Gandaki University
Mustang Chowk, Pokhara

Lecturer - IT syllabus

Programming Languages (procedural and object oriented programming, portability and platform independence),

Object Oriented Programming (platform independence, class, object, methods, inheritance and polymorphism, exceptions**),**

Web Technology (Internet, WWW, Web Browser, Web Servers, URL,: HTTP, HTTPS, POP, SMTP, FTP, WAP ,Domain name and hierarchy, HTML, XHTML,CSS, client and server side scripting, data exchange Web Security**),**

Information Technology (Information System Elements and Architecture, Information Technology Components, Computer Security and Encryption, E-Business and E-Commerce, Decision Support Systems**),**

Discrete Mathematics (Logic and induction, mathematical reasoning, Finite state automata and Grammars, Recurrence Relation, Graph theory),

Problem Solving and Logic (Problem identification and definition, pseudocode and flowcharts, algorithm, validation and verification, Error Handling and Debugging**),**

Software Engineering (Software engineering process, process models, agile development, requirement modelling, design concepts, implementation and testing, Security, software quality assurance, Software configuration management**),**

Data Structure and Algorithms (Structures like Lists, Stack, Queue, Tree, Graphs and Operations like searching, sorting, Algorithm complexity),

Database Systems (Database concepts and applications, data abstraction and independence, schema and instances, Data Models, RDBMS and NOSQL databases, normalization, query processing and optimization, Transactions processing and Concurrency Control, database recovery and backups, hashing**),**

Teaching and Research Methodology (Curriculum review, lesson plans, work plan, Preparation of reference material, Method of teaching particular subject, research paper/proposal writing),

Concept of Big Data and Machine Learning