Basics of Information Technology	2
	DCA 13	Operating System	3
	DCA 14	Object Oriented Programming	2
II	DCA 21	Data Base Management System	2
	DCA 22	Computer Networks	2
	DCA 23	Web Technology	3
	DCA 24	Software Engineering	3

SIMULATION & MODELLING

Department: Computer Science

Semester	Course Code	Name of the Course	Credits
I	DISM 11	Fundamentals of Simulation and Modeling	3
	DISM 12	Mathematical Modeling Concepts	3
	DISM 13	Operations Research and Optimization Theory	2
	DISM 14	Simulation Life Cycle Management	2
II	DISM 21	Continuous and Discrete Simulation Models	2
	DISM 22	Game Theory and its Applications	2
	DISM 23	Artificial Intelligence and Robotics	3
	DISM 24	Simulation Software Development	3

EVENT MANAGEMENT

Department: Tourism

Semester	Course Code	Name of the Course	Credits
I	DEVM 11	Event Management – Principles and Practices	3
	DEVM 12	Event Management Process	3
	DEVM 13	Tourism and Hospitality Management	3
	DEVM 14	Human Resources in Event Management	3
	DEVM 15	Accounting for Event Management	3
II	DEVM 21	Distribution Channels for Event Business	3
	DEVM 22	Event Marketing	3
	DEVM 23	Customer Relationship in Event Management	3
	DEVM 24	Event Risk Management	3
	DEVM 25	Event Management Scenario	3

PROFESSIONAL COMMUNICATION IN ENGLISH

Department: English

Semester	Course Code	Name of the Course	Credits
I	DPCE 11	Oral and Non-Verbal Communication at the Workplace	3
	DPCE 12	Written Communication: Workplace Correspondence	3
	DPCE 13	Basics of Communication – Theory & History	2
	DPCE 14	Communication & Culture: An interdisciplinary approach to today's workplace.	2
II	DPCE 21	Technical Writing	3
	DPCE 22	Electronics Communication	3
	DPCE 23	Professionalism: Values and Ethics for the Workplace	2
	DPCE 24	Project/ Guided Internship	2

PLANNING & EVALUATION

Department: Economics

Semester	Course Code	Name of the Course	Credits
I	DPLE 11	Economics of Development and Policy Issues	3
	DPLE 12	Planning Process and Techniques	2
	DPLE 13	Research Methodology	2
	DPLE 14	Methodology of Plan, Monitoring and Implementation.	3
II	DPLE 21	Planning in India	2
	DPLE 22	Evaluation of Plans	3
	DPLE 23	Project Planning and Control	3
	DPLE 24	Dissertation and Viva-Voce	2

INVESTMENT MANAGEMENT

Department: Commerce

Semester	Course Code	Name of the Course	Credits
I	DINM 11	Basics of Finance and Investment	2
	DINM 12	Management of Funds	3
	DINM 13	Security Analysis	3
	DINM 14	Securities Market Operations	2
II	DINM 21	Portfolio Management	3
	DINM 22	Mutual Fund Analysis and Management	2
	DINM 23	Global Financial Market & Instruments	3
	DINM 24	Debt and Derivatives Market	2

FOREIGN TRADE Department: International Business			
Semester	Course Code	Name of the Course	Credits
I	DIFT 11	India's Foreign Trade and Policy	3
	DIFT 12	Legal Environment for Foreign Trade	3
	DIFT 13	Cross Cultural Management	3
	DIFT 14	International Trade Blocs and Agreements	3
II	DIFT 21	Transnational Marketing	3
	DIFT 22	EXIM Finance and Risk Management	3
	DIFT 23	International Trade Documentation and Procedure	3
	DIFT 24	International Logistics and Supply Chain Management	3

THEATRE ARTS Department: Performing Arts			
Semester	Course Code	Name of the Course	Credits
I	DTHA 11	Acting	2
	DTHA 12	Dramatic Literature (Indian)	2
	DTHA 13	Costume Design	2
	DTHA 14	Lighting Design	2
	DTHA 15	Stage Craft (Set & Props)	2
II	DTHA 21	Direction	2
	DTHA 22	Dramatic Literature (Western)	2
	DTHA 23	Make – Up Design	2
	DTHA 24	Children's Theatre	2
	DTHA 25	Play Production	2

FUNCTIONAL HINDI Department: Hindi			
Semester	Course Code	Name of the Course	Credits
I	DFUH 11	Prayojan Moolak Hindi Ke Vibhinn Ayam	3
	DFUH 12	Aalekhan, Tippan Aur Patra Lekhan	3
	DFUH 13	Patrakarita	3
II	DFUH 21	Media Lekhan	3
	DFUH 22	Anuvad Sidhant	3
	DFUH 23	Anyvad Vyavahar	3
	DFUH 24	Project	2

CERTIFICATE COURSES

TAMIL Department: Tamil			
Semester	Course Code	Name of the Course	Credits
I	CCT 11	Equi-NP Sentence Structures Adjectives & Adverbs	2
	CCT 12	Present, Past & Future Tenses Verb Paradigms, assertive & negative forms	2
	CCT 13	Perfect Tenses & Continuous Tenses, Verbal Nouns, Verb sequences	2
	CCT 14	Complex Structure; Comparative, Quotative, Conditional, Concessive Forms	2
II	CCT 21	Tamil Script Introduction	2
	CCT 22	Tamil Scripts	2
	CCT 23	Grantha Scripts: Reading, Writing simple words	2
	CCT 24	Reading, Writing simple sentences	2

SANSKRIT Department: Sanskrit			
Semester	Course Code	Name of the Course	Credits
I	CSAN 11	Basic Sanskrit Grammar	3
	CSAN 12	Composition and Translation	3
II	CSAN 21	Prose (Chandrapeda Charitam)	3
	CSAN 22	Poetry (Raghuvamsa - Canto-I)	3

Centre for Foreign Languages		
Semester	Name of the Course	Credits
CHINESE		
I	Basics of Chinese	8
II	Use of Chinese	8
FRENCH		
I	Basics of French (6 Units)	8
II	Use of French (6 Units)	8
GERMAN		
I	Basics of German	8
II	Use of German	8
ITALIAN		
I	Basics of Italian	8
II	Use of Italian	8
KOREAN		
I	Basics of Korean (15 Units)	8
II	Intermediate Korean (9 Units) & Advanced Korean (6 Units)	8
JAPANESE		
I	Basics of Japanese	8
II	Use of Japanese & Kanji Characters	8
RUSSIAN		
I	Basics of Russian	8
II	Use of Russian	8
SPANISH		
I	Basics of Spanish	8
II	Use of Spanish	8