

Training Modules for 03rd sem for 30 hours

Soft Skill & Communication Enhancement Training Modules (30 hours out of 30 hours)	
<i>Soft Skills & Communication Enhancement</i>	• 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
<i>Execution & outcome</i>	• 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

Training modules for 04th Semester Students – 30 hours

Quantitative Aptitude Modules Description (18 hours out of 30 hours)	
<i>Quantitative Aptitude</i>	· 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)	
<i>Verbal Reasoning</i>	· One word Substitution + Jumbled sentence · Parts of speech · Subject verb agreement

Logical Reasoning Modules (6 hours out of 30 hours)	
<i>Logical Reasoning</i>	· Data Interpretation · Odd man out + analogy · Seating arrangement

Training modules for 5th Semester Students – 40 hours

Quantitative Aptitude Modules Description

(18 hours out of 40 hours)

<i>Quantitative Aptitude</i>	· Permutation and Combination · Probability · Mensuration · Pipes and Cisterns · Problems on boats and streams · Mixture and allegation · Surface area & Volume
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Logical Reasoning Training Modules with Description

(12 hours out of 40 hours)

<i>Logical Reasoning</i>	· Syllogism · Clocks and Calendars · Seating arrangement · Visual Reasoning
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Verbal Reasoning Training Modules with Description

(10 hours out of 40 hours)

<i>Verbal Reasoning</i>	· Direct Indirect Speech · Active voice and Passive voice · Sentence correction · Para Jumbles · Change in voice · Reading comprehension
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Training modules for 6th Semester Students –40 hours

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

Modules for Electronics & Communication (40 hours)	
EC Specific VLSI & Embedded Systems	• Data Structures □ Arrays, □ • 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
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Modules for Mechanical Students (40 hours)	
Solid Works Specific modules	• Section A: Basics & Introduction • 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 • Sketch tool • 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 Specific modules

Chapter 1: Introduction to BIM and Autodesk Revit

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1.1 BIM and Autodesk Revit

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1.2 Overview of the Interface

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1.3 Starting Projects

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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
	-
	10.2 Adding Ceiling Fixtures
	-
	10.3 Creating Ceiling Soffits
	Chapter 11: Modelling Roofs
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	11.1 Modelling Roofs
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	11.2 Creating Roofs by Footprint
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	11.3 Establishing Work Planes
	-
	11.4 Creating Roofs by Extrusion



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11.5 Creating Dormers
Chapter 12: Modelling Stairs, Railings, and Ramps
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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
-
13.3 Printing Sheets
Chapter 14: Annotating Construction Documents
-
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 - 16.3 Annotating Details 16.4 Keynoting and Keynote Legends
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Training modules for 7th Semester 60 hours:

Python Training Modules for (30 hours out of 60)	
Python	• Conceptual introduction: ○ Topics in computer science ○ Algorithms ○ Modern computer systems ○ Hardware architecture ○ Data representation in computers ○ Software and operating system ○ Installing Python ○ Basic syntax ○ Interactive shell, editing, saving, and running a script. • The concept of data types ○ Variables ○ Assignments ○ Immutable variables ○ Numerical types ○ Arithmetic operators and expressions

- Comments in the program
 - Understanding error messages
- Control statements
 - if-else
 - Loops (for, while)
 - Short-circuit (lazy) evaluation
 - Conditions
 - Boolean logic
 - Logical operators
 - Ranges
- Strings and text files
 - Manipulating files and directories
 - Os and sys modules
 - Text files: reading/writing text and numbers from/to a file
 - Creating and reading a formatted file (csv or tab-separated).
 - String manipulations
 - Subscript operator, indexing, slicing a string;
 - Strings and number system
 - Converting strings to numbers and vice versa
 - Binary, octal, hexadecimal numbers
- Lists, tuples, and dictionaries
 - Basic list operators, replacing, inserting, removing an element
 - Searching and sorting lists
 - Dictionary literals, adding and removing keys, accessing and replacing values
 - Traversing dictionaries
- Design with functions
 - Hiding redundancy
 - Complexity
 - Arguments and return values
 - Formal vs actual arguments, named arguments
 - Program structure and design

- Recursive functions
- Simple Graphics and Image Processing
 - "turtle" module
 - Simple 2d drawing - colors, shapes
 - Digital images
 - Image file formats
 - Image processing
 - Simple image manipulations with 'image' module (convert to bw, greyscale, blur, etc)
- Classes and OOP
 - Classes
 - Objects
 - Attributes and methods
 - Defining classes
 - Design with classes
 - Data modelling
 - Persistent storage of objects
 - Inheritance
 - Polymorphism
 - Operator overloading (`_eq_`, `_str_`, etc)
 - Abstract classes
 - Exception handling
 - Try block
- Graphical user interfaces
 - Event-driven programming paradigm
 - tkinter module
 - Creating simple GUI - buttons, labels, entry fields, dialogs
 - Widget attributes - sizes, fonts, colors layouts, nested frames
- Multithreading, Networks, and Client/Server Programming
 - Introduction to HTML
 - Interacting with remote HTML server
 - Running html-based queries
 - Downloading pages

	○ CGI programming ○ Programming a simple CGI form ● Searching, Sorting, and Complexity Analysis
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 will be provided ● Important questions which appeared in various company based tests and also competitiveness exams will also be provided

Quantitative Aptitude Modules (15 hours out of 60 hours)	
Quantitative Aptitude	● Partnership ● Number system ● HCF & LCM ● Pipes and cisterns ● Probability ● Mixture and allegations ● Permutation and combination
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



SEVENTH SENSE

Talent Solutions

Logical Reasoning Training Modules (08 hours out of 60 hours)	
<i>Logical Reasoning</i>	• Seating arrangement • Making Judgement • Statement and Conclusion • Theme detection
<i>Execution & outcome</i>	• 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 will be provided • Important questions which appeared in various company based tests and also competitiveness exams will also be provided

Verbal Reasoning Training Modules (07 hours out of 60 hours)	
<i>Verbal Reasoning</i>	• Reading comprehension + Change in voice and speech • Subject verb agreement • Verbal analogy • Paragraph formation
<i>Execution & outcome</i>	• 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 will be provided • Assessment tests record will be maintained so to see the improvement continuously. • Important questions which appeared in various company based tests and also competitiveness exams will also be provided