University of Engineering & Management, Kolkata
Department of Computer Science
B.Tech (CSE)
2021 - 2025 Batch
6th Semester Structured Syllabus

Sr. No	Course Code	Course Title	Credits
1	PCCCSE601	Compiler Design	**3**
2	PCCCSE691	Compiler Design Laboratory	**2**
3	PCCCSE602	Computer Networks	**3**
4	PCCCSE692	Computer Networks Laboratory	**2**
5	PECCSE601A	Professional Elective - II : Soft Computing	**3**
6	PECCSE602A	Professional Elective - III : Data Analytics	**3**
7	OECCSE601A	Open Elective - I : Finance & Accounting	**3**
8	HSMC(CS)602	Essential Studies for Professionals - VI	**2**
9	HSMC682	Skill Development for Professionals - VI	**1**
10	MC681	Mandatory Additional Requirements (MAR)	**1**
11	PROJCSE681	Project - I	**3**
12	MOOC 6	Massive Open Online Courses (Mandatory for B.Tech(Honours))	**3**
Total Credit Points of Semester [for B.Tech]			26
Total Credit Points of Semester [for B.Tech (Hons.)]			**29**

University of Engineering & Management, Kolkata
Syllabus for B. Tech Admission Batch 2021

Subject Name: Compiler Design

Subject Code: PCCCSE601

Credit: 3

Lecture Hours: 36

Module number	Topic	Sub-topics	Mapping with Industry and International Academia	Lecture Hours	Corresponding Lab Assignment
1	**Introduction to Compiling and Lexical Analysis**	Compilers, Analysis-synthesis model, The phases of the compiler, Cousins of the compiler. The role of the lexical analyzer, Tokens, Patterns, Lexemes, Input buffering, Specifications of a token, Recognition of tokens, Finite automata, From a regular expression to an NFA, From a regular expression to NFA, From a regular expression to DFA, Design of a lexical analyzer generator (Lex).	***International Academia:*** (https://web.stanford.edu/class/cs143/syllabus.html) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf) ***Industry Mapping:*** Ubuntu, GCC, Dev C++, Flex	8	1. Implementation of Symbol Table 2. Develop a lexical analyzer to recognize a few patterns in C. (Ex. identifiers, constants, comments, operators etc.) 3. Implementation of Lexical Analyzer using Lex Tool 4. Installation of Flex
2	**Syntax Analysis and Syntax directed translation**	The role of a parser, Context free grammars, Writing a grammar, Top down Parsing, Non-recursive Predictive parsing (LL), Bottom up parsing, Handles, Viable prefixes, Operator precedence parsing, LR	***International Academia:*** (https://web.stanford.edu/class/cs143/syllabus.html) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/defaul	10	1. Generate YACC specification for a few syntactic categories. 2. Implementation of Calculator using LEX and YACC

		parsers (SLR, LALR), Parser generators (YACC). Error Recovery strategies for different parsing techniques. Syntax directed definitions, Construction of syntax trees, Bottom-up evaluation of S attributed definitions, L attributed definitions, Bottom-up evaluation of inherited attributes.	t/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf) ***Industry Mapping:*** YAAC, Bison		3. Installation of YACC and Bison 4. Convert the BNF rules into Yacc form and write code to generate Abstract Syntax Tree.
3	**Type checking and Run time environments**	Type systems, Specification of a simple type checker, Equivalence of type expressions, Type conversions Source language issues (Activation trees, Control stack, scope of declaration, Binding of names), Storage organization (Subdivision of run-time memory, Activation records), Storage allocation strategies, Parameter passing (call by value, call by reference, copy restore, call by name), Symbol tables, dynamic storage allocation techniques.	***International Standards*** : (https://web.stanford.edu/class/cs143/syllabus.html) ***AICTE prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf) ***Industry Mapping:*** GCC, Dev C++	10	1. Implement type checking 2. Implement control flow analysis and Data flow Analysis 3. Implement any one storage allocation strategy. (Heap, Stack, Static)
	Intermediate code generation, Code optimization and Code generations	Intermediate languages, Graphical representation, Three-address code, Implementation of three address statements (Quadruples, Triples, Indirect triples). Introduction, Basic blocks & flow graphs, Transformation of basic blocks, Dag representation of basic blocks, The principle sources of optimization, Loops in	***International Standards:*** (https://web.stanford.edu/class/cs143/syllabus.html) ***AICTE prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf) ***Industry Mapping:*** GCC, Dev C++	8	1.Construction of DAG 2. Implement the back end of the compiler which takes the three address code and produces the 8086 assembly language instructions that can be assembled and run using a 8086 assembler. The target assembly instructions can be simple move, add, sub, jump. Also simple

		flow graph, Peephole optimization. Issues in the design of code generator, a simple code generator, Register allocation & assignment.			addressing modes are used.

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Syllabus for B. Tech Admission Batch 2021

Subject Name: Computer Networks

Subject Code: PCCCSE602

Credit: 3

Lecture Hours: 36

Module No.	Topic	Sub-topic	Mapping with Industry and International Academia	Lecture Hours	Hands-On Experiment (Laboratory)
1	Overview of Data Communication and Networking and Physical level.	Introduction; Data communications: components, data representation (ASCII,ISO etc.), direction of data flow (simplex, half duplex, full duplex); network criteria, physical structure (type of connection, topology), categories of network (LAN, MAN,WAN); Internet: brief history, Protocols and standards; Reference models: OSI reference model, TCP/IP reference model, their comparative study. Overview of data(analog & digital), signal(analog & digital), transmission (analog & digital) & transmission media (guided & unguided); Circuit switching: time division & space division switch, TDM bus; Telephone Network;	International Academia: https://www.scs.stanford.edu/10au-cs144/sched/ AICTE prescribed syllabus: https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf Industry mapping: Wieshark, CISCO, DLINK,	10	**1**. Use Linux tools like ifconfig, dig, ethtool, route, netstat, nslookup, and ip to understand the networking configuration of the computer that the student is working on. **2**.Use Wireshark to capture packets when browsing the Internet. Examine the structure of packets: the various layers, protocols, headers, payload.
2	Data link Layer and Medium Access sub layer.	Types of errors, framing(character and bit stuffing), error detection & correction methods; Flow control; Protocols: Stop & wait ARQ, Go-Back- N ARQ, Selective repeat ARQ, HDLC; Point to Point Protocol, LCP, NCP, Token Ring; Reservation, Polling, Multiple access protocols: Pure ALOHA, Slotted ALOHA, CSMA, CSMA/CD,	International Academia: https://www.scs.stanford.edu/10au-cs144/sched/ AICTE prescribed syllabus: https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf Industry mapping: NS2/NS3, Java, Python	8	**1**. Use Linux network tools like ethtool to observe and analyze link layer packet statistics and errors. **2**. Use NS2/NS-3 to simulate medium access protocols. Observe contention, collisions and packet loss in

		CSMA/CA Traditional Ethernet, fast Ethernet(in brief);			medium access protocols. Observe the working of error detection/recovery mechanisms.
3	Network layer and Transport Layer.	Internetworking & devices: Repeaters, Hubs, Bridges, Switches, Router, Gateway; Addressing : IP addressing, subnetting; Routing : techniques, static vs. dynamic routing , Unicast Routing Protocols: RIP, OSPF, BGP; Other Protocols: ARP, IP, ICMP, IPV6; Process to Process delivery; UDP; TCP; Congestion Control: Open Loop, Closed Loop choke packets; Quality of service: techniques to improve QoS: Leaky bucket algorithm, Token bucket algorithm.	International Academia: https://www.scs.stanford.edu/10au-cs144/sched/ AICTE prescribed syllabus: https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf Industry mapping: CISCO Packet Tracer, Java, Python. https://www.netacad.com/courses/packet-tracer	10	**1**. Use tools like ping and traceroute to explore various Internet paths to popular servers. **2.** Measure TCP throughput between two hosts in a network using tools like iperf. Modify TCP configuration parameters. Use the tc Linux utility or similar to control bandwidth, delay, loss. Observe impact on measured throughput.
4	Application Layer and Modern topics.	Introduction to DNS, SMTP, SNMP, FTP, HTTP & WWW; Security: Cryptography (Public, Private Key based), Digital Signature, Firewalls. ISDN services & ATM, DSL technology, Cable Modem: Architecture & Operation in brief Wireless LAN: IEEE 802.11, Introduction to blue-tooth.	International Academia: https://www.scs.stanford.edu/10au-cs144/sched/ AICTE prescribed syllabus: https://www.aicte-india.org/sites/default/files/Model_Curriculum/Updated-AICTE%20-%20UG%20CSE.pdf Industry mapping: CISCO Packet Tracer, NS2/NS3, Wireshark. https://www.netacad.com/courses/packet-tracer	8	**1**. Install and configure some network applications, e.g. Apache, Bind (DNS), etc. **2**.Understand various header fields and their usage in different application layer protocols using Wireshark packet capture. **3**. Simulate transport protocols optimized for data centers in NS-2/NS-3.

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Subject Name: Professional Elective - II : Soft Computing

Subject Code: PECCSE601A

Credit: 3

Lecture Hours: 40

Module number	Topic	Sub-topics	Mapping with Industry and International Academia	Lecture Hours	Corresponding Lab Assignment
1	**Introduction**	- Introduction to soft computing - Introduction to fuzzy sets and fuzzy logic systems; - Introduction to biological and artificial neural networks - Introduction to Genetic Algorithms.	***International Academia:*** (https://openlearninglibrary.mit.edu/courses/course-v1:MITx+6.036+1T2019/course/) (https://plato.stanford.edu/Archives/win2010/Entries/logic-fuzzy) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AI&ML.pdf) Software : MATLAB	6	1. Write a program to implement the McCulloch-Pitts Model by MATLAB Program. 2.Generate ANDNOT function using McCulloch-Pitts neural net by MATLAB Program. 3.Generate XOR function using McCulloch-Pitts neural net by MATLAB program.

2	**Fuzzy sets and Fuzzy logic systems**	-Classical Sets and Fuzzy Sets and Fuzzy relations : Operations on Classical sets, properties of classical sets, Fuzzy set operations, properties of fuzzy sets, cardinality, operations, and properties of fuzzy relations. -Membership functions : Features of membership functions, standard forms and boundaries, different fuzzification methods. -Fuzzy to Crisp conversions: Lambda Cuts for fuzzy sets, fuzzy Relations, Defuzzification methods. -Classical Logic and Fuzzy Logic: Classical	**International Standards** :(https://plato.stanford.edu/Archives/win2010/Entries/logic-fuzzy) (https://www.utoledo.edu/engineering/electrical-engineering-computer-science/current-students/syllabi/eecs-4120-intro-to-fuzzy-systems-and-applications.html) ***AICTE prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AI&ML).pdf) ***Industry Mapping:*** Robotics and Automation Software,Decision Support Systems,SCADA (Supervisory Control and Data Acquisition) Systems software: MATLAB(fuzzy toolbox),LabVIEW,Python	10	4.Write a program to implement fuzzy set operations. 5. Write a program to implement fuzzy relational operations. 6. Write a program to design and implement fuzzy temperature controller 7. Write a program to write and illustrate the concept of Fuzzy C – means Clustering

		predicate logic, Fuzzy Logic, Approximate reasoning and Fuzzy Implication Fuzzy Rule based Systems: Linguistic Hedges, Fuzzy Rule based system – Aggregation of fuzzy Rules.			
3	Neural Network	- Introduction to Neural Networks: Advent of Modern Neuroscience, Classical AI and Neural Networks, Biological Neurons and Artificial neural network; model of artificial neuron. Learning Methods: Hebbian, competitive, Boltzman etc. -Neural Network models: Perceptron, Adaline and	***International Standards*** : (https://openlearninglibrary.mit.edu/courses/course-v1:MITx+6.036+1T2019/course) ***AICTE prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AI&ML).pdf) ***Industry Mapping:*** Manufacturing and Industry 4.0 Software(framework) PyTorch,Tensorflow	10	8. Write programs to test the learning rules of Hebb, Perceptron, Delta, and Widrow Hoff 9. Write a program for learning rule to implement the Back-propagation algorithm. 10. Write a program to write and test a program for the linear separability of the input domain

		Madaline networks; -single layer network -Back-propagation and multi-layer networks. - Competitive learning networks: Kohonen self organizing networks, Hebbian learning; Hopfield Networks.			
4	Genetic Algorithms	-Simple GA, crossover and mutation, -Multi-objective Genetic Algorithm (MOGA). - Applications of Genetic Algorithms: genetic algorithms in search and optimization. -GA operators: Encoding, Crossover, Selection,	***International Standards:*** ***(https://ocw.mit.edu/courses/6-034-artificial-intelligence-fall-2010/resources/lecture-13-learning-genetic-algorithms)*** ***AICTE prescribed syllabus:*** ***(https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AI&ML).pdf)*** ***Industry Mapping:*** Optimize the location of resources and minimize production costs. ***Software:***	8	**11.** Write a MATLAB program to plot a few activation functions that are being used in Genetic Algorithm. 12. Illustrate different types of generalized bell membership functions using the Matlab program.

		Mutation, etc. -Solving single-objective optimization problems using Gas	R-Libraries(GA (genalg),Python libraries(DEAP (Distributed Evolutionary Algorithms in Python)),Matlab.		
5	Introduction to Machine Learning	-Supervised learning: Primitive algorithms, Generative algorithms, -Support Vector Machine, Ensemble methods. -Unsupervised learning: K-means, Principal component analysis, Independent component analysis. -Reinforceme	***International Standards:*** ***(https://ocw.mit.edu/courses/6-0002-introduction-to-computational-thinking-and-data-science-fall-2016/resources/lecture-11-introduction-to-machine-learning/)*** ***AICTE prescribed syllabus: (https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AI&ML).pdf)*** ***Industry Mapping:*** ***AI applications,IOT.***	6	13. Implement and demonstrate the FIND-S algorithm for finding the most specific hypothesis based on a given set of training data samples. Read the training data from a .CSV file. 14. For a given set of training data examples stored in a .CSV file, implement and demonstrate the Candidate-Elimination algorithm to output a description of the set of all hypotheses consistent with the training examples. 15.Other Real time case studies.

		nt learning and control.	***softwares:*** ***Scikit-learn(python),TensorFlow(python),Keras(python),Microsoft Azure Machine Learning(python),PyTorch***		

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Syllabus for B. Tech Admission Batch 2021

Subject Name: Professional Elective - III : Data Analytics

Subject Code: PECCSE602A

Credit: 3

Lecture Hours: 36

Module number	Topic	Sub-topics	Mapping with Industry and International Academia	Lecture Hours	Corresponding Lab Assignment
1	**Descriptive Statistics**	Types of Descriptive Statistics: Distribution (Also Called Frequency Distribution); Measures of Central Tendency: Mean, Median, and Mode; Variability (Also Called Dispersion): Range, Variance, and Standard Deviation, Standards of relative position (describe the location of a specific value within the dataset, such as percentiles), Graphical methods (charts, histograms, and other visual representations to display data) Univariate Descriptive Statistics, Bivariate Descriptive Statistics	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language	5	Not included as lab paper. Mathematical operations can be practised in R and python.
2	**Inferential Statistics**	Probability Distribution, Parameter Estimation, Confidence Intervals, Regression Analysis,	***International Academia:*** (https://statistics.stanford.edu/graduate-	5	Not included as lab paper. Mathematical operations can be

		Hypothesis Test, Z-Test, T-Test, Chi-Square Test, ANOVA	programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language		practised in R and python.
3	**Introduction to Machine Learning**	Machine learning and its types; Applications of machine learning; Issues in machine learning. The Machine Learning process flow: Define Project Objective, Acquire & Explore Data (Data pre-processing), Model Building. Model validation, Interpret & Communicate, Data Visualization, Implement, Document & Maintain. Types and Algorithms of Machine Learning: Regression, Classification, and Clustering. Regression : Linear (Ordinary Least Squares), Logistic,	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language	5	Not included as lab paper. Mathematical operations can be practised in R and python.

		Regularized (Ridge Regression, Lasso Regression), Co-occurrence Matrix			
4	**Supervised Learning (Classification)**	Linear Regression Logistic Regression Decision Trees K-Nearest Neighbours Naive Bayes Support Vector Machines Ensemble Learning Techniques: Random Forest, Neural Network, Deep Learning Confusion Matrix Active Learning	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language	5	Not included as lab paper. Mathematical operations can be practised in R and python.
5	**Unsupervised Learning (Clustering)**	K-means Clustering, Agglomerative (Hierarchical) clustering, Spectral Clustering (DBSCAN), Association Analysis, Principal Component Analysis.	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf,	5	Not included as lab paper. Mathematical operations can be practised in R and python.

			https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language		
6	**Reinforcement Learning**	Q-Learning, State-Action-Reward-State-Action (SARSA), Deep Q-Network (DQN), Deep Deterministic Policy Gradient (DDPG).	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language	3	Not included as lab paper. Mathematical operations can be practised in R and python.
7	**Data Mining**	Introduction to Data Types of Data Mining: Association Rule Mining (Market Basket Analysis , Apriori Algorithm, Improving the Efficiency of Apriori , Frequent Pattern-Growth Algorithm, Mining Closed and Max Patterns), What are the various kind of association	***International Academia:*** (https://statistics.stanford.edu/graduate-programs/statistics-ms/statistics-data-science-curriculum) ***AICTE-prescribed syllabus:*** (https://www.aicte-india.org/sites/default/files/	8	Not included as lab paper. Mathematical operations can be practised in R and python.

		rules, Measuring the Quality of Association Rules Pattern Evaluation Methods, Clustering, Classification, Anomaly Detection, Regression, Sequential pattern mining, Time Series Analysis, Text Mining, Graph Mining Data Pre-processing, Data Cleaning, Missing Values (Inconsistent Data), Outliers	Model_Curriculum/AICTE%20-%20UG%20CSE.pdf, https://www.aicte-india.org/sites/default/files/Model_Curriculum/CS%20(AIDS).pdf) ***Industry Mapping:*** Python, R Language		

University of Engineering & Management, Kolkata
Syllabus for B. Tech Admission Batch 2021

Subject Name: Open Elective - I : Finance & Accounting

Subject Code: OECCSE601A

Credit: 3

Lecture Hours: 36

Module number	Topic	Sub-topics	Mapping with Industry and International Academia	Lecture Hours	Corresponding Lab Assignment
1	**Introduction to Finance and Accounting**	The principles of financial and cost accounting Financial Management, Financial Planning and Capitalization- definitions, objectives, changing roles and functions, Financial Decision. Basic accounting concepts, important definitions, uses, limitations, advantages; types of Accounting, Financial statements, introduction to Journal Accounting; double entry bookkeeping, different types of transactions related to Financial Accounting.	***International Academia:*** (Accounting, Finance & Valuation Course I Stanford Online) ***AICTE-prescribed syllabus:*** (Microsoft Word - Information_Technology_Syllabus.doc (makautwb.ac.in)) ***Industry Mapping: Designing an accounting system***	8	1.Easy Tally. 2. Preparation of Basic financial and accounting statements
2	**Capital Budgeting**	Managerial accounting tools and practices Nature of Investment decision, Importance of Capital Budgeting, The Capital. Budgeting Process - Investment Criterion, Pay-back period, Accounting,	**International Standards** :(Accounting, Finance & Valuation Course I Stanford Online) ***AICTE prescribed syllabus:*** (Microsoft Word - Information_Technology_Syllabus.doc (makautwb.ac.in)	6	Mapping and Techniques using Excel and Tally

		ROR (Rate of Return) Method, Discounting Cash flow method, Net – present value method, IRR (Internal Rate of Return) method, The benefit-Cost Ratio method.	***Industry Mapping:*** Financial long term forecasting		
3	**Management of Working Capital**	Various concepts, Elements, Classification, Financing and importance of working capital, Investment analysis, Cash flow determination, cost of capital, capital budgeting methods.	**International Standards : (Accounting, Finance & Valuation Course I Stanford Online)** **AICTE prescribed syllabus: (Microsoft Word - Information_Technology_Syllabus.doc (makautwb.ac.in)** **Industry Mapping: Financial daily or short term fund planning and management**	8	Mapping Techniques using Tally and Excel
4	**Cost – Volume – Profit Analysis**	Analysis of Costing and Classification of costs, Allocation, apportionment and absorption, Cost centers, different costing systems, Cost analysis for managerial decisions, Meaning of Linear CVP analysis, Objectives, Assumptions, Break – Even analysis, determining the Break-Even point profit, Volume graph profit, Volume ratios margin of Safety.	**International Standards: (Accounting, Finance & Valuation Course I Stanford Online)** **AICTE prescribed syllabus: (Microsoft Word - Information_Technology_Syllabus.doc (makautwb.ac.in)** **Industry Mapping: Analysis of sales and cost dependency on profit margin using cost analysis methods.**	8	Mapping and solving Techniques using Tally and Excel

5	**Financial Control**	Posting of Ledgers and preparation of Trial Balance; preparation of Balance Sheet and Profit and Loss Accounts; Controlling other departments by Financial Accounting (A practical Approach).	**AICTE prescribed syllabus: (Microsoft Word - Information_Technology_Syllabus.doc (makautwb.ac.in)** **Industry Mapping: Design and analysis of company health using Balance sheet using available tools and techniques**	6	

Subject Name: Essential Studies for Professionals - VI

Subject Code: HSMC(CS)602

Credit : 2

GATE exam Syllabus

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Subject Name: Skill Developments for Professionals - VI

Subject Code: HSMC682

Credit : 1

Quantitative Aptitude