



IDM TECHPARK

GUIDE'S FOR PERFECT CAREER PATHWAY



Ruby Course Syllabus



N.S.D.C
National
Skill Development
Corporation



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About Us

IDMTECHPARK global retail & corporate training solutions provider in Coimbatore, Erode, Trichy & Salem that offers a comprehensive range of training and placement services for both fresher's and professionals seeking new opportunities. The company commenced its IT training business in 2016. A pioneer in IT education, over the years, we have trained over 50k students. Idmtechpark has a wide range of courses, maintains education standards & provides placement assistance.

www.idmtechparkcoimbatore.com
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About IDMTECHpark Education Quality

IDMTECHPARK is managed and developed by industry specialists with more than 8 years of expertise in the field. IDMTECHPARK offers a staff of highly skilled professional trainers who deliver effective IT training in a friendly setting, concentrating on the needs of each individual to help them succeed in a demanding work world. In the book of career and success, our staff never leaves a page unturned.

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IDMTECHPARK's versatile instructor-led training class rooms and lower-class sizes enable people to engage more easily and absorb knowledge, resulting in remarkable results for both themselves and the organizations for which they work. Our training programmes are adaptable and customizable to ensure that each participant gets the most out of their time with us. IDMTECHPARK focuses in providing hands-on IT training in over 30 different courses.

- We teach in-demand courses
- We provide impactful learning material
- Our teachers are well-selected & trained
- We follow world-class teaching methods
- Our courses include E-Projects
- We conduct technical workshops
- Exams are held and based on Exams providing Certification
- Certificates are recognized the world over
- Our course timings are flexible



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Our Recent Placement

Idmtechpark assists students in getting job placements on successful completion of their courses. Idmtechpark also provides recruitment assistance to organizations. Idmtechpark students are shortlisted based on the organization's requirement. To make students job-ready, Idmtechpark conducts workshops e.g. How to do Group Discussions, how to behave in a Personal Interview. From time to time, job fairs & campus recruitments are conducted. Workplace skills such as time management, making effective presentations and communication skills are also provided. All this helps students find appropriate jobs in the IT industry while also helping save companies recruitment costs.

Krishnaveni M

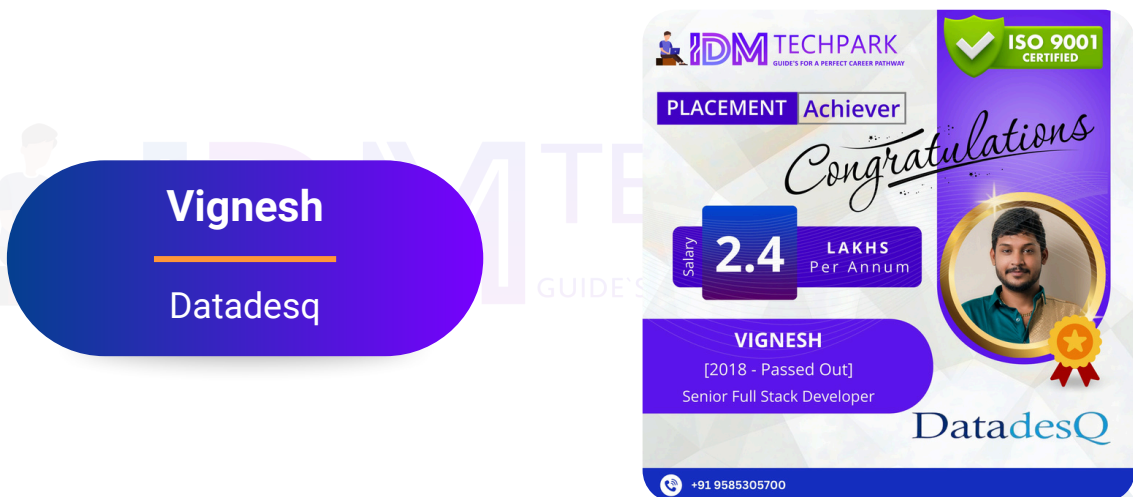
Frutterlabs





Joshwa

Xccessor



Vignesh

Datadesq



Madhumitha

Accenture

Keerthana

AJS



Brindha Boopathi

AJS



Kavin Kumar

AJS

Ajithkumar

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Gowthami

Genpact



Surya

ZUCI

Pavithra

Vel Info Tech



Poovitha

Gray Matter



Ramesh

TDT

Siva Sankar
ST Cloudspark tech



Nabeel Hisham
VTail

Kalayarasan
Violet Infotech



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Our Alumni Working At



MODULE 1

Introduction to Ruby

- What is Ruby?
- History and philosophy (Matz, “developer happiness”)
- Installing Ruby (via RVM, rbenv, or rubyinstaller)
- Writing your first Ruby script

MODULE 2

Ruby Syntax & Variables

- Identifiers, naming rules
- Variables (local, global, instance, class)
- Constants and scope
- Comments and style conventions

MODULE 3

Data Types & Operators

- Strings, Numbers, Symbols
- Booleans, Arrays, Hashes
- Operators (arithmetic, comparison, logical)

MODULE 4

Control Flow

- If, unless, elsif
- case-when
- Loops: for, while, until, each
- Break, next, redo, retry

MODULE 5

Methods and Arguments

- Defining methods
- Default and keyword arguments
- Return values
- Splat operator (*args)

MODULE 6

Blocks, Procs, and Lambdas

- What are blocks?
- Yield keyword
- Differences: Proc vs Lambda
- Closures and use cases

MODULE 7

Object-Oriented Programming in Ruby

- Classes and objects
- Instance vs class variables
- Encapsulation with attr_accessor, attr_reader, attr_writer

MODULE 8

Inheritance and Modules

- Inheritance and super
- Mixins with Modules
- Namespaces and include vs extend

MODULE 9

Ruby Gems & Bundler

- Installing and using gems
- Gemfile and gemspec
- Creating custom gems



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MODULE 10

File I/O and System Commands

- Reading/writing files
- Directories and file operations
- Running system commands with backticks and system

MODULE 11

Exception Handling

- begin-rescue-end blocks
- else and ensure clauses
- Custom exception classes



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MODULE 12

Regular Expressions in Ruby

- Regex syntax and modifiers
- Matching and extracting data
- Regex with scan, match, sub, and gsub

MODULE 13

Web Scrapping with Ruby

- OpenURI, Nokogiri
- CSS selectors and XPath
- Parsing HTML and XML

MODULE 14

Testing with RSpec

- Intro to RSpec
- Writing specs and matchers
- Test-driven development (TDD)



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MODULE 15

Working with APIs

- Making HTTP requests with Net::HTTP and HTTParty
- JSON parsing
- Building simple REST API clients



MODULE 16

Intro to Sinatra

- Building minimal web apps
- Routing and templates (ERB/Haml)
- Deploying simple apps



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MODULE 17

Getting Started with Ruby on Rails

- Rails philosophy and directory structure
- MVC architecture
- Rails generators

MODULE 18

ActiveRecord & Database ORM

- Migrations
- Models and associations (has_many, belongs_to)
- Validations and callbacks

MODULE 19

Embedded Ruby (ERB)

- Partial and layouts

- Helpers

- Embedded Ruby (ERB)

- Partial and layouts

- Helper

MODULE 20

Controllers & Routing in Rails

- RESTful routes
- Strong parameters
- Before actions and filters

MODULE 21

Authentication and Authorization

- Sessions and cookies
- Devise gem for user auth
- CanCanCan or Pundit for roles/permissions

MODULE 22

APIs with Rails

- Building RESTful APIs
- JSON rendering with Jbuilder
- Token-based auth (JWT)



MODULE 23

Background Jobs and Workers

- Active Job basics
- Sidekiq and Redis
- Scheduling tasks (whenever gem, cron)

MODULE 24

Deployment & DevOps

- Deploying on Heroku, Render, or DigitalOcean
- Environment variables and secrets
- Asset pipeline

MODULE 25

Final Project & Capstone

- Full-stack project (blog, task manager, forum, etc.)
- GitHub versioning
- Testing + deployment

Thank You

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