

Training Modules for 1st sem for 30 hours

	Soft Skill Training Modules 30 hours out of 30 hours)
Soft Skills	Neuro – Linguistic Programming
	Techniques
	• Power of Thinking Big
	Techniques to overcome Inhibition
	Emotional Intelligence
	 Confidence / Trust Enhancement
	 Design Thinking and Lateral Thinking
	• Staying in Charge
	Industry Expectation
	• 6 Thinking Hats
	 Career Roadmap Planning
	• Email Writing
	• Change Management
Execution & outcome	Every day there will be a test conducted after the
	topic is done there will be a test to measure the
	improvement
	Books with homework and formulae will be provided
	Important questions which appeared in various
	company based tests and also competitiveness exams
	will also be provided



<u>Training modules for 2nd Semester Students - 30 hours</u>

	Communication Skills Modules (30 hours out of 30 hours)
<u>Communication</u>	Assertive Communication
<u>skills</u>	Learning Skills
	Managerical Skills
	Effective Communication
	Public Speaking
	Organising Speech
	Critical thinking
	• LSRW
	Business communication
	Managing conflicts
	Communication – Power of Convincing
Execution &	
outcome	Every day there will be a test conducted after the topic is done there
outcome	will be a test to measure the improvement
	Books with homework and formulae will be provided
	Important questions which appeared in various company based tests
	and also competitiveness exams will also be provided



<u>Training modules for 3rd Semester Students – 30 hours</u>

Quantitative Aptitude Modules Description (18 hours out of 30 hours)	
· Percentage	
· Problems on Ages	
· Averages	
· Time speed and distance	
· Profit and loss	
· Problems on trains boats and streams	

Verbal Reasoning Training Modules with Description	
(6 hours out of 30 hours)	
Verbal Reasoning	 One word Substitution + Jumbled sentence Parts of speech Subject verb agreement

Logical Reasoning Modules (6 hours out of 30 hours)	
Logical Reasoning	Data InterpretationOdd man out + analogySeating arrangement



<u>Training modules for 4th Semester Students - 30 hours</u>

Quantitative Aptitude Modules Description (15 hours out of 30 hours)	
Quantitative Aptitude	 Permutation and Combination Probability Mensuration Pipes and Cisterns Problems on boats and streams Mixture and allegation Surface area & Volume

Logical Reasoning Training Modules with Description (10 hours out of 30 hours)	
Logical Reasoning	· Syllogism
	· Clocks and Calendars
	Seating arrangementVisual Reasoning

Verbal Reasoning Training Modules with Description	
(5 hours out of 30 hours)	
Verbal Reasoning	 Direct Indirect Speech Active voice and Passive voice Sentence correction Para Jumbles Change in voice Reading comprehension



<u>Training modules for 5th Semester Students - 40 hours</u>

Quantitative Aptitude Modules Description (10 hours out of 40 hours)	
Quantitative Aptitude	 Races and Games Time speed and distance formula based Compound interest Cubes and cuboids Simple interest

Logical Reasoning Training Modules with Description (4 hours out of 40 hours)	
Logical Reasoning	Analytical puzzles Blood Relations

Verbal Reasoning Training Modules with Description (2 hours out of 40 hours)	
Verbal Reasoning	· Sentence Structures

Java Modules (24 hours out of 40 hours)	
Java Language	 Introduction to Java and Core JAVA programming
	OOPS Concept
	Java Inheritance and Polymorphism
	Packages+ Statics
	Java Abstraction
	Java String, Exception Handling
	Exceptions in JAVA+ Input Output in JAVA

•	Multithreading,	I/O

- Interfaces and Objects
- Java Thread and AWT/Events
- Overloading and overriding in Java
- Java Swings
- Applets
- Introduction to web technologies+ Client Server Scripting Languages

<u>Training modules for 6th Semester CS & IS Students - 40 hours</u>

	CS & IS Language Modules (40 hours out of 40 hours)
Java and Strings,	 Data Structures □ Arrays, □
DBMS	$ullet$ Strings, \square Queues, \square Linked List, \square
	$ullet$ Trees, Graphs. \Box Algorithms \Box Sorting, \Box
	\bullet searching, \Box Backtracking and other algorithms, \Box Divide and conquer, \Box
	 Dynamic programming, Graphs: DFS, BFS, MST, Greedy, Heap,
	Balanced Trees, \square
	$ullet$ Java and C++ programming and concepts \Box
	$ullet$ OOPS concepts, \Box exception handling, \Box
	Abstract Classes and Interfaces
	DBMS □ DDL, □ DML, □ DCL, □
	$ullet$ ER and Relational Models, \square
	$ullet$ Normalization, \square Queries \square Operating System \square Deadlock, \square
	Synchronization, □
	$ullet$ Process and Threads, \Box
	Scheduling, □ Memory Management



Modules for Electronics & Communication (40 hours) **EC Specific VLSI &** Data Structures □ Arrays, □ **Embedded Systems** Strings, □ Queues, □ Linked List, □ARM • 1) Introduction to ARM • 2) ARM Architecture • 3) Programming model • 4) Pipelining and Interrupt s • Embedded System -Keil • Introduction to Keil IDE Basic Programming in Assembly and Embedded C. Arduino • Introduction to Arduino • Programming in Embedded C. • Microcontroller VLSI

	Modules for Mechanical Students (40 hours)
Solid Works	Section A: Basics & Introduction
Specific modules	Graphic User Interface
	System requirements
	Parametric design
	Basic part modelling
	Feature based modelling File Management
	Managing SolidWorks environment
	Section B: Sketching with SolidWorks
	2D Sketching
	Sketching entities and relations
	Editing & its features
	• Dimensions



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- Mirror, Convert entity
- Move & Copy
- Section C: Part Modeling
- Part Modelling
- Extrude and Cut extrude
- Revolve and Sweep
- View toolbar
- Creating Reference geometries
- Fillet and Chamfer
- Hole wizard
- Calculating weight/mass & other

Modules for Civil (40 hours)		
Civil Riveting	Chapter 1: Introduction to BIM and Autodesk Revit	
Specific modules	-	
	1.1 BIM and Autodesk Revit	
	-	
	1.2 Overview of the Interface	
	-	
	1.3 Starting Projects	
	-	
	1.4 Viewing Commands	
	Chapter 2: Basic Drawing and Modify Tools	
	- 2.1 Using General Drawing Tools	
	- 2.2 Editing Elements	
	- 2.3 Working with Basic Modify Tools	
	- 2.4 Working with Additional Modify Tools	
	Chapter 3: Setting Up Levels and Grids	
	- 3.1 Setting Up Levels	

- 3.2 Creating Structural Grids
- 3.3 Adding Columns
- 3.4 Linking and Importing CAD Files

Chapter 4: Modelling Walls

- 4.1 Modelling Walls
- 4.2 Modifying Walls

Chapter 5: Working with Doors and Windows

- 5.1 Inserting Doors and Windows
- 5.2 Loading Door and Window Types from the Library
- 5.3 Creating Additional Door and Window Sizes

Chapter 6: Working with Curtain Walls

- 6.1 Creating Curtain Walls
- 6.2 Adding Curtain Grids
- 6.3 Working with Curtain Wall Panels
- 6.4 Attaching Mullions to Curtain Grids

Chapter 7: Working with Views

- 7.1 Setting the View Display
- 7.2 Duplicating Views
- 7.3 Adding Callout Views- 7.4 Elevations and Sections

Chapter 8: Adding Components

- 8.1 Adding Components
- 8.2 Modifying Components

Chapter 9: Modelling Floors

- 9.1 Modelling Floors
- 9.2 Creating Shaft Openings
- 9.3 Creating Sloped Floors

Chapter 10: Modelling Ceilings

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10.1 Modelling Ceilings

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10.2 Adding Ceiling Fixtures

13.3 Printing Sheets

10.3 Creating Ceiling Soffits Chapter 11: Modelling Roofs 11.1 Modelling Roofs 11.2 Creating Roofs by Footprint 11.3 Establishing Work Planes 11.4 Creating Roofs by Extrusion 11.5 Creating Dormers Chapter 12: Modelling Stairs, Railings, and Ramps 12.1 Creating Component Stairs 12.2 Modifying Component Stairs 12.3 Working with Railings 12.4 Sketching Custom Stairs 12.5 Creating Ramps Chapter 13: Creating Construction Documents 13.1 Setting Up Sheets 13.2 Placing and Modifying Views on Sheets

16.3 Annotating Details

16.4 Keynoting and Keynote Legends

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Chapter 14: Annotating Construction Documents
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14.1 Working with Dimensions
-
14.2 Working With Text
-
14.3 Adding Detail Lines and Symbols-
14.4 Creating Legends
Chapter 15: Adding Tags and Schedules
-
15.1 Adding Tags
-
15.2 Adding Rooms and Tags
-
15.3 Working with Schedules
Chapter 16: Creating Details
-
16.1 Setting Up Detail Views
-
16.2 Adding Detail Components



<u>Training modules for 7th Semester Students -50 hours</u>

Quantitative Aptitude Modules Description (10 hours out of 50 hours)	
Quantitative Aptitude	 Percentages Time and work Venn diagrams Series progression Mixtures and allegation

Logical Reasoning Training Modules with Description (4 hours out of 50 hours)		
Logical Reasoning	 Letters and number series +Odd man out Data arrangement 	

Verbal Reasoning Training Modules with Description (4 hours out of 50 hours)		
Verbal Reasoning	· Tenses and One word substitution · Closet test + Idioms and Phrases	

Python Modules (16 hours out of 50 hours)		
Python	Introduction to python	
	Origin of Python	
	 Introduction to Python and what is Python 	
	Python Identifiers	
	 Python Origin+ Python Identfiers and Keywords 	
	 Python Data Types-1 -> int, float, coplex, Bool, str, bytes, 	

bytearray

- Python Data Types-2 -> list, tuple, range, set,frozenset,dict,none
- Print(), type() and id()
- Operators
- Conditional Statements and looping statements
- Functions
- Object Oriented features, Creating class, constructors, instance variables
- File Handling
- Data base Programming
- Handling Exceptions
- User-defined Exceptions
- Classes
- Class Definition, objects
- Class , instance, method objects
- Inheritance and Lambda expressions
- Iterators and generators
- Virtual Environments and Packages
- Creating Virtual Environments
- Managing Packages with pip
- Standard Library/ Modules
- Managing Packages with pip
 - Regular expressions



	Technical training Modules (16 hours out of 60 hours)
Technical	 Data Types, File handling, arrays Greedy Algorithm, Stack, Queue Mapping Concepts Array manipulation, String manipulation, Tree
Evocution 2 outcome	Dynamic Programming, Back Tracking, Graph
Execution & outcome	 Every day there will be a test conducted after the topic is done there will be a test to measure the improvement Books with homework and formulae will be provided Important questions which appeared in various company based tests and also competitiveness exams will also be provided